

LUTHERAN
OUTDOOR
MINISTRIES
CENTER
OREGON, ILLINOIS



Birth of the Earth

natural... wild... free...

1988-89 PROGRAM RESOURCE

HOW TO USE THIS RESOURCE

This Resource contains a theological perspective based on the theme "Birth of the Earth: natural... wild... free..." with recommended activities, Bible Study/Learning Experiences, Worship/Devotional Experiences, and a variety of interesting learning/recreational experiences that focus on the theological perspective.

This Resource may be used for 1-10 day experiences with children, teens, adults, families, and/or senior citizens. The educational methods employ those of Christian experiential learning.

BACKGROUND PAPER: The Background Paper gives the theological substance of the Resource. It is best for the leader to not only read and become familiar with the ideas in the Background Paper, but also to thoroughly consider the implications for his/her faith and Christian living.

ACTIVITY & LEARNING EXPERIENCE GUIDE: The Guide provides a variety of activities that the group leader may use to help his/her group grow in their faith in terms of the ideas of the Background Paper. Activities are designed for small groups (6-12 people) to do outdoors and indoors.

Each program "Day" has activities and learning experiences based on an idea in the Background Paper (usually a chapter). There is a section for each type of activity. The sections are:

<u>Section</u>	<u>Type of Activities or Learning Experiences</u>
A	Theme of Day, Intentions, Bible Passages, Commentary
B	Bible Study/Learning Experiences
C	Worship and Devotional Experiences
D	Discussion Ideas
E	Environmental (Nature) Learning Experiences
F	Arts & Crafts Learning Experiences
G	Game & Sport Learning Experiences
H	Special Activities & Learning Experiences
I	Performing Arts (music, skits, story-telling, etc.)

Sections D, E, F, G, H, and I detail activities that are included in or done in conjunction with activities in sections B and C.

The leader should first evaluate the characteristics and purpose of the small learning group before choosing, adapting, and detailing each activity.

When used in a five-day camp, each "Day" includes those activities for a Hebrew day (sunset to sunset). A ten-day trip experience may find it more beneficial to consider each "Day's" activities for a 48-hour period.

Day-long and weekend retreats would do best to choose 1-3 of the "Day" themes and focus on those learning experiences and activities.

Each page in the Guide is coded, i.e., "V B 3." This means that this page is the third page ("3") in the Bible Study Section ("B") for the fifth day ("V").

Additional resources, ideas, and references noted in the Program Resource are in the LOMC Resource Center. They are available for use at LOMC.

B I R T H O F T H E E A R T H
N A T U R A L . . . W I L D . . . F R E E . . .

1988 - 89 P R O G R A M R E S O U R C E

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Central/Southern Illinois Synod,
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BIRTH OF THE EARTH

NATURAL WILD FREE

John E. Swanson

INTRODUCTION

One day a friend gave me a flier for a book on wildlife that began, "This book is dedicated to all who find Nature not an adversary to conquer and destroy, but a storehouse of infinite knowledge and experience linking man to all things past and present. They know conserving the natural environment is essential to our future well-being."

There are many new books addressing this issue. Our world view is changing slowly from "using" the land to "loving" the land. It is a return to the spirit of the Native American understanding of the environment. It is an ecological perception that is replacing a consumer orientation.

Are these hopeful words? Yes, but they are said at a time when humans can determine the future of the earth in a way that is more awesome than it has ever been in the history of history. The threat of a nuclear disaster reminds us that we hold the fate of the earth in our hands.

This nuclear age gives us a new science. There was a time when Newtonian physics directed our perception of reality. I grew up in grade school learning that we live in a closed atomic system. Nuclear physics has exploded that idea. Matter does not simply convert from one form to another. New matter is being created.

Another characteristic of our times is the vocal political expressions by some religious groups who are fundamentalist, conservative, and right wing, insisting that their "Biblical" view of creation be taught in public schools along with the prevailing scientific hypothesis.

We are also becoming sensitized to a world that is not only the northern hemisphere composed of North America and Europe. There are countries of all sizes and shapes and populations. We refer particularly to the Third World where there is poverty unlike what we know in the United States.

Often these are exploited lands and people, where resources have been used to benefit only a small portion of the world's population.

In part this is what is happening today:

1. An emerging ecological perception of the environment
2. The threat of nuclear destruction
3. The shift from Newtonian to Nuclear physics
4. The challenge to and from the religious right
5. The relationship with the Third World

It is within these givens and our responses to them that this curriculum is prepared. It is intended to help people address the issues that each of these items raises. It takes the form of a new vision of God's creative process.

It is my opinion that one treats the environment in the way one perceives creation as an activity and as an order. We can conduct the religious/scientific debates. We can look for proof of our positions. We can play the intellectual games and talk about what we believe. Be we creationist or evolutionist or hold to another the point of view, we have filters, a way of receiving and sorting out data. These filters interpret our perceptions.

As one naturalist puts it, "Theory determines what we see." Even the scientific/intellectual community has a problem with perception and filters.

The responsibility of the Church's educational ministry is not to prove which doctrine is right and true, but to give the learners handles, concepts, images, and faith systems to act as responsible agents of God in this world. We need to see creation as the work of God. We need to know who God is in this creative work. We must grapple with human responsibility and irresponsibility. We must be inspired to take the God-given risks of God's people in God's world to maintain it.

A way to accomplish this task is to give people a wholistic vision, a way to look at and talk about this reality that gives some concrete, interpretive tools. I will use the word "metaphor" for this.

A metaphor has limitations like any sermon illustration. It is not a model. It has mythic qualities to it. A metaphor puts meaning together in an understandable, earthly construct. It may be more emotional than intellectual. But it shapes our perception of reality.

Our use of metaphors in daily language is when we put abstract ideas into some type of concrete figures. "You can't squeeze blood out of a turnip." "They are all washed up." "I am flying higher than a kite." The Gospel of John uses metaphors to describe Jesus.

Let me illustrate the power of the metaphor. There was one used several years ago that shaped our thinking, impacted our decisions, judged our actions. It was the "life boat" theory of population and available resources.

There is much concern about the carrying capacity of the earth. How many people can it support? Have we the food to feed everyone? What about other resources?

This perception has led to the "life boat" theory. There can be only so many inhabitants on planet earth because there is only so much available and only so much can be produced.

This metaphor has been at the heart of many who advocate birth control measures. It was just a few decades ago that citizens of the United States were cajoled into "acting responsibly" and reproducing only two children per family.

However, along came another metaphor, that of the ark, like in Noah's Ark.

In this instance the earth is a boat that is capable of handling future growth. The animals may have boarded the ark two by two, but do not be deceived that they disembarked that way.

To envision the earth as an ark took away the doomsday notion and introduced hope. We can live with each other and with our resources. What causes hunger in our world today? Politics! Greed! Priorities need to be rearranged.

I use the example of these metaphors because it is appropriate in the context of this paper. It shows how a metaphor affects our perception, determines policy, and sets a standard for judgment.

At the heart of the matter is this: It is not what we see; it is how we see it. The metaphor is a tool we use for looking at life and interpreting it. It is this interpretive step that needs to be educated.

The theme this year invites you to look at God, God's creation, human responsibility and irresponsibility, and motivation for action using the metaphor "Birth of the Earth."

Before continuing to read this paper you may want to let your mind wander and discover what images and ideas come to mind when meditating on these words, "Birth of the Earth, Natural Wild Free."

BIRTH OF THE EARTH METAPHOR

The "Birth of the Earth" metaphor is a way to help us look at how God creates. It is derived from several postures. It comes out of the experience of how creation occurs today as well as reflects some of the "Body" language of the Church in which we describe the presence of God in this world.

Before looking at the metaphor we need to look briefly at some of the Biblical reports that have shaped metaphors for us in the past. The concepts from the Bible, whether we accept them or reject them, have played a great role in our understanding of the natural world. They have been the standard by which Western culture has measured the understanding of the natural world. Lynn White, Jr., in an essay entitled "The Historic Roots of Our Ecological Crises" points this out when he says,

what people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny - that is, by religion. To Western eyes this is very evident in, say, India or Ceylon. It is equally true of ourselves and of our medieval ancestors.¹

What has been the shaping religious system for the Western world has its roots in the Genesis account.

White continues later in the essay showing the impact of the religious mind on the scientific mind:

From the thirteenth century onward, up to and including Leibnitz and Newton, every major scientist, in effect, explained his motivations in religious terms. Indeed, if Galileo had not been so expert an amateur theologian he would have got into far less trouble: the professionals resented his intrusion. And Newton

1

White, Jr., Lynn, ""The Historic Roots of Our Ecological Crisis," Environmental Handbook, Edited by Garrett de Bell (New York: Ballantine Books, 1970), p. 19.

seems to have regarded himself more as a theologian than as a scientist.²

There are two important factors that underlie the Genesis accounts of creation. First, there was a given understanding of life in the days of the writers centuries ago that impacted people's perception. There was a "science," maybe very primitive, but it was a "State of the Art" science.

We may want to disagree with this position. However, your attention is called to one of the scientific views held until recently, i.e. the world exists in a closed atomic system. The interpretation of the Bible along with the perception of reality was contingent on an understanding that there was a limited number of molecules in the universe, and they were simply changing form.

In this atomic age we are discovering that new life is in fact being created. The simple world of Newton is gone. All the "things" of existence were not created at the beginning of time. The Biblical tradition does not say this, but for years before nuclear science came on the scene this is how the Biblical report was interpreted.

A scientific world view gives us a perspective from which we make observations within the limits of our technology. This was true for the Biblical writers in the same way it is true for us today.

Secondly, the authors of the various Biblical stories saw beyond the "technical" knowledge of the day to the power of God.

I call your attention to another contemporary comparison. There is a difference of opinion within the religious community as to the role of the theory of evolution. In the opinion of people opposed to the theory of evolution God is excluded from the theory. Well, so did the ancient scientific views exclude God. Is it possible to see God as the source of evolution? The Old Testament writers would have done so if that were the prevailing opinion of the day. It so happens their "science" included mythology and poetic descriptions of creation to which they added their understanding of God.

Unfortunately, when creation stories become the debatable subject it is often at the expense of the profundities of what the stories say. They are exciting and carry meaning to us of great theological significance.

Look at the first story. Genesis 1:1-2:4. This is usually conceived as "The" Creation Story. This account presents three things that are very sophisticated. First, it claims that God is the author of the process. This is a startling claim because the scientists of that day would put down such a radical assertion of a monotheistic God. A single God doing a task attributed to dragons and demons? This flew in the face of the thinking of that day. The author is a radical!

The second point the author makes is a very deep, long-lasting theological statement that threads its way through the Old and New Testaments. He has a dynamic understanding of "Word" - the power, the creative energy of God. This power, the "Word," takes many forms. It is this Word that brings the world into existence. In its development through the centuries recorded in Scripture, we see the role of the

prophets (those who speak for God) and the person Jesus (the Word of God incarnate). The word, the world proclaimed, the Word made flesh, the word written and uttered in today's world all bespeak of the God who applies His personal energy and power to create, sustain, and renew life.

The third aspect of the First Creation Story is that it is a liturgical drama. The purpose of liturgy is to take the worshipping community through a drama where they fully participate in the activity of God in a capsulated form. It is from this perspective we can read the First Genesis Account. If one is willing to let the poetry take hold one cannot help but sense the movement and the progress of the emerging world. There is no doubt what God is doing. The audience is a part of the drama.

The second creation story, Genesis 2:4-25, has different concerns though it does compliment the first story. Its origin is not the same as the first account. The players are different. It is the story of humanity's place in creation. How did things get their names? How did men and women come to be? What are humanity's responsibilities?

There is a third predominant creation story. Strains of it are found in various historical books in the Old Testament. It is organized in Psalm 104. The Psalmist touches a tremendous cord of intimacy between the creation and the Creator. It is a statement of dependence. God is the source of life. Without Him all things die.

There is a striking parallel between the Psalmist's understanding of God's influence and modern day science's understanding of the source of energy.

Steve Van Matre in Sunship Earth describes the story of life which lifts up different movements in the composition of God's creation.

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|--------------------|---|
| ENERGY FLOW | Sunlight energy is transferred in decreasing amounts from those growing things which can capture it (plants - food producers) to those which obtain it from the dying of others (certain plants and animals - food decomposers) . . . |
| CYCLES | As these producers, consumers, and decomposers grow and die, they are using life's essential chemicals or nutrients, taking these nutrients from and returning them to their reservoir in the earth's air, soil, and waters over and over again . . . |
| COMMUNITY | These essential chemicals or nutrients and the sunlight energy available have varied greatly in both amount and quality in many places and times, permitting a great number of different plants and animals to share the earth . . . |
| INTERRELATIONSHIPS | In meeting their needs all these plants and animals are constantly interacting with one another and with their surroundings in different ways . . . |
| CHANGE | Because they are in the process of both acting upon their surroundings and being acted upon, all plants and animals and the places where they live are becoming something else . . . |

ADAPTATION

In the overall story of life some plants and animals end up with new and successful ways of solving all the problems brought about by the altering of these conditions where they live . . . 3

Sunship Earth is solar powered. The whole system, the global community, is a recipient of energy that in one way or the other comes from the sun. It is through the capability of the communities that this energy flow is managed.

God's creation is an ecosystem: The term "eco" is Greek for "home." "Home" is both the immediate environment and the world. "Home" is both an isolated site as well as the universe.

The author of Psalm 104 has this sense of ecosystem, interdependence, and the source of energy.

There are several other creation concepts in the Bible that are overlooked. One is in I Samuel 2:8. It is a brief statement: "For the pillars of the earth are the Lord's and on them he set the world." The author had an architectural understanding of God and space.

Another creation story is in Proverbs 8:22-31. Here the first item created is "wisdom," and wisdom is a woman. (And you thought the first to be created was Adam? Not according to Proverbs.) Wisdom is pictured as standing side by side with God as God puts the creation together. What is wisdom? Sophia? It is God's integrity! This understanding underlies some Pauline thinking.

And still another vision of creation that is very exciting because to some degree it is one that challenges some of our present day creationists is found in Job 40:15-24. "Behold, Behemoth . . . He is the first of the works of God" (RSV). The Westminster Dictionary of the Bible gives this definition of Behemoth:

A large animal . . . which eats grass like an ox. . . It is probably the hippopotamus of the Nile.⁴

The theme of this passage is that God is in control of all evil forces in spite of appearances to the contrary. One can twist the passage around, as other passages have been jerked and spliced, and make a case for creation on this account.

A concept similar to the first Genesis account also appears in Job 26:7-13. Some unique images are presented. The earth hangs in space. Clouds are like balloons. Is the speaker aware of an International Date Line? The earth is apparently flat so the pillars that shake from the fear of God can hold up the sky.

The one passage that stands alone, but brings into question the need to reflect on all the Biblical stories of creation is Colossians 1:15ff. All things were created through Jesus Christ, according to Paul. Is it not interesting that nowhere in the New Testament is any particular creation story given preferential treatment? The

3

Van Matre, Steve, Sunship Earth (Martinsville: American Camping Association, 1979), p. 15.

4

Davis, John D., The Westminster Dictionary of the Bible, (Philadelphia: The Westminster Press, 1944), p. 64.

fact is that there are similarities between John 1:1 and the first Genesis Account. And there is a great affinity between the role of Jesus in creation according to Paul in Colossians and the role of wisdom in Proverbs.

The "Birth of the Earth" metaphor is an attempt to view God's creation from the perspective of Twentieth Century experiences that include a deep and abiding understanding of a God who is very present in the world that God creates.

There are several characteristics to the metaphor. The first is that it takes into account a common view of how the world is continually created today. The word we use for bringing something into being is "birth." It involves a long process (gestation period) and includes parents.

Birth is seen as a loving act, the result of love, and the expression of love.

Birth is the way species survive. In most instances in the non-human world, once a being is no longer reproducing, it dies or is killed off. Thus, to sustain the species, survival and reproduction are the purposes of a created entity.

In many cases the Biblical stories of creation focus most of their attention on the creation of and service to humanity. They tend to be anthropocentric. The entities of the non-human world are seen only in relationship to humans and not as having value in and of themselves.

This has led some people, like Lynn White, Jr., mentioned above, to draw this conclusion:

What did Christianity tell people about their relations with the environment?

While many of the world's mythologies provide stories of creation, Greco-Roman mythology was singularly incoherent in this respect. Like Aristotle, the intellectuals of the ancient West denied that the visible world had had a beginning. Indeed, the idea of a beginning was impossible in the framework of their cyclical notion of time. In sharp contrast, Christianity inherited from Judaism not only a concept of time as nonrepetitive and linear but also a striking story of creation. By gradual stages a loving and all-powerful God had created light and darkness, the heavenly bodies, the earth and all its plants, animals, birds, and fishes. Finally, God had created Adam and, as an afterthought, Eve, to keep man from being lonely. Man named all the animals, thus establishing his dominance over them. God planned all of this explicitly for man's benefit and rule: no item in the physical creation had any purpose save to serve man's purposes. And, although man's body is made of clay, he is not simply part of nature: he is made in God's image.

Especially in its Western form, Christianity is the most anthropocentric religion the world has seen. As early as the second century Tertullian and Saint Irenaeus of Lyons were insisting that

when God shaped Adam he was foreshadowing the image of the Incarnate Christ, the Second Adam. Man shares, in great measure, God's transcendence of nature. Christianity, in absolute contrast to ancient paganism and Asia's religions (except, perhaps, Zoroastrianism), not only established a dualism of man and nature but also insisted that it is God's will that man exploit nature for his proper ends.⁵

In metaphors suggested by Scripture, God is seen as outside of the creation. In this metaphor God is personally, intimately involved.

When I read Luther's explanation to the First Article of the Apostles' Creed I do some serious reflecting on what it means to me. "I believe that God has created me and all that exists." I take two things into account.

First, God created me. That assertion means that something more happened than that my parents decided to have a child and my mother bore me in her womb. There is something about my knowledge of the "process" and my belief in God that brings my parents' actions, the biological process, and the work of God together so that I can say I am given birth by God.

Second, with this understanding I realize that I live in solidarity with all that exists, for as God has given birth to me so God has given birth to them. All creation has this something in common.

Thank you, Luther, for the insight!

One can imagine the universe as the "body of God." From God all things come. In God all things have their being. The logo for this curriculum is a hand from which a twig emerges that has fixed to it a cocoon from which a butterfly emerges. The hand is the hand of God.

We tend to use "body talk" in the New Testament. The Church is the Body of Christ. We are fed with Christ's body in the Sacrament of the Altar. We understand the resurrection of Jesus as a bodily event. By the power of the Holy Spirit, Christ is embodied in His believers. Being in Christ is called a new or re-birth.

As with any metaphor there are some limitations when thinking of the universe as God's body because it smacks of pantheism. This is a fancy word meaning that God is in all natural things.

To say that the universe is the body of God is not to say that this is all to be said about God. The universe is the expression of God. God is more. Yet, the universe as God's body gives us images of a God of love and intimacy with the world.

Only one place in Scripture does this imagery exist. "You are mindful of the Rock that begot you, and you forgot the God who gave you birth." Deuteronomy 32:18. Interestingly enough one of the root words for mercy, i.e. God's mercy, compassion, in the Old Testament is "womb." When God assures Israel of His love for her, Isaiah says:

Can a woman forget her sucking child, that she should have no compassion on the son of her womb? Isaiah (49:15)

This metaphor does not rule out the dynamics of the other images of creation in the Biblical tradition. It is intended to give an added dimension of love and closeness.

This metaphor also relieves us of the academic debate over how the world was originally created. We can focus our energies on how the world is created now. We see the continuity.

Birth involves mystery and miracle. Birth is awesome. Regardless how the process is scientifically described there is the element of the unknown. There is a power in this event that can only be celebrated.

"Birth of the Earth" is not to be a complicated image at all. It should be able to simply and freely give a handle to those who choose to use it.

It is not to be an idolatrous doctrine nor an ultimate statement about how God does things. It should play for the young and uninitiated as well as the old and sophisticated.

From the physical act of giving birth this metaphor derives its strength.

". . . it joins the reservoir of the great symbols of life and of life's continuity: blood, water, breath, sex, and food. In the acts of conception, gestation, and birth all are involved, and it is therefore no surprise that these symbols became the center of most religions, including Christianity, for they have the power to express the renewal and transformation of life - the 'second birth' - because they are the basis of our 'first birth.'" 6

To summarize: the Birth of the Earth metaphor brings us closest to:

1. the beginnings of life,
2. the nurture of life,
3. the fulfillment of life, and
4. the parental nature of God.

THE SAVING PRESENT PARENT - GOD

What type of God does the "Birth of the Earth" metaphor espouse?

The nature of God as loving and nurturing has already been stated. Does one need to add more?

Throughout Scripture there is one image of God that prevails. It is the image of the "saving presence."

We use many symbols to describe God: the Good Shepherd of Psalm 23, the Mighty Fortress of Psalm 46, Father as used frequently by Jesus, Spirit, King, Almighty. We are being made conscious today of the feminine and maternal descriptions of God in Scripture, too.

6

McFague, Sallie, Models of God (Philadelphia: Fortress Press, 1987), p. 105.

There are several ways God the Creator is perceived: the artist, the master geneticist, the watchmaker, the plumber/electrician, the King of Siam, the housekeeper, the contractor, the architect, the earth mover, the one who sets boundaries and limits.

However, there is something about God as Parent that is more appealing than some of the other mechanical and aloof views of God.

Sallie McFague contrasts the artist with the parent.

An artist, upon completing a work, makes a judgment whether it is good or bad; the judgment is an aesthetic one based on critical standards. The artist may, of course, decide at a future time that what was good is no longer. But a child, the product of our bodies, is not judged in this way. Certainly children may also be considered good or bad, yet the criteria applied are not aesthetic ones, that is, neutral standards, unrelated to the parent. Rather, it is the quality of the relationship between parent and child that is most important; we judge, then, in categories of love, not art.⁷

James Weldon Johnson says in his dramatic poetic sermon, "Creation:"

This Great God,
Like a mammy bending over her baby,
Kneeled down in the dust
Toiling over a lump of clay
Till he shaped it in his own image;

Then into it he blew the breath of life,
And man became a living soul.
Amen. Amen.⁸

We look at a world in pain and anguish. Where is the mother? She is feeding her young. She does not give up on her children. Like the pelican who cannot find enough food for her young, she will pluck her breast and suck blood from her own body to feed her children until food can be found.

Whatever images are used it is essential that one characteristic of God prevails, and it is this: God is the saving presence in the universe. God brings to fulfillment what God creates.

God is the caring Parent, both Mother and Father.

In this role God is vulnerable. As the parent is often the risk-taker setting free the children to be what they are to be, God takes chances with creation. But nothing causes God to abandon His children.

The story of a faithful God is repeated in the New Testament in the Parable of the Loving Father (sometimes known as the Parable of the Prodigal Son, but maybe more

7

Ibid., p. 111.

8

Johnson, James Weldon, God's Trombones (New York: The Viking Press, 1963), p. 20.

properly the Parable of the Elder Brother). Paul says in Romans 8 there is nothing that can separate us from the love of God.

Sallie McFague writes about it this way:

Parental love is the most powerful and intimate experience we have of giving love whose return is not calculated (though a return is appreciated): it is the gift of life as such to others. Parental love wills life and when it comes, exclaims, "It is good that you exist!" Moreover, in addition to being the gift of life, parental love nurtures what it has brought into existence, wanting growth and fulfillment for all. This agapic love is revolutionary, for it loves the weak and vulnerable as well as the strong and beautiful. No human love can, of course, be perfectly just and impartial, but parental love is the best metaphor we have for imaging the creative love of God."⁹

How can "saving presence" be defined? "Saving" means to "make whole." Taking a cue from the Native Americans we could use their definition of wisdom - that people may live. This does not mean mere survival.

Living implies beauty, freedom of choice, giving birth, discipline, celebration. Living is not the same as going shopping or buying, nor is it the same as making a nest in which to escape the sufferings of one another. Living has something to do with Eros, love of life, and with the love of others' lives, others' right to Eros and dignity.¹⁰

Matthew Fox lifts up the parental imagery of God using the concept of royalty. He quotes Meister Eckhart, a sixteenth century theologian:

Every human person is an aristocrat. Every human person is noble and of royal blood, born from the intimate depths of the divine nature and the divine wilderness.¹¹

Fox outlines three stages of a theology of the royal person in Israel.

First, God is King. This means God is with people, leading them. (Emmanuel - God with us.) God is Creator (Cf. Psalm 149:2, 95:3-5, 47:1-2, 7-8, 93:1-2). God cares for the world, that it live in justice and equity (Psalm 96:10-13, 97:1-2, 98:8-9, 99:4).

Second, the human king is imbued with the Spirit of God. God has entrusted to humanity the care for and preservation of the world (II Samuel 23:2-4). Though this is getting ahead of ourselves, we must recognize that the trust God expects from believers has already been practiced by God in entrusting people with this world.

9

McFague, op. cit., p. 103.

10

Fox, Matthew, Original Blessing, (Sante Fe: Bear and Company, 1983), p. 9.

11

Fox, op. cit., p. 94.

Third, there is the expectation of the Messiah, the King who comes to rule in the final age.

In a sense a regal figure of a King and an intimate figure of a parent do not gel. However, if we see ourselves as children of the King the perspective changes. Actually, this idea is inherent in the word "generous," a word Paul uses to describe the Corinthian Christians. The root meaning of "generous" is "of noble birth."

Can such a description befit all of creation? Can everything be considered children of nobility from the smallest of life to the greatest? Why not? The next time you know you have treated a part of God's creation with hostility or indifference, like the pesky box elder bug that flies around my office and irritates me to no end, would your behavior be different if you conceived that being to be of noble birth?

In fairy tales and Native American stories we find animals becoming humans and vice versa. There is the sense in these earthly, magical stories of nobility and powerful figures changing in one instance from a frog to a prince and in another from a boy to a buffalo. These are noble creatures.

The Jerusalem Bible translates Psalm 110:3 this way:

Royal dignity was yours from the day you were born, on the holy mountains,
royal from the womb, from the dawn of your earliest days.

The image of God as a parent is a comforting image to some and a fearsome image to others. Not all parents are loving and nurturing. In some ways the parent can be the object of a rebellious child.

The parent being described here is ideal. Yet, there is inherent in human parenthood a desire to do the best for the child, though there may be a debate among people what is the "best."

Again, Sallie McFague:

God . . . is primarily involved not in the negative business of judging wayward individuals but in the positive business of creating with our help a just ecological economy for the well-being of all . . . creatures. God . . . is the one who establishes justice, not the one who hands out sentences. . . . God is concerned with establishing justice now, not with condemning the future.¹²

God is the noble parent of a creation of noble children. His primary attribute is His saving presence.

Luther has a parental image of God that is stated this way:

He has given me and still preserves my body and soul with all their powers.

He provides me with food and clothing, home and family, daily work, and all I need from day to day.

God also protects me in time of danger and guards me from every evil.

All this he does out of fatherly and divine goodness and mercy, though I do not deserve it.

Luther's God may have been a tormenting God for him at one time in his life. But his brief statement here shows God as one who supports and nurtures. What is important for Luther is that God's goodness and mercy, as expressed in God's care, grow from God's nature and not from God's interpretation of and response to human depravity.

God is graceful. The work of God is renewing and mending and making things well. What is remarkable is that God initiates and sustains the action in spite of our undeserving nature.

Joseph Sittler describes "instances" of grace this way:

Grace is the empowerment of salvation by God, and its working is unfolded in structures parallel to man's knowledge of damnation. Grace is God's seeking and finding man as the lost one. Grace is God's benevolent disposition toward and action on behalf of man who is trapped in evil; grace is the forgiveness of sins. Grace is the surety of God's reality and meaning when damnation takes the form of meaninglessness. Grace is the placement of man in a community of redemption and reconciliation when abandonment and isolation is the form of the human hurt. Grace is the supply of strength when weakness is characteristic of the human effort. Grace is the yes of the evangel to every no of the world-within, the world-among, and the impenetrable world--around. Grace is the presence of the eternal in the evanescence of the temporal. Grace is the promise and power of life at the moment of death - even of those little dyings that occur before death. Grace is intrinsic in all that God has made."13

Adaptation and survival in the natural world can be interpreted as the work of the Present Saving Parent - God. It is the process whereby species are nurtured and continued.

Adaptation occurs through a series of births of a species in which characteristics of the species are altered so that the species can survive and reproduce. This would affect its color, its structure, its behavior patterns, etc.

Survival is the strategy of each individual species. In most cases this is innate. One of the goals of the species is to continue its own.

For some folks this notion may be difficult because it suggests that life is different today than when the world first came into being. There is evidence to this effect. Paleontologists are in this business, these old fossils. Either God is playing a game with us by planting some artistic creations in the ground or these fossils are a record of natural history.

The point is this: in the process of all interaction God is involved to make possible the wholeness and completeness of an entity. God is not static. God is not the watchmaker who puts the world into order and is removed from it, waiting in heaven for the folks to arrive.

As God is involved in the human history of the world so is God involved in the natural history. God's love is love of all creation. God is not separated from anything.

This notion is probably palatable to most people today. Chances are we have confined God's saving action only to people and not extended it to the non-human world.

This notion has merit also because it does fit comfortably with the mutualism we see in the natural process. It is not uncommon for us to point out the way plants and animals benefit one another, pollination being a prime example.

However, in the adaptation process there is the "dark side." It is called "antagonism." Along with the beneficial relationships there are the defensive measures. One animal wards off another. There is hurt and pain. Have you ever walked through a patch of stinging nettle? Or have you picked a tick off the skin? What have you said then about a benevolent deity?

In reflecting upon the antagonistic character of nature one cannot use it for the demonstration of God. However, maybe God can help us understand our natural world.

When God is viewed as one who comes to be involved in the saving process one can better deal with antagonistic adaptive behavior.

Another issue also sallies forth. In the course of natural events certain species become extinct. They are replaced by others. What happened to the dinosaurs? Did they all evolve into something else or did some of them die off? The answer is yes.

It is not unlikely that species will have lived out their lives. The death of a species when observing the whole ecosystem is not much different than the death of one of the members of the species. Once it has lived out its life something else takes its place. One can say that its destiny has been fulfilled.

Later in this paper the issue of extinction caused by the influence of human decision and action will be addressed.

For now, however, it may be helpful to see that within the natural process of life, the cooperation of plant and animal life as well as the defense mechanism that causes antagonism, we can see a God involved in the process, not removed from it.

NATURAL

The words that appear in the First Creation Story in Genesis always intrigue me, "And God saw that it was good." To me these words stand out in sharp contrast to words we often hear within the religious community, "And God said it was bad."

I am a firm believer in the Confession of Sins as a part of the liturgy. I believe we should lift up our sinful nature to recognize it for what it is. But I also feel we should hear and feel the word "good." Granted, we hear that word in the pro-

nouncement of forgiveness. At the same time I think we need to see good for its own sake.

For everything created by God is good, and nothing is to be rejected if it is received with thankfulness. I Timotny 4:4

When God calls something "good," I believe the word means complete, whole, having its own integrity, natural.

Natural? Natural! What raises the question is that within the Christian community the word "natural" is related to sin. "We are by nature sinful and unclean" according to the Prayer of Confession and Forgiveness in the Lutheran Worship. By these words we are stating the human dilemma of being sinful. It is a condition of life that can be dealt with, but not avoided. As Psalm 51 says, "In sin did my mother conceive me." Wretched person that I am I do not even deserve the grace of God. Sin is inherent in the human animal. The word "nature" is diminished in value.

Natural also has a positive side. It is not to be glorified or divinized. However, it should not be condemned or satanized either. "Natural" as used above is intended to describe the human condition as it is. "Natural" used to describe the all encompassing world community is to acknowledge the human/non-human world as it is.

The difficulty for some at this point is where sin enters into the picture. For now, this issue is suspended to be dealt with in the next chapter. At present, we are looking at the blessing, the ideal side of the human contribution to the world, rather than what humans take from the world - how are we to live with the world rather than against it.

Matthew Fox, a Dominican scholar, who is a promoter of creation-centered spirituality, has accused the Christian Church of what he calls Fall/Redemption theology. It is a theology that first establishes guilt and then shows a way out. He resists the idea of original sin.

His positive emphasis is called, as the title of his book, Original Blessing. He writes of his position in this way:

Like any parent, God loves her creation and that love which is an unconditional sending forth into existence is blessing. God's creation is desirable; that means it is a blessing. . . .

Blessing involves relationship: one does not bless without investing something of oneself into the receiver of one's blessing. And one does not receive blessing oblivious of its gracious giver. A blessing spirituality is a relating spirituality. And if it is true that all of creation flows from a single, loving source, then all of creation is blessed and is a blessing, atom to atom, molecule to molecule, organism to organism, land to plants, plants to animals, animals to other animals, people to people, and back to atoms, molecules, plants, fishes. . . .

Biblical theologian Claus Westermann, in his excellent study Blessing in the Bible and the Life of the Church, points out that there are two basic ways by which the God of the Bible deals with humankind: by deliverance and by blessing. . . .

Ironically, the fall/redemption tradition, in its overemphasis on sin, guilt, and introspection, has actually managed to deaden the meaning of salvation itself. As Westermann points out, 'it is assumed that everyone knows' what salvation means, but in fact we do not. By leaving creation out, the myriad theologians preoccupied with 'salvation history' have succumbed to distorting the scriptures, as Westermann indicates. 'No concept of history that excludes or ignores God's activity in the world of nature can adequately reflect what occurs in the Old Testament between God and his people.'

The God of the Covenant is the God of blessing. The promises made to Israel are promises of good things, of fruitful lands, of healthy children and wholesome living. And Israel is to bless Yahweh in return for this lavish gift.

For Yahweh your God is bringing you to a good land, a land of streams of water, of fountains and springs flowing forth in valleys and hills, a land of wheat and barley, and of vines and fig trees and pomegranates, a land of olive trees and honey in which you will not eat bread in poverty, in which you will not lack anything . . . you shall eat and be satisfied, and you shall bless Yahweh your God in the good land which he has given you. (Deut. 8:7-10)

Blessing is not an abstraction to the people who knew Yahweh the Creator God. Blessing is about survival and about enjoying life's basic gifts. When it came time for the aging Isaac to bless his son, these were his words: "May God give to you of the dew of heaven and of the fatness of the earth and much grain and wine." (Gen. 27:28)¹⁴

Luther's explanation to the First Article of the Apostles' Creed recognizes that there is something incumbent in the world (dare we say the natural world) where good is done for human welfare.

He has given me and still preserves my body and soul with all their powers.

He provides me with food and clothing, home and family, daily work, and all I need from day to day.

Maybe we take this too much for granted. Food, clothing, work, etc., just happen. When the opposite occurs, bodies destroyed, hunger, nakedness, homelessness, divorce, unemployment and underemployment, and withholding of things needed for basic survival, then we look at the causes and blame the depravity of humanity.

One of the mentors of the emerging ecological consciousness is a man from Wisconsin who wrote masterfully and persuasively in the late 1940's, Aldo Leopold. His classic piece is A Sand County Almanac in which he puts forth his conservation and land ethic.

Though Leopold does not speak in religious terms his ethic emerges from an attitude that the created order is good. He does not see the creation as a variety of entities or commodities but as a whole, a community.

His way of advocating a shift in our perception of the natural world is to say that we should appraise things as being natural, wild, and free. He contrasts this with a prevailing mood that humans create things to be unnatural, tame, and confined.

It is the arrogance of humanity to want to control, to dictate, to be the final decision maker about all things. We design things so they are shaped around us and create the unnatural, the tame, and the confined. Can the creation be as it is? Do we need to manipulate it? Can it be left on its own in a natural state?

Some have understood the statement in Genesis that humanity is to have dominion over the land to mean to subdue and conquer it. Not unless we have all things serving the purpose of humanity does a thing have worth. Not unless all is under our control have we done our job.

Lynn White argues in the essay cited above that the conquest of nature in the western world emerges from the theology of the Western Church that emphasized that "sin was moral evil, and that salvation was found in right conduct."¹⁵

It is critics like this who point at a truth, but who miss the point of the truth, too. Chances are, if White understood sin and grace as the thrust of the Church's proclamation rather than sin and law he may have drawn the same conclusions. Some Christians tend to hold nature hostage to the will of and service to humanity. They see their role in the order of creation as being the conquerors.

For some Christians grace is anthropocentric. It is God's divine action, the encounter with Jesus Christ, the promise of life after death. The non-human world is a part of the temporal structure that will be dismantled and rendered obsolete when a new heaven and a new earth appear after the Second Coming of Christ. This leads for many to conclude that any disruption of the universe natural, or created by human behavior, is probably within the will of God. They will then say, "Let the whole creation blow itself up. We have our ticket to heaven. The environment, the whole ecosystem, is separated from the divine-human encounter, the grace of God. Grace is for people. It is for people to go to a life after death.

On the other hand, the ecosystem can be perceived as the arena of grace. This is how Luther understands it. Review his explanation to the First Article of the Apostles' Creed. Grace embraces all of the human and non-human world. Sittler says:

When encountered in (God's) deed of grace in Jesus Christ, it so places the child of grace within existence that the world of persons, things, processes, and all mortal engagements with them is proposed to the mind and spirit as a veritable theatre of grace.¹⁶

Thus, the critic misses the point of the truth in the Christian tradition. In fact, when the Christian understands God's saving presence as a parent; God's graceful encounter with all the world in Christ, one cannot draw the conclusion that Chris-

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White, op. cit., p. 21.

16

Sittler, op. cit., p. 13.

tian theology, unless distorted as it has been, contributes to a mind set of conquest. It leads to another conclusion, and that conclusion is that the human has responsibility for the care of the earth as God has chosen to care gracefully for all of creation.

To have dominion according to Scripture is to have the responsibilities of stewardship and management of the earth. God's creation does not exist for the human. It exists for itself. It has its own integrity. By its very nature it is good.

Leopold says:

In short, a land ethic changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such.¹⁷

Regardless of how a person sees the emerging of various species in the evolving of creation we recognize there was a period of time in which the natural world managed itself without human intervention. It was natural, wild, and free. Humans were not wandering the earth to tame and contain it. (Only the Second Creation story in Genesis has humans being created first.)

Paleontology offers abundant evidence that wilderness maintained itself for immensely long periods; that its component species were rarely lost, neither did they get out of hand; that weather and water built soil as fast or faster than it was carried away.¹⁸

The "Birth of the Earth" metaphor acknowledges that human beings are a part of the biota. All things are creatures of God. Each person has his/her niche. We are interdependent upon one another. And we live in community.

The niche is not a small piece of staked turf. It is an entity's task and responsibility within a specific ecosystem. Each being has its contributions. This leads to interdependence among the variety of entities and results in an identifiable community. Interestingly enough it is the community that gives meaning to each individual entity.

The human animal, therefore, is not a cut above the rest of creation. Humanity shares its niche with all of creation.

Jenny White Cloud said:

As you know we Indians think of the earth and the whole universe as a never-ending circle, and in this circle man is just another animal. The buffalo and the coyote are our brothers; the birds, our cousins. Even the tiniest ant, even a locust, even the smallest flower you can find - they are all relatives. We end our prayers with the word mitkuye oyasin - 'all my relations' - and that includes everything that grows, crawls, runs, creeps, hops, and flies on this continent. White people see man as nature's

17

Leopold, Aldo, A Sand Country Almanac (New York: Ballantine Books, 1966), p. 240

18

Ibid., p. 274.

master and conqueror, but Indians, who are close to nature, know better. 19

In Genesis 2 man is fashioned from the dust of the ground just like the animals. There is an "authentic affinity between the man and the animal kingdom." 20 There is affinity in fact with all of creation.

The difficulty with this perspective is that so much of what humanity has done has subdued the earth and shaped it. It has not entirely been done to intentionally destroy. One could call it progress, culture, creativity. Many would claim this has all been done for the sake of God and to God's glory.

David Attenborough in The Living Planet helps us see this point:

Living organisms are extraordinarily adaptable. Species, far from being fixed and immutable, evolve with a speed that is well able to match most geological and climatic change. Owls, colonizing the far north, developed the thicker, whiter plumage that now keeps them warm and inconspicuous on the snow-covered tundra. Wolves, finding their habitat changing to desert or extending their territory into it, lost their thick fur, and so their bodies do not overheat. Antelope, moving out from forests and grazing on open savannahs, grew longer legs and became swifter runners, and so the hazards of living in such exposed circumstances were reduced.

Man, for the first few millennia after his appearance as a new species, showed signs of the same adaptability. Eskimos, living in the Arctic, developed short, stocky bodies, the shape that tends to retain heat; Indians in the Amazonian rain forest have hairless bodies and long thin limbs, the shape that tends to lose heat. Those people who live where the sunshine is so fierce that it can damage their bodies have dark pigmentation in their skins; those in cloudier, cooler regions where sunshine is so feeble and infrequent that it is scarcely sufficient to promote the production of vitamins in the body have less pigment and pale skins.

Then, some 12,000 year ago, mankind began to show a new talent. When faced with harsh surroundings, he no longer waited many generations for his anatomy to change. Instead, he changed his surroundings. He began to modify the land in which he lived and the animals and plants on which he depended. 21

19

Erodes, Richard and Ortiz, Alfonso, American Indian Myths and Legends (New York: Pantheon Books, 1984) p. 5.

20

Siegel, Charles P. "Women, Authority and the Bible," Women and Men in the Body of Christ, A Report by the Advisory Committee for the Study on Women and Men in the Body of Christ (Division of Mission in North America, Lutheran Church in America, 1987) p. 46.

21

Attenborough, David, The Living Planet (Boston: Little, Brown and Company, 1984), p. 291.

The first observable development of humanity altering the surroundings was seen in the Middle East - the dog that was the domestication of the wolf for the hunter, sheep and reindeer bred to live with and serve humans. Natural selection gave way to human selection. Species after species, animal and plant were tamed and confined. The hand of humankind was in the evolutionary process!

The introduction of the urban world brought about other changes. The first town sprung up in the Middle East some 10,000 years ago. Food came to the people. Foraging and hunting became a sport.

Today, it is no longer possible to talk about a world in which humanity plays a minor or insignificant role. Humanity's role is very much a self-conscious one of being the manager of the environment. We have much to say about whether or not the world can be natural, wild, free.

Attenborough points out:

The natural world is not static, nor has it ever been. Forests have turned into grassland, savannahs have become deserts, estuaries have silted up and become marshes, ice caps have advanced and retreated. Rapid though these changes have been, seen in the perspective of geological history, animals and plants have been able to respond to them and so maintain a continuity of fertility almost everywhere. But man is now imposing such swift changes that organisms seldom have time to adapt to them. And the scale of our changes is now gigantic. We are so skilled in our engineering, so inventive with chemicals, that we can, in a few months, transform not merely a stretch of a stream or a corner of a wood, but a whole river system, an entire forest.

If we are to manage the world sensibly and effectively we have to decide what our management objectives are. . . .

First, we must not exploit natural stocks of animals and plants so intensively that they are unable to renew themselves, and ultimately disappear. This seems such obvious sense that it is hardly worth stating. Yet the anchoveta shoals were fished out in Peru, and herring has been driven away from its old breeding grounds in European waters, and many kinds of whales are still being hunted and are still in real danger of extermination.

Second, we must not so grossly change the face of the earth that we interfere with the basic processes that sustain life - the oxygen content of the atmosphere, the fertility of the seas - and that could happen if we continue destroying the earth's green cover of forests and if we continue using the oceans as a dumping ground for our poisons.

And third, we must do our utmost to maintain the diversity of the earth's animals and plants. It is not just that we depend on many of them for our food - though that is the case. It is not just that we still know so little about them or the practical value they might have for us in the future - though that, too, is so. It is, surely, that we have no moral right to exterminate forever the creatures with which we share this earth.

As far as we can tell, our planet is the only place in all the black immensities of the universe where life exists. We are alone in space. And the continued existence of life now rests in our hands."²²

What does it mean to call creation "good?" It means:

1. We see integrity in all of life.
2. We recognize the human role as being one with the rest of creation.
3. We affirm that humanity has a unique role in husbanding the system through aggressive and passionate parent concern.

Sallie McFague puts it this way:

We must become the gardeners and caretakers of our Eden, our beautiful, bountiful garden, not taming and ruling it, let alone despoiling and desecrating it, as we so often do, but being to it as a universal parent, willing the existence of all species and, as a good householder, ordering the just distribution of the necessities of existence. We are, of course, speaking here of an attitude, of a role model that, if assumed, can begin to change both how one sees the world and how one acts in and toward it. If one thought of oneself as parent to the world, that is, if one moved oneself inside that model and walked around in it, acting the role of parent, what changes might come about in, say, how one spent one's time, one's money, one's vote? The universalizing of our most basic loves, extending them beyond the confines of our immediate families and primary communities and even beyond our own species, is, I believe, the necessary direction in our search for models for behavior in an ecological, nuclear age."²³

WILD

Webster's New World Dictionary defines the word "wild:"

"1. living or growing in its original, natural state and not normally domesticated or cultivated . . . 2. not lived in or cultivated; overgrown, waste, etc. . . . 3. not civilized; savage . . . 4. not easily restrained or regulated; not controlled or controllable; unruly, rough, lawless, etc. . . . 5. characterized by a lack of social or moral restraint; unbridled in pursuing pleasure; dissolute, orgiastic, etc. . . . 6. violently disturbed; turbulent; stormy . . . 7. in a state of intense excitement, . . . 8. in a state of disorder, disarrangement, confusion, etc. . . . 9. fantastically impractical; visionary . . . 10. showing a lack of sound judgment; reckless; imprudent . . . 11. going wide of the mark aimed at; missing the target . . ."²⁴

22

Ibid., p. 308.

23

McFague, op. cit., pp. 120-121.

24

Guralnik, David B., Webster's New World Dictionary (New York: Simon and Schuster, 1984), p. 1626.

Notice how the definition moves from natural order to human disarray to the inability to control. This characteristic of this world is the skeleton of this chapter.

When humans use the word "wild" it usually refers to disorder and no control. If one would survey most people the natural, untamed world is disorderly. Yet, after a careful analysis of the wilderness one discovers it is orderly. True, the wilderness is foreign to us. It smacks of movements and designs that are lacking in a tame world. But the wild has order.

Leopold speaks of the wilderness in this fashion:

Wilderness is the raw material out of which man has hammered the artifact called civilization.²⁵

What humans call "wild" in the natural world is not only order, but order begetting order. Tornadoes and floods, snow, rain, and wind storms, volcanic eruptions and earthquakes are part of the order of things. They involve forces that destroy. They also give new life. This may be disruption. But it is also ordering. The word "wild" is akin to "natural" as described in the previous chapter.

"Wild" as disruptiveness and chaos is best understood in the human world. Here it implies no order, no limits, no control. It is an earthly mark of human rebellion against God and against God's creation.

Ironically, "wild" denoting human behavior addresses the human desire to conquer, to tame, and to control for one's own purpose. It is tantamount to sin, the rejection of communal life.

McFague says:

To sin is . . . to refuse to take responsibility for nurturing, loving, and befriending the body and all its parts. Sin is the refusal to realize one's radical interdependence with all that lives: it is the desire to set oneself apart from all others as not needing them or being needed by them. Sin is the refusal to be the eyes, the consciousness, of the cosmos.²⁶

The word "idiot" comes from a Greek word that refers to a person who thinks and behaves as though he/she does not need, relate to, nor depend upon community.

As God has created entities and ecosystems, it is the human penchant and persuasion to disrupt the system and care for it in so far as the realm can be controlled. Humanity goes wild, throws away its inhibitions, and lives for the moment without fear of consequences on the one hand, and on the other hand dominates with indifference and denying the orderliness of the non-human world. This has been called traditionally "original sin."

When Luther says in the explanation to the First Article of the Apostles' Creed that we do not deserve all that God does for us, what he is saying is that God acts in spite of humanity's nature to destroy both Creator and creation.

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Leopold, op. cit., p. 264.

26

McFague, op. cit., p. 77.

From the point of view of the Christian tradition, the situation is that human beings choose and act by nature to create systems that self-serve and satisfy self-interests. Rather than ecosystems, systems that recognize the interdependence of all things, people prefer, manufacture, even justify egosystems, systems that put the "I," the ego, in the middle of all things.

The behavior that endangers the world can be shown on a continuum where at one end there is the molestation of the environment for the sake of greed (e.g. allowing cattle to overgraze land) and at the other end the need for survival (the poor who gather wood at the edge of the forest to prepare their meager food supplies).

From an ecological perspective, the earth is threatened by forced extinction of species by humans. Root cause? Sin!

Extinction of species is a part of the natural process. Chances are it began three and one half billion years ago. However, extinction within the natural process is balanced by the formation of new species in the wise design of the creation. This is called "speciation." This occurs primarily because environments vary and some species do better than others in a given habitat. Thus, they survive.

The key to success is adaptation. Adaptation is possible because of the amount of genetic variability present in all things. It is this genetic variability that keeps things in the game and keeps the game going.

"Speciation" is a faucet running new species into a sink. "Extinction" is the drain removing others.

So what is the problem? The basic problem is that in this "modern" world the faucet is not keeping up with the drain. Acceleration is occurring. Why? Because of people impact on the environment! This is the human dilemma.

For perhaps 50,000 years people have interfaced with the environment. From the year 1600 people could, because of technology, overturn animals to extinction in just a few years and thereby disrupt the environment extensively and rapidly.

Between 1600 and 1900 people eliminated about 75 known species, mostly mammals and birds. Since 1900 people have eliminated about 75 known species. From 1960 on the extinction rate has soared. The conservative estimate is that beginning in 1984 100 species world-wide have been driven to extinction annually. As of the 1980's we are facing a situation where each hour of each day or every year one species becomes extinct.²⁷

By eliminating an appreciable portion of the earth's stock of species, humanity might be destroying life that just might be its own. Some biologists believe that humankind is altering evolution (which is logical in terms of this theory) and altering it for the worse.

Humanity's pressure on species is both direct and indirect - by both over exploitation and by habitat modification and destruction: overhunting, overfishing, over harvesting, destroying, and altering natural habitats.

What difference does it make if species become extinct? None, as long as there are new species able to take the place of others to perform certain functions and as

long as the extinction does not become so rapid that speciation is completely frustrated. It is the maintaining of species that provides for the survival of genetic capabilities.

The dilemma is the disruption of community, the extinction of habitat(s). It is not the extinction of a specific species that will make a significant difference. It is how the habitats are affected in general. An individual can exploit a tiger and thereby affect other things in the habitat. However, more than likely, an individual can exploit the tiger's habitat for a variety of purposes: timber, firewood, livestock grazing, or cultivation.²⁸ Herein is the problem.

The key to extinction is change in either the physical or the biological environment.²⁹ When a habitat is disrupted it is difficult if not impossible to rectify it. An example of this is when the plow is put to the virgin soil where native herbs exit. Once the land is torn up by the plow native prairie plants will not naturally return if the land is left untouched. Other plants take their place and grow more rapidly. The only way for the native plants to return is by human beings finding them elsewhere and reintroducing them.

Individual cases of selfish exploitation can be cited, but the difficulty is in the attitudes of great numbers of people and the increase in the world's population. Natural environments are impacted because of the numerous products needed to satisfy customer demands. Affluent sectors of the global village are responsible, unknowingly but effectively, for the disruption of myriad species' habitats in lands far distant from their own.

Forest lands are also depleted by the poor for firewood, but there is no comparison with the world's rich minority who, for example, destroy forests in Central America to create artificial pasturelands to grow more beef for the hamburger trade and other fast food businesses in the United States.³⁰

The fact of population increase also presents some interesting issues. More is necessary for feeding the world. Diversity, which is necessary for the stability of species and genes and productivity of the land, is jeopardized. More land is also necessary for living space. Myers, in Sinking Ark, anticipates that this one fact alone will drive anywhere from one fifth to one half of the wild animal population to extinction.³¹ Community/habitat and disruption/destruction are at the heart of the matter.

One of the pressing concerns in recent years is the disposition of toxic and hazardous waste. Practices of disposing such material that date back many years are now creating problems by contaminating underground water supplies. Landfills that were considered only land sores are now becoming cancers in the system. Today, there are careless practices in the way certain things are disposed of: paint thinners, home

28 Ibid. p. 29

29 Ehrlich, Paul and Ann, Extinction (New York: Random House, 1981), p. 27

30 Myers, Op. Cit., pp. 8-10

31 Ibid, p. 48.

pesticides, bleaches, and old TV sets (the PCBs are the problem).

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Habitat disruption has serious human implications as well. Inequities occur, resulting in hunger, injustice, and war. The pressing story of Ethiopia brings the problem into striking relief.

Habitats are disrupted and destroyed as the result of sin. Sin is both acts of commission and omission. It is what we do, what we do not do, and what we are. As sinners we act to exploit our world, making an ecosystem an egosystem. Sin also is how we act regardless of how sinless our motives may appear to be. There are no sinless alternatives!

Sin is described as arrogance, missing the mark, rebellion, incompleteness, egocentricity. It affects what we think, believe, as well as what we do. Sin is both individual and corporate.

Adam wanted to be like God. Cain chose not to be responsible for his brother. The human situation is the desire to be the creator and not the creature. The world is a toy which serves private purposes.

The Ehrlichs say that the ultimate form of arrogance is to play God by pushing organisms out of existence. The notion is that the only important life form is the human being.³³ Ironically, they advise that to sell people on the preservation of habitats one must demonstrate how species and habitats serve humanity. Either way, destruction and restoration of habitats have sin at their heart.

Thus, "wild," as understood has no order, chaos, disruption, indifference to control, and the need to control, fits the human condition Christians call sin. This stands in contrast to "wild" meaning that which is natural and orderly.

There is a third characteristic to the word "wild" that needs to be addressed. When they are wild and out of control. In our generation the ultimate end over which we have no control is the unleashing of nuclear power which could result in the death of birth, no less the death of death.

This discussion usually revolves around a nuclear holocaust. But there are other slower processes that humans have set into motion, e.g. the disposing of toxic materials and the wanton destruction of habitats.

Jonathan Schell in Fate of the Earth outlines the dilemma very well.

. . . as far as we can tell, there will never again be a time when self-extinction is beyond the reach of our species. . . . What is new to our time is the realization that, acting quite independently of any good or evil intentions of ours, the human enterprise as a whole has begun to strain and erode the natural terrestrial world on which human and other life depends. . . . Seen as a planetary event, the rising tide of human mastery over nature has

32

"Hazardous Waste . . . Stored up Trouble," National Geographic, March, 1985, p. 318.

33

Ehrlich, Op. Cit., p. 49.

brought about a categorical increase in the power of death on earth. . . . the death of a species or an ecosystem has a role in the natural order that is very different from that of the death of an organism. Whereas an individual organism, once born, begins to proceed inevitably toward death, a species is a source of new life that has no fixed term. . . . The question now before the human species, therefore, is whether life or death will prevail on the earth. This is not metaphorical language but a literal description of the present state of affairs.³⁴

The human capacity to unleash the destruction of the earth means that we hold the reins in our hands.

To respect the Birth of the Earth one respects all of creation's freedom to be. Fulfillment is to allow all of creation to live out its potential. The role of the human is to serve as the parent.

To Summarize:

In the non-human world, the wilderness, the wilds - orderliness is its character.

In the human world "wild" has two meanings: The first is the human raging and indifference toward the world - where everything is me first. The second is a denial of the wild world that requires humans to control and conquer it.

Wild has to do with the future. When something is out of control it moves beyond the present. Humanity has the capacity to create such a future, a future that can mean not only the death of birth, but the death of death. This does not deal solely with nuclear power. What all have we dumped into the earth that will impair the future?

FREEDOM

How can we live out this understanding of the Birth of the Earth?

Luther concludes the explanation to the First Article of the Apostles' Creed: "We are to thank and praise, serve and obey him."

We are creatures of God who have been set free. Someone has described the Cross as "God's birthing chair" - the throne of travail, hard labor, anguish. Yet, in the meekness is new life.³⁵ Thus, in Christ we have been given new birth.

We have the experience of our first birth which brings us into solidarity with all of creation. We also have our second birth which empowers us to live freely to serve the world.

34

Schell, Jonathan, Fate of the Earth, (New York: Alfred A. Knopf, 1982), pp. 108-113.

35

Fullenwieder, Jann E. Boyd, "Labor unto Death: a Theology of the Cross" ("Woman and Men in the Body of Christ," 1987), pp. 58-59.

We are set free to free the world. We are called to pass life along. As in natural birth we are co-creators with God who is the source of life.

We should become mothers and fathers to the world, extending those natural instincts we all have, whether or not we have children of our bodies (or adopted children), to what Jonathan Schell calls 'universal parenthood.'³⁶

To pass life along does not only mean to procreate or to permit life to be pro-created. It also means to set up systems where that which is can survive and be fruitful and multiply.

In the January 18, 1988 issue of Newsweek there was an article entitled "Making Nature Whole Again." It is a story about people who are investing their lives in the restoring of the environment.

The fix-it men of the environment are here. Not content to merely lobby for antipollution laws or sue to keep a developer from building on a bird sanctuary, they are repairing what man has already damaged. They are determined to do no less than turn back the calendar to the days when buffalo roamed the prairie and salmon ran as thick as molasses. An early example of such 'restoration ecology' was reclaiming strip-mined land. But today's restorers go beyond replacing topsoil. They are also replanting entire tropical forests, rebuilding streams and re-creating wetlands in hundreds of projects from Costa Rica to Maine.³⁷

The task before us is to live with the world not against it, to co-exist and not to control, to live within the rights of the other, to assure "justice for all."

One day I was standing on a patio eating refreshments with many Church professionals. I noticed a small group of people absorbed in something that was happening at their feet. I discovered that it was an ant pulling a toothpick across the cement surface of the patio.

Apparently, the observers tormented the ant on several occasions by removing the toothpick. But undaunted, as soon as the ant found the toothpick, he would continue his effort.

The patio was large and made of concrete. One could only guess where the ant was going. The only evidence that the ant knew its way was that it continued on a straight line.

It was time for dinner, and we were called into the main dining room. The ant was still about its task. Obviously, we were going to miss out on the outcome of this event.

Thus, enters the human intevenor. One of the adults reaches down and picks up the ant and the toothpick. It is obvious that the ant is irritated. It runs all over the person's hands. The intruder was able to manage the ant's antics and bring him to the edge of the patio and place him in the dirt.

36

McFague, op. cit., p. 119.

37

Newsweek, January 18, 1988, p. 78.

As I watched the development I began to wonder why the "adult" intervened. Was it for the sake of the person's fulfilling a need to dominate and control or was it for the fulfillment and welfare of the ant? Was it essential that there be human intervention?

We think we know best. We have a sense of destiny and future. We are endowed with power to decide in ways other creatures cannot. To what extent does this give the human animal the right to control? Are there ants' rights?

To be able to shape a world where justice prevails for all of creation requires that we become politically competent. I believe there is such a thing as "ants' rights." We need to challenge a world that does not allow freedom and also denies fulfillment. Does the suffering in the Third World come from a lack of food or the lack of will? Hunger is a political and distribution problem. Hunger is caused by sin against ones neighbor, to control them and to withhold their rights to be free.

Freedom is to enable the world to realize its fulfillment. How can we do this? Here are a few of the answers.

We can see to it that justice is ordered. George Johnson in "Preaching and World Hunger" in Lutheran Partners says,

Justice is the very essence of God, as love is. It is the action of God to bring deliverance to oppressed, suffering, lost people. It is part of what the Bible calls salvation. It is God's action to free people from the power of sin and evil. Justice is good news to the poor, the blind, and others who are oppressed by evil. It is the restoration of right relationships. The kingdom of God is a kingdom of justice. . . .

Like God's desire to forgive, so his desire to correct injustice is not limited to something for the next life. The gospel is the power of God unto salvation and salvation is wholeness of one's being. Jesus came to bring the abundant life, beginning now.³⁸

We can impart wisdom - pleasure. Pleasure is how the Greeks define wisdom. "Taste and see how good the Lord is," shouts the Psalmist.

Pleasure can be interpreted as self-gratification or it can be interpreted as fulfillment. Interestingly enough the words pleasure, thanksgiving, and grace all come from the same root Latin word.

What do we really have coming to us? (The "we" is all of creation.) We can roll in the mud of sin and say, "We deserve absolutely nothing." However, in God's wisdom (pleasure?) all of creation can live to its fullest in terms of what it has within itself (genes) and what it has from without (culture/environment).

We can extend the invitation to the oppressed to be free. This is no small task. Who are the oppressed? Those who are held captive and denied fulfillment from within and/or without. Sometimes people do not know that freedom is possible.

We look with horror at the hungry people of the world. We rue the day that we would be subjected to such a plight. What reaction do you think a hungry person would have if he/she would observe the world that we take for granted. As their experience is beyond our experience, so is our's beyond theirs.

Our mission is not to bring our world to others. It is to help others realize fulfillment within their world. They are invited to be free, to move in their minds and hearts as well as bodies to a new understanding and way of life.

We can contribute to the transformation of life. This has two aspects. The first is obvious. Things can be better: the naked can be clothed, the hungry fed, etc.

There needs to be transformation on our part, too. We need to reset our priorities in terms of use of wealth and power. Our political wills must be reshaped.

We hear a lot today about creating a moral atmosphere in our country. Politicians are running on this platform. Their concern is right, but their objective is wrong. Morality involves transforming our entire mode of behavior, personally and socially, so that the world and all that is in it can be fulfilled. Morality is not simply the fulfillment of one's personal life. It is a community issue.

H. Paul Santmire concludes his book, The Travail of Nature:

This is the question, then, more than any other . . .

Is the final aim of God, in his governance of all things, to bring into being at the very end a glorified kingdom of spirits alone who, thus united with God, may contemplate him in perfect bliss, while as a precondition of their ecstasy all the other creatures of nature must be left by God to fall away into eternal oblivion?

Or is the final aim of God, in his governance of all things, to communicate his life to another in a way which calls forth at the very end new heavens and a new earth in which righteousness dwells, a transfigured cosmos where peace is universally established between all creatures at last, in the midst of which is situated a glorious city of resurrected saints who dwell in justice, blessed with all the resplendent fullness of the earth, and who continually call upon all creatures to join with them in their joyful praise of the one who is all in all.³⁹

CONCLUSION

I introduced this paper indicating that we need to find a way to look at the Creator God and the creation of God in a fresh way that will help us address developing issues in our day.

Hopefully, we have been able to see some things.

1. The world in which we live is one ecosystem. The human and non-human world is the arena where God gives birth to all of creation.

2. The threat of nuclear destruction results from the human desire to control the ecosystem. There is an innocent side to this problem. We have developed skills and knowledge about our world. These can be used for the welfare and fulfillment of life. However, when does one overstep the bounds of what is controllable and what is not? Must all of life and space be "conquered?" Intelligence is not free nor immune from sin.

Lest we forget, the destruction of the environment may be far greater in terms of present disposal methods of toxic waste than any disposition of nuclear waste or nuclear holocaust. Many past sins could put us on the verge of death of birth.

3. How do we use scientific theories? Does a change in theory alter our understanding of the world, God, and Scripture? We stand on the top of an explosion of knowledge. One day we thought ants on a particular plant caused the plants destruction. Recently we have learned that ants are that plants bodyguards.

Scientific theory and understanding should be alterable. Our theology needs to be based on God not our scientific knowledge. This puts us back to the Scriptures and the experience of the faithful people.

To view our world from a birth metaphor unchains us from the scientific-religious arguments.

4. The present challenge in the political arena and the courts of justice is coming from the conservative right. We need to be clear about what they are saying and what the other side is saying. Over what is the debate? Are the issues clear?

The basic legitimate concern of the conservatives is the authority of Scripture. Does Scripture have authority? Over what?

Scripture is the norm and rule of faith and life. It is the Church's book. It is the record of God acting, speaking, creating, sustaining, redeeming in the past, the present and the future.

The Biblical tradition presents a God who is involved in creation. This should be the starting point rather than debates over what ancient writers may have intended.

5. Humans live in solidarity with all of creation. This includes those who are without. We cannot avoid the issue. We belong to each other. We are all brought into existence by birth. We are not conquerors of the world. We are co-creators and co-parents with God. We are part of the birthing process.

Theme: Birth of the Earth

Intention

Enable the participants to:

Become familiar with the "Birth of the Earth" metaphor as a way to describe how the world is created, reflecting on various Biblical descriptions and creation stories and contemporary theories of creation.

Catechism

I believe that God has created me and all that exists.

Scripture

Genesis 1:1-2:25
 Deuteronomy 21:18
 Deuteronomy 32:4,6,18
 Psalm 18:1-6
 Psalm 104
 Proverbs 8:22-31
 Job 26:7-13
 Job 40:15-24
 Isaiah 49:15
 Romans 1:20a
 Colossians 1:15

B. BIBLE STUDIES

1. Write Your Own Creation Story

- I. Description: Write a creation account based on own understanding of the origin of the world.
- II. Appropriate for: Grades 7 and older
- III. Biblical Text: Genesis 1:1-2:4
- IV. Materials: Bibles, pencils, paper
- V. Process:
 - A. Ask participants to read Genesis 1:1-2:4.
 - B. Talk a few minutes about the various hypotheses of "how the world was made."
 1. Big Bang - (Cf. I H 1)
 2. Creationism
 3. Other?
 - C. Ask participants to write their own creation stories. They can work individually or in groups of two.
 - D. Have the participants read their stories.
 1. The leader listens for three things:
 - a. Who creates?
 - b. How is the world created? What "powers" are used?
 - c. What value is there in creation? Is there any worth given?
 2. Chances are, the above information is missing.
 - E. Remind the participants that the authors of the first creation story used an existing hypothesis of that day. (See the background paper for more information.) Read the Genesis account and note the following:
 1. God is proclaimed the Creator. How does the Genesis writer show this?
 2. God created by speaking. Words are used. Cite examples from the Genesis text.
 3. God calls creation "good" and spends one day celebrating creation's value. How does God do this? (He does it by calling creation good and resting on the Seventh Day.
 - F. The First Creation Story talks about the creation of things.
 1. Does it also talk about the creation of relationships?
 2. Is there any order in the process? (Note the sequence of the days.)
 3. Does one thing build upon another as far as the writer of this account is concerned? As far as you are concerned?
 - G. It may happen that the participants raise some questions how the contemporary hypotheses might negate the Biblical account of creation. The important factor is not that the Biblical account is received literally. Emphasize why God did what was done and how it was done. This is a statement of faith about God, not a scientific description.

2. Creation Hymn

- I. Description: Jesus is the intermediary of creation.
- II. Appropriate for: All Ages
- III. Biblical Text: Colossians 1:15-20
- IV. Materials: Bibles, paper, pencils
- V. Process:
 - A. Participants read the passage antiphonally.
 - B. Divide participants into groups and instruct them to rewrite the text in their own words and set words to a familiar tune, using the ideas from this passage. (People remember ideas and concepts more easily when they are set to music.)
 - C. Discuss the musical "creations" and what the participants saw in the passage.

3. Movie Screen the Genesis First Creation Account (Cf. I C 4)

IV 4. God's First Creation?

I. Description: An introduction to the fact that the Bible indicates several different entities God created first.

II. Appropriate for: Adults

III. Biblical Text: Proverbs 8:1-36

IV. Materials: Bibles, paper, pencils

V. Process:

- A. Form into groups of 6 to 8 people.
- B. Ask participants to write down on a piece of paper what they think/believe God created first. (Show the cards to no one.)
- C. Ask one person in each group to read Proverbs 8:1-36. Instruct the group to listen to how Proverbs would answer the question, What was God's first creation?
 1. Let the groups respond spontaneously.
 2. The participants can choose to share their original answers if they desire.
- D. Ask the small groups to share with the larger group:
 1. What did they discover?
 2. What sex is Wisdom?
 3. What did some people think/believe God created first?
 4. How do the participants respond to what Proverbs says?

5. "Birth of the Earth"

I. Description: A study of the "Birth of the Earth" metaphor. There are several sequences. It can be used in a variety of time frames and outdoor settings. The study includes:

1. A discussion of the origin of various things
2. Introduction to the metaphor, "Birth of the Earth"
3. Activities to help discuss the evidence of birth
4. Information that could help interpret physical phenomena
5. A Bible Study of Psalm 104
6. An extension on body language in the Church

II. Appropriate for: All age groups with some adaptability.

III. Biblical Texts: Genesis 1:1-2:26, Psalm 104

IV. Materials: Bibles. See special activities for details of materials.

V. Process:

- A. Wonder about origins - an introductory discussion
 1. Ask: Have you wondered how various things came into being or where they come from?
 - a. Participants may know some interesting facts about the origins of some things.
 - b. Tantalize the participants with a few examples. (Cf. I H 2)
 2. Ask: Have you ever wondered, or do you know, how this great vast wonderful world came into being?
 - a. Participants may have some ideas about the creation of the world.
 - b. If they don't, briefly describe the popular Big Bang Theory, evolution, and the first two Genesis accounts, Genesis 1:1-2:4 and 2:4-26. for details)
 - c. Arguing for points of view is out of place here. This step simply lifts up information.
- B. Introduce the metaphor "Birth of the Earth."
 1. Ask: Do you know how you came into being?
 - a. What is the word that is used to describe this event?
 - b. Can anyone tell the story of the day they were born?

2. Ask: Are human beings the only beings that are born? Besides humans, what are there? Tell stories.
 - a. Maybe younger children know about pets while older children may talk about birth as the emergence of life in any form.
 - b. Do the participants know how birth occurs? (Some folks may giggle, others will have some facts. See I H for some details.)
3. Ask participants to remember what the Genesis Accounts said about who created the world.
 - a. Did God create you? How?
 - b. Does God create other living things? How?
4. Introduce the Apostles' Creed - say it together: "I believe in God the Father, Almighty, maker of heaven and earth."
 - a. Depending upon the situation do one of the following:
 - Ask participants to describe what these words mean.
 - Each individual draw what these words mean or do a group mural in silence.
 - Give each person a piece of clay and ask them to shape the clay to convey their understanding of the Article.
 - b. Discuss
5. Does anyone know how Luther explained this Article? ("I believe that God has created me and all that exists.")
 - a. If you were Luther what would be a substitute word for "created?"
 - b. Explore several possibilities.
 - c. Introduce the "birth" motif if it is not suggested.

C. Evidence of birth - activities

These are a series of activities from which to choose depending upon the leadership, age of group, general interests, skill, time, and the variety of ecosystems on the site. The activities only introduce people to areas where evidence of birth can be recognized.

1. Hatchery (Visit one or make your own, Cf. I E 3)
2. Fields and Fencerows

There are grasses, flowers, birds, and insects abundant in fencerows and fields which have not been cultivated for a year or more. Take along appropriate equipment to press flowers and catch insects. A visit to such an area can be done at night using a strong flashlight with a red beam. Crawling around, pulling things apart, looking down in the earth are necessary things to do. While doing one or more of the activities listed below ask participants to share evidence of birth.

a. Activities

- Bones and Straws (Cf. I E 4)
- Early Morning Bird Walk (Cf. I E 8)
- Find Your Mate (Cf. I E 9)
- Cocoons (Cf. I E 10)
- Seeds (Cf. I E 11)
- Hatching (Cf. I E 12)
- Bird Nest (Cf. I E 13)
- Flower Powder (Cf. I E 14)
- Animal Parts (Cf. I E 15)
- Following the Scent (Cf. I E 16)
- The Mating Game (Cf. I E 17)
- The Wonder of Nature (Cf. I E 18)
- D'Juno (Cf. I E 33)

b. Arts and Crafts

- Ant Jar (Cf. I F 3)
- Flower Press (Cf. I F 4)

3. Deciduous Woodlands

"Deciduous" (Latin) means "to fall down." The forest is composed of hardwoods and broad leaves. It is a climate-creator. Trees breathe out moisture and oxygen, creating rainfall and cleaning the atmosphere. The air warms and cools slowly in the forest. The stand of trees melts the wind. A visit to this type of location introduces many potentials for seeing the birth of life.

a. Activities

- Lichen Looking (Cf. I E 19)
- Soil Profile (Cf. I E 20)
- Sawing Away (Cf. I E 21)
- Moisture Makers (Cf. I E 22)
- Litter Critters (Cf. I E 23)

b. Arts and Crafts

- Spore Prints (Cf. I F 5)
- Bark Rubbing (Cf. I F 6)
- Bark Casts (Cf. I F 7)

4. Conifer Forest

Conifer means "cone bearing." This is the evergreen forest. Look carefully for the fungus world. It is more important in this woodland than in a deciduous forest.

a. See activities above for the deciduous forest.

b. Soil Profile (Cf. I E 20)

5. Creek/Pond

It is believed that life emerged first in chemically rich water about 3500 million years ago. The ocean was the birthplace and the nursery of life and is still the main residence of life.

a. Activities

- Pond or Lake Study (Cf. I E 6)
- Habitats of the Pond (Cf. I E 24)
- What Lives Here? (Cf. I E 25)
- Can Fishing (Cf. I E 26)
- A Better Fly Trap (Cf. I E 27)
- Water Snails (Cf. I E 28)
- Water Striders (Cf. I E 29)
- Animal Movement in Water (Cf. I E 30)
- Water Breathers (Cf. I E 31)
- Swamp (Cf. I E 32)

b. Arts and Crafts

- Water Scope (Cf. I F 2)
- Sealed World (Cf. I F 8)

D. Information on the Reproductive Process

1. The Incredible Egg (Cf. I H 3 a.)
2. Chicken Ova (Cf. I H 3 b.)
3. If/When You Find an Egg (Cf. I H 3 c.)
4. Fungus (Cf. I H 3 d.)
5. Ferns (Cf. I H 3 e.)
6. When Life Began (Cf. I H 3 f.)
7. Cattails (Cf. I H 3 g.)
8. Aphids (Cf. I H 3 h.)
9. Frogs and Toads (Cf. I H 3 i.)
10. Conifers (Cf. I H 3 j.)
11. Cherry Trees (Cf. I H 3 k.)
12. Birds (Cf. I H 3 l.)
13. Human Reproduction (Cf. I H 3 m.)

E. Bible Study - Psalm 104 (RSV is strongly recommended)

1. Read Psalm 104 entirely to get an overview of the passage.
 - a. Passage can be read:
 - + Out loud - reading section by section (see below) and asking participants what this says to them,
 - + Out loud - all at one reading, or
 - + To oneself.
 - b. Ask participants to share with everyone what this Psalm is saying to them. (Try to get everyone in group to share something.)
 - c. Ask someone to read aloud Genesis 1:1-2:4. The participants are to listen carefully and interrupt any time they hear anything that relates to Psalm 104 either something that is similar or dissimilar. Allow whatever discussion may occur.
2. Read Psalm 104 section by section with the intent to dig deeper. Ask one person to read each section aloud and then discuss.
 - a. Vss. 1-4 (Note parallel with Genesis 1:1-5)
 - + What is passage saying? Participants use own words.
 - What is clothed and covered?
 - What is the light and the tent?
 - Who is riding the winds?
 - For whom are the wind, the fire, and the flames messengers?
 - + Where is God? In front or behind these things?
 - + Can the participants understand a "hidden" God? Luther did. Through various ways God reveals Himself.
 - + Can the world, the universe, all that God created, be considered an "expression" of God?
 - b. Vss. 5-9 (Note parallel with Genesis 1:6-10)
 - + What is passage saying? Participants use own words.
 - What is the shape of the earth? (Round, pearshaped, flat?)
 - Are the mountains below or above the water?
 - What are the boundaries referred to?
 - What other types of natural boundaries do we know exist?
 - + Note what God does to make things happen.
 - Compare to Genesis 1:1-2:4 - how God creates the world.
 - Leader may review how the "word" is the means by which God creates the world, speaks through the prophets to rightwise the world, enters the world in human form, and communicates with us in the present.
 - c. Vss. 10-13 (Be sure to use the RSV here. It is more helpful.)
 - + Participants draw a picture that depicts this segment.
 - + Share the pictures.
 - + Leader notes how participants pictured vs. 13b, "the earth is satisfied with the fruit of thy work."
 - + Conduct a discussion on "fruit." What is it?
 - Fruit is the way a specie regenerates itself.
 - Who is doing this regenerative work according to this text?
 - d. Vss. 14-23 (See Genesis 1:11-19)
 - + Participants put passage in their own words.
 - + Note the "interdependence" suggested by the author.
 - What depends upon what?
 - Can you devise a "chain" like a "food chain" from this?
 - + How do the participants understand vs. 21?
 - Upon what does a lion prey?
 - What are some additional examples of predator/prey situations?
 - Who provides the prey according to the text?
 - Does this passage have anything to say about the way humans consume the lives of plants and animals for sustenance?

- The Native Americans understand that the prey the hunter kills is a gift of the prey to the hunter if the hunter has the proper attitude.
- e. Vss. 24-26 (Compare Genesis 1:20-28. RSV best for this section.)
 - + Participants put passage in own words.
 - + Why did God make fish?
 - Does God play?
 - In the First Genesis Account what did God do on the Seventh Day?
 - Is there a relationship between play (recreation) and the Seventh Day rest?
 - + What does the Psalmist mean in vs. 24, "In wisdom . . .?"
 - How do the participants understand wisdom?
 - Read Proverbs 8:22-31 (The "I" is Wisdom, a female.)
 - According to Proverbs what does God create first?
 - Note comparisons with this Proverbs passage and readings from Genesis 1:1-2:4 and Psalm 104.
- f. Vss. 27-30 (Compare Genesis 1:29-31)
 - + Participants put passage in own words.
 - + How dependent is the earth upon God? What images does the Psalmist use?
- g. Vss. 31-35 (See Genesis 2:1-4)
 - + Participants put in own words.
 - + Note what humanity does.
 - + In the whole Psalm where are human beings?
 - In the center of all things?
 - A part of all things?
 - As one praising God?

F. Summarize

G. Extension - the Body Language of the Church

1. It may help participants to realize that when talking about the world using body language and bodily functions we do the same thing in describing the Church.
2. Ask participants what body language they can name in the New Testament.
3. Look at various examples:
 - a. Birth of Jesus in Luke 2. This is a physical event of God. God enter human history as a human being. Note Philippians 2:5-11.
 - b. Resurrection of Jesus in all the Gospels. When the resurrection is discussed it is a physical event. Is the body of Christ in the tomb? Has it been changed? Is He recognizable? Is this event important in the life of the Church and the ecology of the world?
 - c. The Church is described as the Body of Christ in I Corinthians 12. Our entrance into the Church also involves a bodily event. What is it?
 - d. Holy Communion involves the eating of bread and the drinking of wine. We are also eating the body of Christ and drinking His blood.
 - e. Describing the new creature God has made in faith the word "rebirth" is used.
4. From this perspective can participants envision the earth as the body of God and all that exists as expressions of the body of God?

C. WORSHIP AND DEVOTIONAL EXPERIENCES

1. Group Prayer - Day 1

I. Description: This is the first of a day by day process to engage participants in corporate prayer. A different suggestion is given for each day. T

II. Appropriate for: All Ages

III. Materials: Paper and pencils

IV. Process:

A. Participants write their hopes and expectations for the week.

B. Participants read aloud what they have written.

C. Leader closes with a prayer (called a "collect") that includes - or collects - all the hopes and expectations mentioned. The leader could also begin each section of the prayer using the name of the person who expressed the idea(s), "Jean prays that . . ."

2. Special Spots I

I. Description: Participant find a special space for devotion and meditation.

II. Appropriate for: All Ages

III. Materials: 12" of surveyor's tape for each participant.

IV. Process:

A. Find a natural area that will not be disturbed by other individuals and groups. (The area can be used several times during the week for devotional purposes and for environmental awareness activities.)

B. Begin this activity by telling the participants that they are going to a spot that will become very special to them.

C. Upon arriving at the area instruct the participants to find a place within sight of the leader that they like and sit down. The closest person should be 30 feet away. There is to be no talking. They are to stay in the spot for 10 minutes observing what they see in the area. Tell the participants to use their eyes, ears, and sense of touch to become familiar with the place.

D. Near the end of the quiet time the leader distributes surveyor's tape and instructs the participants to put their names on it and tie it in their area.

E. Gather the participants after the 10 minutes and ask them to describe their areas.

3. A Creation Antiphonal Reading V

I. Description: A reading to be done between two locations where people are in earshot of one another.

II. Appropriate for: All Ages

III. Biblical Texts: Genesis 1:1-2:4 and Psalm 104

IV. Materials: Bibles or printed sheets

V. Process:

Description	Psalm 104	Genesis 1:1-2:4
The First State of Creation	vss. 1-4	vss. 1-5
Foundation of the Earth and Spring of Water	vss. 5-13	vss. 6-10
Vegetation	vss. 14-18	vss. 11-13
Moon and Sun	vss. 19-23	vss. 14-19
Sea and Its Animals	vss. 24-26	vss. 20-28
All Life Looks to God	vss. 27-30	vss. 29-31
Doxology	vss. 31-35	vss. 2:1-4

4. Movie Screen the Genesis First Creation Account I

I. Description: Participants experience the activities of each day of creation.

II. Appropriate for: Small groups. All ages.

III. Biblical Text: Genesis 1:1-2:4

IV. Materials: Bible for the leader

V. Process:

- A. Participants sit in a circle on the ground and are told what to expect. They will be closing their eyes and listening to the reading of the first Genesis account of creation and imagining they are sitting inside a big movie theater.
- B. To prepare the group to sit quietly with eyes closed the leader asks the participants to sit in a relaxed fashion. Feel comfortable. Suggest they relax their bodies from their toes to their heads. When instructing the participants to close their eyes the leader may need to allow a few moments for the participants to express themselves orally to relax their discomfort. There is no need to rush.
- C. Before beginning be sure that everyone understands and agrees.
- D. Instruct the participants to close their eyes and to imagine a huge movie screen on their foreheads.
 1. Tell them to watch the screen for colors and shapes, to listen for sounds, and to notice where they are in the "movie" as the script is read.
 2. Read Genesis 1:1-2:4 slowly.
 - a. Pause between each day.
 - b. Allow time for the participants' imaginations to work.
 3. When the reading is complete instruct the participants to open their eyes slowly when they are ready to.
- E. When everyone's eyes are open let the participants talk to each other.
 1. The leader should listen carefully and try to pick up what the participants are sharing and ask that the persons share with the entire group.
 2. Try to get the participants to freely state their feelings.
 3. If it is necessary these questions can be asked:
 - a. What was the high point for you?
 - b. What was the low point?
 - c. Which day was your favorite?
 - d. Where were you? Watching the screen? Involved in the process?

VI. Variations: If this is done with a large group follow the steps above and then add:

- F. Ask participants to subgroup according to their favorite day. (If a small group is too large split it up. Make sure there is a leader, a guide, in each group.)
- G. The leader guides the small group to:
 1. Talk about what caused the group members to choose this particular day.
 2. Prepare a statement, a prayer, or a sketch to present to/share with the larger group.
- H. Gather the group together with group sharing and appropriate songs.

5. "Creation" from God's Trombones

- I. Description: This sermon/poem is a part of the Black heritage. Many children were reared on it.
- II. Appropriate for: All ages.
- III. Materials: The book God's Trombones, Johnson
- IV. Process:
 - A. Read
 - B. Dramatize

6. Sauntering Service

- I. Description: Using senses participants find an item of creation with/for which to praise God.
- II. Appropriate for: All ages
- III. Biblical Text: Psalm 19:1-6
- IV. Materials: Blindfolds

V. Process:

- A. Bring the group to the center of an area. Blindfold everyone.
- B. Say the Invocation: "In the Name of the Father, and of the Son, and of the Holy Spirit. Amen."
- C. The group stands in a small circle. The leader spins each person around several times so he/she loses his/her orientation.
- D. Instruct the participants to remain silent, and on the leader's cue they are to walk until the leader says, "Stop." (Let the group go no more than 20' from the center of the area.) Instruct individuals to sit down.
- E. While blindfolded, instruct the participants to individually find "something" for which they can praise God. They will need to do this by discovering by touching what is in the area.
- F. Once they have found something, they are to return to the center of the area by following the leader's voice. Ask the participants to hold hands and walk in a circle for at least two revolutions.
- G. The participants sit down and remove their blindfolds.
 1. Share the "something" each person found and explain reasons for praising God.
 2. Read aloud together Psalm 19:1-6
 3. Offer a prayer.
- H. For the scattering ask the participants to find the spot where they sat when blindfolded. When each person locates his/her spot he/she is to shout "Halleluia!"

7. "Medicine Wheel: Wholeness toward 'Holiness'"

I. Description: A worship based on St. Francis' "Canticle of the Sun."

II. Appropriate for: All Ages

III. Biblical Text: Romans 1:20a

IV. Materials: Copies of St. Francis' "Canticle of the Sun."

V. Process:

- A. Organize the worship around the elements presented in the Biblical text, the Canticle, and Native American concepts of the earth. Notice the intimacy between the environment and the people, e.g. "Mother Earth," etc.
- B. Using the clue from the Canticle move around the circle.

VI. Source: Francis: A Saint We Share, pp. 59-60.

8. A Celebration of Birth

I. Description: A dramatic introduction of the theme

II. Appropriate for: All Ages

III. Biblical Texts: Deuteronomy 32:4, 6, 18

IV. Materials: torches, floral bouquets

V. Process:

A. Preparation

1. For groups -

- a. Assign each group an organism whose birth they are to celebrate. Give them specific items, e.g. a cat fish, not just a fish. Be as creative with the assignments as possible. Assign the "universe" and "humanity" and then any types of fish, insects, snakes, fungi, tree, herb, etc.
- b. The group is to prepare a report of the day of birth to present to the large group. The presentation can take the form of a drama, a mime, a poem, etc. The report should include answers to these questions:
 - + What was it like the day of birth? Weather? Time of year?
 - + Where was the organism born? Water? Earth? Specific location?
 - + What was the birthing experience like? Sounds? Colors? Sensations? Feelings? Pain?
 - + Where were the parents?
- c. The group then decides how the birthday will be celebrated. The

- song "Happy Birthday" cannot be used nor can there be a cake.
- d. Each group gathers a bouquet of flowers to be used in the celebration.
2. Worship Site -
 - a. Prepare a place for the participants to gather. Can be a campfire site, but not necessary.
 - b. Erect torches/candles for each group making a presentation. There may need to be kerosene wicked torches with wind protection.
 3. Leader -
 - a. Select some appropriate songs. The ones listed below are found in Lift Up Your Voice, Youth Songbook, Fortress Press, Philadelphia:
 - "Born of the Father"
 - "God Made the World"
 - "Let All Things Now Living"
 - "For the Beauty of the Earth"
 - "Praise and Thanksgiving"
 - b. Prepare a litany.
 - + Create a petition for each of the organisms given to the groups. Prepare the petitions in a sequence so that the last two in the order are "universe" and "humanity."
 - + Each petition should be shaped so that it addresses the particular organism. The petition should include:
 - A statement acknowledging God's providence in creating the organism.
 - A line about what the organism provided for others.
 - A sentence that describes what would happen if the organism lived solely for itself.
 - An ending that clues the assembly they are to respond with the following:
 - + Prepare a copy of the response to be recited in unison after each petition.
 - "In His perfect work God is always just.
 - He is a God of faithfulness and goodness.
 - Did He not create you?
 - Be not unmindful of the Father who begot you,
 - And forget not the God who gave you birth."
- B. A Tentative Order
1. Gathering Song(s)
 2. Introductory Comments:
 - a. We worship God and celebrate the Birth of the Earth. We will think specifically about particular aspects of God's creation. This will be done when groups make their presentations. The candle signifies our memory of the particular organism that is presented.
 - b. We shall also share in a litany. When the group's organism is mentioned a representative from the group places the bouquet at the base of the torch recognizing our celebration of God.
 3. Each group makes a presentation. These presentations can be interspersed with songs.
 4. Light one of the torches at the conclusion of each presentation.
 5. The leader presents the litany before the appropriate torch. At the end of the assembly's response the group assigned to the organism mentioned places a bouquet of flowers at the foot of the torch.
 6. Closing Song
 7. Prayer
 8. Scattering

E. ENVIRONMENTAL (NATURE) LEARNING EXPERIENCES

1. Outer Space Visitor

- I. Description: The purpose of this activity is to increase observational skills and use of descriptive language.
- II. Appropriate for: Grades 4-7, Families
- III. Materials: None
- IV. Process:
 - A. Have the participants pretend they have just arrived by rocketship from the planet Tralthamadore. They are not human beings. They are aliens.
 - B. They are standing on a planet that is completely foreign to them. They are looking at things for the first time!
 - C. Ask each participant to select an object: tree, rock, flower, cloud, etc. Then have them describe their discovery without using terms that earthlings would normally use, such as trunk, bark, leaves, twigs, buds, petal, blossom, stone, sky, etc.
 - D. Have the group try to guess what object is being described. The first participant to recognize the object takes the next turn.
- V. Source: Eco-Acts, p. 43.

2. What Good Is It?

- I. Description: A valuing activity.
- II. Appropriate for: All ages, Families (intergenerational), Adults, Seniors
- III. Materials: Paper and pencil for leader
- IV. Process:
 - A. Find a natural area without disruptions from other people
 - B. This game is played like "Twenty Questions". One of the participants is "it" and is sent out of hearing range from the group. The group then picks a natural object which will be the subject to be guessed by "it".
 - C. "It" is then called to return and tries to guess the object by asking questions that can be answered "yes" or "no". The group tells "it" if the object is animal, vegetable, or mineral. "It" must begin each question with the words, "Is it good for...?" The question must be directed to a specific person in the group.
 - D. If "it" has been successful in guessing the object he/she can sit down, and the person who answered the last question becomes "it". The game begins again.
 - E. If "it" doesn't correctly guess the object within 20 questions, "it" sits down, is told the answer, and the last person to receive a question then becomes it, and the game starts again.

3. Hatching Fertile Eggs

- I. Description: Participants experience the emergence of new life.
- II. Appropriate for: All age groups.
- III. Materials: Eggs, incubator, brooder.
- IV. Process:
 - A. Procuring eggs and setting up the incubator.
 1. Order chicken (the most reliable and easiest) eggs from a reliable source.
 2. Set up the incubator and adjust the temperature to 100 degrees F. Set humidity to 50% by placing water directly on the bottom. Do this well before hand so you do not have to play with the thermostat while eggs are inside. (They are very sensitive to high temperature and a 2 degree deviation can kill them.)
 3. Number the eggs.
 4. Keep the eggs cool (but do not refrigerate) until you are ready to "set" them (put in the incubator).
 5. Put them into the already warm incubator immediately upon their arrival.

6. Turn the eggs three times a day. First have them with numbers up; then alternate, with numbers down. Note: After the 18th day, stop rotating, increase humidity and put something soft over the mesh.
- B. Things to do/observe during the 21 days.
1. Show the participants the eggs at the various stages. Use a filmstrip projector to direct a beam of bright light through the egg. By the fourth or fifth day you will see the developing embryo vividly.
 2. The eggs should be numbered for identification purposes and also as a means of indicating which ones have been turned. The reason for turning the eggs is to keep the membrane from sticking to the shell. How does a hen know this? She doesn't. She does it by instinct. The eggs can also be weighed.
 3. An experiment: Open a fertile egg carefully and place in a Ziplock baggie and suspend it in the incubator. The embryo develops within a transparent skin/shell. Naturally, it cannot survive, as its real shell is the best possible container for it - permitting exchange of molecules of gases through its minute pores, yet too small to permit bacteria to pass through.
- C. After the Hatch:
1. You must provide a suitable brooder for the eggs. The chicks need food, water, and warmth (60 degrees F) for about 10-14 days before they can be placed outdoors. Chicks should be left in the incubator until they fluff out. Then place them in the brooder.
 2. Observe the primitive pecking order in the brooder.
 3. When the chickens are ready to leave the brooder set them out on a sunny day.
- D. How to make a chicken brooder: Make a large wooden box, about 16-18" high and big enough to hold the number of baby chicks you will be hatching. For 12-13 chicks, the box can be about 4' by 2 1/2'. You will need a lamp with a 75-100 watt bulb. It must be kept on day and night - temperature must be maintained at 90 degrees F. It should have a screen cover, and the cover should be placed on whenever it is unattended. No predators can get in; and later chicks cannot get out. Line the bottom with layers of newspaper. Wood shavings may be used, too.

VI. Source: The Nature Specialist, Lenore Hendler Miller. pp. 16 and 125.

4. Bones and Straws

- I. Description: Participants discover a basic principle in physics and biophysics.
- II. Appropriate for: Grade 7 and older.
- III. Materials: Straws, straight pins, a variety of animal bones (cow, chicken, etc.), lenses, marker, newsprint.
- IV. Process:
 - A. Divide the group in half.
 1. To one group give one half the straws and pins and challenge them to use the straws to build the tallest possible free-standing structure.
 2. Give the other group half the bones and lenses. Challenge them to try to find out why bones are so strong.
 3. Keep the groups separated from each other.
 - B. The group building the straws should discover that the structure will collapse without supporting struts in triangular arrangement. (If they don't, the leader might need to suggest it.)
 - C. After a period of time, 15 minutes, ask the groups to share their responses to the challenge. The bones group should go first. List responses on newsprint. Next the straw group responds and shows their structure. The ensuing discussion should bring out the structural anatomy of bones, which, when looked at closely with lens as well as the naked eye reveal triangular struts which provide strength without adding bulk or weight.

V. Source: The Nature Specialist, Miller, p. 36.

5. Box Concentration

I. Description: Give participants further exposure to natural items, reinforcing their present knowledge.

II. Appropriate for: All ages.

III. Materials: Large empty box, four to ten natural objects, paper, pencils

IV. Process:

A. Make sure participants know the names of every item in the box.

B. Distribute paper. Participants fold paper into quarters.

C. Place objects on a sheet of paper that has been divided into sections by folding.

D. Direct the participants to concentrate on the objects for one minute. Then cover the whole thing with the box. Participants try to remember the objects and where they were located. For further rounds change sections around.

V. Variation: Follow the same procedure as above, but rather than naming the item the participants are sent outside to find the duplicates.

VI. Source: The Nature Specialist, Miller, pp. 36-37.

6. Pond or Lake Study

I. Description: Expose participants to the diversity of aquatic life, introduce them to the water as an important habitat, point up the differences between land and a pond, and observe the different types of life.

II. Appropriate for: All ages.

III. Materials: Dip nets, insect nets, white plastic and enamel pans, strainers, spoons, lenses, small paint brush, small portable microscope, pond or water life guide for both plants and animals, plankton net, water scopes (homemade from a large plastic container with both ends cut open. At one end heavy duty clear plastic is held on with a rubber band.)

IV. Process:

A. Background: A pond or a lake, if it is healthy, teems with life. The organisms that live in a water habitat will differ depending on many variables: water depth, pH, pollutants, temperature, source of the water, etc.

B. On the way to the lake or pond. Talk about water, clear water, water conservation, breathing through gills, how some insects and all amphibians spend the early stages of their lives in water, aquatic food chains and webs, etc.

C. At the water's edge have the participants spread out and with dip nets, strainers, etc., carefully search the plants and the detritus (mushy bottom) for organisms. The items can be seen better when placed against a white background, e.g., an enamel pan. Use bug boxes or lenses to get close-up looks. Identify the items.

V. Follow-up Activities from OBIS:

A. Animal Movement in the Water

B. Attract a Fish

C. Habitats of the Pond

D. Too Many Mosquitoes

E. Water Breathers

F. Water Holes to Mini-Ponds

G. What Lives Here?

VI. Source: The Nature Specialist, Miller, pp. 54-55.

7. What Is It?

I. Description: Introduces participants to items in the environment.

II. Appropriate for: Very young children

III. Materials: A cardboard box, selected items that can be handled and passed around.

IV. Process:

- A. Sit the participants in a circle.
- B. Pass objects around. Give each person a chance to examine it without calling out or saying what it is. Could turn this into a game of "20 questions."

V. Source: The Nature Specialist., Miller, pp. 69-70.

8. Early Morning Bird-Walks

I. Description: A one hour activity for a small group of participants.

II. Appropriate for: All ages

III. Materials: None

IV. Process:

- A. Birds tend to be most visible at edges, where fields and forests meet. But walking through the woods, while dew is still wet and making webs visible, has a special feeling and can be pleasurable even if birds cannot be found. Bring along various resources with which to identify birds, books and silhouette guides.
- B. Prepare a Bird Study Field Sheet:
 1. Size and shape of body, head, beak, feathers, legs, and feet.
 2. Colors and markings: unusual designs on body, color on head, wings, body feathers.
 3. Sounds: chattering, warbling, singing, other.
 4. Movements on the ground (hopping, strutting, jumping) and in flight (these can be diagrammed).
 5. Nest location and materials
 6. Surroundings: location, travel alone or with others, area wet or dry, tracks made.
 7. Food

V. Source: The Nature Specialist, Miller, pp. 87 and 102.

I 9. Find Your Mate

I. Description: Role play animals by using animal calls as clues for locating mate.

II. Appropriate for: Twenty or more participants. Children.

III. Materials: Double set of cards, each set having the name of an animal on it, e.g., dog, frog, snake, bee, etc. Blindfolds for all.

IV. Process:

- A. Explain that one of the reasons an animal makes sounds is to locate another of its species.
- B. Distribute cards. Instruct participants not to reveal the animal on them. Collect the cards. Put blindfolds on. At the signal, the participants make the noise of the animal and try to locate their mate.
- C. Talk about the various ways animals identify their mates.

V. Variations: Can be used with "Sound Off," OBIS.

VI. Source: The Nature Specialist, Miller, p. 45.

III 10. Cocoon

I. Description: What it feels like to be a butterfly emerging from a cocoon.

II. Appropriate for: Youth

III. Materials: Sleeping bags, poncho, two large sticks for making a stretcher

IV. Process:

- A. Each participant is called from the sleeping quarters for the cocoon experience. The stretcher is made up of a poncho and two poles - first aid style. Participants stay in sleeping bags.
- B. This technique requires two fairly husky "cocoon carriers."

- C. Take the cocoon to an area of the forest which the participant will not recognize immediately, to strengthen the idea of emergence into a new world.
- D. Have the participant remove his/her shoes before entering his cocoon.
- E. Lift, rock, and dip the cocoon to simulate winter winds and loosen the participants sense of direction.
- F. The cocoon carriers lay the cocoon down and walk away into the woods.
- G. Instruct the participant in advance that when he/she can no longer hear footsteps he/she is to emerge slowly from the cocoon. The participant is to put on shoes and see if they can return to the camping area.
- H. This is not to be a fearful experience. Only those who wish should do the activity.

V. Source: Van Matre, Acclimatizing, p. 98.

11. Seeds

I. Description: A trading game using seeds.

II. Appropriate for: Youth

III. Materials: Magnifying glasses, empty microfilm containers

IV. Process:

- A. Send out participants to accumulate as many seeds as they possibly can find. The more unique they find the better. Fill the microfilm container.
- B. Gather the participants and have them set up little booths where they can show off their seed collection.
- C. Encourage the participants to look at the displays and begin to trade.
- D. The leader should get involved to set the tone.
- E. Be sure to examine all the seeds in detail.

V. Source: Van Matre, Acclimatizing, p. 97.

12. Hatching

I. Description: Emerging from a shell. III

II. Appropriate for: Youth

III. Materials: None

IV. Process:

Sit in a circle facing out. Curl up as if you are inside an eggshell. Feel the shell closing you in. The shell is the old "you." It is your barrier to awareness. Now begin to hatch. Strain against the sides of the shell to break free. Peck at the shell with your nose. Make a crack; start a small opening. Struggle to get out; break the shell. Emerge! Alive - free - open - reborn!

V. Source: Van Matre, Acclimatization, p. 63.

13. Bird Nests

I. Description: Challenge participants to build a nest for an imaginary bird and place it in the activity site. I

II. Appropriate for: Youth, any size group

III. Materials:

- A. For each participant: a "Bird-Nest Frame" equipment card, one thin strip of flagging.
- B. For the group: a "Bird-Nest Frame" equipment card, colored flagging, two containers of water for making mud.

IV. Process:

A. Background

- 1. Allow fifty to sixty minutes for the activity.
- 2. Choose a site that includes a variety of trees, shrubs, and grasses. Flag two activity areas that are situated in such a way that a team in one area cannot see the team in the other area.

B. Action

1. Ask the group to describe some bird nests they have seen. Sketch the described shapes on a data board. In addition, ask the youngsters to discuss some of the places where birds build nests.
2. Challenge the group to go in pairs and gather small samples of materials that a bird might use to build a nest. After a few minutes, call the group together. Ask the youngsters to spread out their samples. Emphasize that birds build nests with all kinds of materials and in many different shapes.
3. Show the group how to shape wire frames over their knees. See the equipment card. Explain to the participants that they will use the frames to weave or mold the materials they collect into bird nests.
4. Tell the youngsters that they will split into two teams and that each team will work in a different site. Each participant will:
 - a. Use materials from the site and a wire frame to build a bird nest.
 - b. Find a suitable place for the nest in the team's activity site.
 - c. Place the nest in its spot without covering or hiding the nest.
(Birds must be able to fly into and out of the nests.)
5. Give each participant a wire frame. Divide them into two equal teams. Give each team a container of water for making mud, and send one team to each flagged site. The leader circulates among the participants as they work.
6. Allow twenty to thirty minutes for the participants to make and position their nests.
7. Announce to the participants that they are now going to switch sites and play the roles of naturalists looking for bird nests. The nests should not be disturbed.
8. Give each participant a strip of flagging. Challenge them to find the nests. Tie the flag when a nest is found.
9. When all the nests are found ask the nest creators to collect the nests. Talk about the activity.
 - a. Which nests were the most difficult to find? Why?
 - b. Which locations would probably provide the greatest protection against predators? Against the weather? Why?
 - c. Which nests appear to be the sturdiest? What materials were used?
 - d. What do birds use instead of a wire frame to give support to their nests?
 - e. What problems did you have constructing your nests. How do you think birds deal with these problems?

V. Source: OBIS

V 14. Flower Powder

I. Description: Challenge the participants to find out how animals move pollen from one flower to another.

II. Appropriate for: ten to twelve youth

III. Materials:

- A. For each team of two: a pollen board, two artificial bees, a set of paper flower shapes, magnifying lens, three to four pieces of flagging, a zip lock bag.
- B. For the group: a Flower-Powder Junk Box containing - tape, cotton swabs, pipe cleaners cut into various lengths, cotton balls, yarn, glue, construction paper, clay, popsicle sticks, toothpicks, scissors, three small containers of "pollen" (one cornstarch and two different colors of tempera paint powder), a "Pollen Collectors" equipment card, a "Flowers Shapes" card.

IV. Process:

A. Preparation

1. Plan forty to sixty minutes for this activity.

2. Choose a site with at least three kinds of flowering plants. Test several flowers with a pollen board to make sure the flowers have pollen. Select one plant with a lot of pollen, and flag it for your demonstration at the beginning of the activity.

B. Action

1. Gather the youngsters around the flagged plant. Gently press one of its flowers against the pollen board and show the results to the group. Ask if anyone knows what the powder on the board might be. If no one knows, tell them that the powder is pollen and that flowers need pollen to make seeds that will grow. Add that, for many plants, the pollen from one flower must be moved to another flower of the same kind to make seeds that will grow.
2. Explain that flowers have pollen only at certain times so some flowers may not contain pollen today.
3. Show the participants how to use the pollen boards. Caution them against picking or damaging the flowers while collecting pollen.
4. Divide the group into teams of two and give each team one pollen board and three or four pieces of flagging.
5. Challenge the participants to find plants with flowers that contain pollen by using the pollen boards and the press technique that you have just demonstrated. Encourage the teams to collect different kinds of pollen on their boards and to flag the plants that have pollen-bearing flowers. Explain that they can use different areas on their boards for each kind of flower they test.
6. After about five minutes, ask the teams to display their pollen boards and to point out the different flowers from which they collected pollen.

C. Making Model Flowers

1. Show the group the disk, cone, and paper-cup flower shapes.
2. Ask the teams to find a flagged plant that has flowers resembling one of the paper shapes. Tell the teams to look very closely at the real flowers to see what parts or structures in the flower have pollen on them. Give each team one magnifying lens and one set of flower shapes. Send the teams out to hunt.
3. Spread out the craft materials. After the participants have hunted for five minutes call them together. Challenge each team to construct pollen-bearing structures like those on the real flower they studied and then make a model of the flower by attaching the structures to the appropriate paper shape. Tell the participants that you will add the "pollen" to the paper flowers after they are completed.
4. Allow at least twenty minutes.
5. As the teams complete their flower models, ask them to point out the parts of the model that correspond to the real-flower, pollen-bearing parts. Carefully add "pollen" (tempera paint powder or cornstarch) with a popsicle stick to each paper flower at those places. Use a different color of "pollen" for each of the three shapes. Display the finished paper flowers in one area.

D. Discovering how animals transfer pollen

1. Mention that bees visit flowers to collect pollen and sweet juices (nectar) for food.
2. Give each team one artificial bee, and tell the participants to "buzz" or visit several of the paper flowers as if the "bees" were collecting food.
3. Ask the participants what happens to the "bees" when they visit the paper flowers. Then have the participants describe what happens to the pollen in the flowers as the "bees" move from flower to flower. Tell the participants that flowers must receive pollen from the same kind of flower to make seeds/fruit.

4. Now challenge the teams to take their "bees" to real flowers. Ask them to notice where on the "bee" bodies the pollen sticks as they visit different kinds of flowers. Also ask them to look for insects other than bees on the flowers. Give each team a zip-lock bag for collecting insects and a clean artificial bee. Send the teams out to hunt.
 5. After sufficient time call the teams back and discuss experience.
- E. What do you think?
1. Beside insects, what else could move pollen from one flower to another?
 2. What might happen to plants if we killed all the insects with poison? Would humans be affected?
 3. Could humans artificially pollinate flowers? What problems would be encountered?
- V. Variations:
- A. Some flowers have shapes that are adapted to the feeding parts of certain animals. Give each participant a 5 inch long piece of pipe cleaner to use as an "animal," such as a butterfly or hummingbird, with a long, thin mouth part. Challenge the teams to find out whether their "bees" or "long-mouthed animals" are better suited to gathering food from the flowers.
 - B. Some animals have certain color preferences. Challenge the participants to find out if bees, hummingbirds, or other animals that visit flowers seem to have color preferences.

VI. Source: OBIS

15. Animal Parts
- I. Description: A game in which participants act out animals.
 - II. Appropriate for: Youth
 - III. Materials: None
 - IV. Process:
 - A. Create groups of four or five participants.
 - B. Ask each group to select an animal common to the area. Then tell them that each group will have to imitate the body of their animal. They are going to appear before a panel of animal experts who will try to guess their identify. No noise is allowed
 - V. Source: Cornell, Sharing Nature with Children, p. 82.
16. Following the Scent
- I. Description: Participants follow scents to locate territories.
 - II. Appropriate for: Youth
 - III. Source: OBIS
17. The Mating Game
- I. Description: Participants discover the various ways animals seek out their mates.
 - II. Appropriate for: Youth
 - III. Source: Clouds on the Clothesline, Pearce, p. 19f.
18. The Wonder of Nature
- I. Description: Participants participate in a guided scavenger hunt without a sheet of instructions.
 - II. Appropriate for: Youth
 - III. Source: Clouds on the Clothesline, Pearce, p. 30f.
19. Lichen Looking
- I. Description: Participants investigate the locations, sizes, shapes, colors, and number of lichens.
 - II. Appropriate for: Youth

III. Materials:

- A. For each team of two: a lump of clay, 20 flags in an envelope, a bag of investigation materials containing (five pieces of wax paper (10cm X 10cm), a felt tip pen (fine tip), roll of transparent tape, a magnifying lens or bug box, a small plastic bag, two medium size plastic bags, a plastic or wax paper band (7 cm X 150 cm) marked off in 15 cm sections, a piece of string three meters long marked off in meters), a set of action cards.
- B. For the group: one meter tape, a compass.

IV. Process:

A. Preparation

1. Plan fifty to seventy minutes for this activity.
2. Choose a site with a variety of lichens growing on several rocks or trees.
3. Make paper flags out of construction paper with a pin inserted in each one.
4. Make up one bag of investigation materials for each team.
5. Duplicate a set of action cards for each team.

B. Action

1. Designate boundaries for the site and tell the participants they are going "Lichen Looking."
2. Point out two or three different kinds of lichens. Ask the youngsters to pair up, and give each team an envelope of paper flags and a small piece of clay. Challenge the teams to find all the places where lichens are growing in the site. The participants should pin a paper flag near the lichens they find. (Use clay to secure flags when lichen is found on rocks. Caution the participants to be gentle.
3. After a few minutes call the teams back and as a group examine the lichens the teams have flagged.
4. Give each team a bag of investigation materials and a set of Action Cards. Send the teams out to conduct the Action-Card investigations.
5. The leader should move from team to team offering assistance.
6. Assemble the teams and share the discoveries.

C. Looking further

1. How many different colors of lichens did you find. Show samples.
2. What was the most common shape of lichens growing in the site? The most unusual shape?
3. What kind of animals did you find living on lichens? What were the animals doing?
4. Examine the leaves you collected. What kind of trees have lichens growing on them? Why do you think lichens do not grow on the other trees?
5. Do lichens seem to grow on certain sides of trees and rocks? Why might this be?

D. Lichen looking revisited

1. Find a lichen that is dry and brittle. Water it and observe the changes in a few hours. If possible, look again after a few days.
2. Continue noticing where the lichens grow.

V. Source: OBIS

20. Soil Profile

I. Description: Participants discover which soil conditions suit which creatures and is a useful frame work on which to base studies of litter dwelling and burrowing organisms.

II. Appropriate for: All ages

III. Materials: Trowel

II

IV. Process:

Dig a small pit, keeping one side smooth so you can see the soil in cross-section. Note the depths and colors of the various layers (called "horizons") and take samples. A typical deciduous wood profile has deep litter grading into thick rich humus. Beneath is a layer of subsoil stained with organic matter which overlies the parent material such as clay.

21. Sawing Away

I. Description: Participants saw sections from fallen trees, count the rings, and investigate the patterns of tree growth.

II. Appropriate for: Youth

III. Source: OBIS

II 22. Moisture Makers

I. Description: Participants measure the moisture released from different kinds of leaves by observing the color change of cobalt chloride paper.

II. Appropriate for: Youth

III. Source: OBIS

II 23. Litter Critters

I. Description: Participants become familiar with body parts of animals found in natural ground litter.

II. Appropriate for: Youth

III. Source: OBIS

24. Habitats of the Pond

I. Description: Locate plants and animals in each of the 5 habitats of a pond or lake, and record where they live.

II. Appropriate for: Youth

III. Source: OBIS

I 25. What Lives Here?

I. Description: Discuss and investigate some of the plants and animals that live in an aquatic site.

II. Appropriate for: Youth

III. Source: OBIS

26. Can Fishing

I. Description: Discover what kinds of aquatic organisms live on or in submerged cans.

II. Appropriate for: Youth

III. Source: OBIS

27. A Better Fly Trap

I. Description: Make a device that attracts and traps flies.

II. Appropriate for: Youth

III. Source: OBIS

28. Water Snails

I. Description: Mark and recapture water snails to discover their preferred habitat.

II. Appropriate for: Youth

III. Source: OBIS

29. Water Striders

I. Description: Explore the movement and feeding behavior of water striders.

II. Appropriate for: Youth

III. Source: OBIS

30. Animal Movement in Water
I. Description: Discover how some aquatic animals move through water.
II. Appropriate for: Youth
III. Source: CBIS
31. Water Breathers
I. Description: Investigate currents that aquatic animals create.
II. Appropriate for: Youth
III. Source: OBIS
32. Swamp
I. Description: Word descriptions of nature.
II. Appropriate for: Youth
III. Source: Clouds on the Clothesline, Pearce, p. 20.
33. D'Juno?
I. Description: A hide and seek game with clues.
II. Appropriate for: Youth
III. Source: Clouds on the Clothesline, Pearce, p. 28f.

F. ARTS AND CRAFTS LEARNING EXPERIENCES

1. Bird in Egg

I. Description: An arts and crafts project to follow up chick hatching experience.

II. Appropriate for: Young children

III. Materials: Eggshell halves, cotton balls, toothpicks, black and orange colored paper, shirt cardboard, yellow chalk or powdered tempera, paper bag, hole punch, glue, scissors, rulers, pencils.

IV. Process:

A. Wash eggshell halves and allow to dry. This presents a good opportunity for you to show the inside of the eggshell, discuss the functions of the membranes, and find the air pocket. While they are drying, crush some yellow chalk or use the powdered tempera inside of a paper bag. Drop the cotton balls in and shake the bag to coat the cotton. That's the chick's body. Two circles, punched out of black paper with a hole punch, are glued on for eyes. For the beak, use a piece of toothpick colored or dyed orange, or a small piece of orange construction paper cut and folded in a triangular shape.

B. Stick the toothpick beak into the cotton or glue the paper beak on. Then, drop glue into the shell and set the chick in it. Can be glued on a cardboard square to stabilize.

V. Source: The Nature Specialist, Miller, pp. 35-36

2. Water scope

I. Description: A device for underwater observation. I

II. Appropriate for: All ages

III. Materials: plastic bucket, clear plastic wrap, elastic or rubber band, penknife, ballpoint pen

IV. Process:

A. Remove the big circle from the bottom of the bucket.

B. Cut a piece of clear plastic wrap large enough to cover the top of the bucket.

C. Secure the plastic in place with elastic or a rubber band.

V. Source: Toy Book

3. Ant jar

I. Description: A device for observing ant behavior.

II. Appropriate for: Youth

III. Materials: two clear glass jars, one slightly smaller than the other, loose or sandy soil, sugar, water.

IV. Process:

A. Put the smaller jar without its lid, upside down into the center of the larger jar.

B. Fill the space between the two jars with loose or sandy soil.

C. Find some ants.

D. Make an ant trap by mixing a bit of sugar with a little water in a small jar or can and lay the jar or can sideways on the ground near an ant hill.

E. Place the ants in the ant jar and put on the lid.

F. Once a week put a little sugar water and bird or grass seed in the jar to feed the ants.

V. Source: Toy Book

4. Flower press

I. Description: One method for saving flowers.

II. Appropriate for: All ages

III. Source: A Practical Guide for the Amateur Naturalist, Durrell, p. 252f.

II

5. Spore prints

- I. Description: Creating a "photograph" of spore distribution from a fungus.
- II. Appropriate for: All ages
- III. Source: A Practical Guide for the Amateur Naturalist, Durrell, p. 254f.

6. Bark rubbing

- I. Description: Creating a record of trees.
- II. Appropriate for: Youth
- III. Materials: Waxed or grease-proof paper, sticky tape, a large wax crayon.
- IV. Process:
Fasten paper to tree and rub with the crayon using strokes in one direction only.

7. Bark casting

- I. Description: A craft project using natural surfaces.
- II. Appropriate for: All ages
- III. Source: A Practical Guide for the Amateur Naturalist, Durrell, p. 256.

8. Sealed World

- I. Description: A simple aquarium
- II. Appropriate for: All ages
- III. Materials: one gallon wide mouthjar with lid, small amount of sandy soil, pond water, four or five water plants, one snail, two minnows, paraffin.
- IV. Process:
Put sandy soil in bottom of jar. Push plant roots into it. Fill with pond water to within two inches of top. Allow one week for soil, water and plants to settle. Then add snail and minnows. Be sure to screw lid on jar, then pour melted paraffin all around lid to seal it. Use a cardboard collar to keep paraffin above the water level so the light can get through and people can observe. Put the jar in good light, but not direct sunlight.
- V. Variations:
The number of plants, fish and snails can be different.
 - 1 minnow - 5 plants - 1 snail
 - 3 minnows - 2 plants - 1 snail
 - 4 minnows - 2 plants - 2 snails
 - 2 minnows - 1 plant - 1 snail

VI. Source: The Nature Specialist, Miller, pp. 59-60.

G. GAME AND SPORT LEARNING EXPERIENCES

A Note about Games and Sports

Games and sports in this Program Resource serve two functions:

- 1) the activity serves the intentions of the day and is used in a Bible study/learning experience, and
- 2) the activity serves the purpose of group-building and communication. This includes some activities that are done just "for fun" and are experienced by the small group.

In Day I be sure to first begin with games that are fairly easy, of low personal risk, and introductory (names, hometown, etc.). Then continue with games that are group-building activities (beginning of trust bonds, opening of communication lines, development of group spirit, etc.).

The "Group-Building" games listed below are noted specifically in Day I so that the sequencing of get-acquainted and group-building activities can be kept in the proper order. Many of the games in Days II, III, IV, and V are group-building in nature but are not listed as such since they often serve multiple purposes.

1. Name Train ID

- I. Description: Get Acquainted - Learn names
- II. Appropriate for: All
- III. Materials: None
- IV. Process:

- A. The participants stand in a circle. One participant volunteers to be the locomotive, choo-choosing and piston-driving her/his arms.
- B. The locomotive stops and exchanges introductions with another: "Hi, I'm Bob. Hello, I'm Mary." Upon hearing the other's name, Bob, the locomotive, alternately raises his arms and extends his legs while chanting the person's name: "Mary, Mary, Mary, Mary, etc.!"
- C. Once Bob is finished with his chant, Mary puts her hands on Bob's hips or shoulders - like a caboose attached to the end of a train - and the enlarged train choo-choos around the circle and makes another stop at a third person, Jim.
- D. Bob and Jim then exchange introductions and Bob chants Jim's name as he did Mary's. Then Mary does the same chant again.
- E. When Mary is finished with the chant, Jim hooks up to Mary as Mary has hooked up to Bob and the sequence continues until all the campers are in the train.

V. Source: more New Games, p. 75. II D

2. Name Tag Mixer

- I. Description: Get Acquainted. Learning Names in large unacquainted group.
- II. Appropriate for: All. This activity is best for large, unacquainted groups.
- III. Materials: Name tags or shoes for each person.
- IV. Process:

A single circle of players face the center of the circle. Each person takes off his/her name tag and places it on the ground in front of him/her. On the signal to begin, everyone begins walking single file in one direction around the circle. On the signal to stop, all stop by someone else's name tag. The tag is then to be returned to its owner. The same play is repeated about half the number of times that there are people in the group.

V. Source: Guide for Recreation Leaders, p. 33.

3. Introductions

- I. Description: Get-Acquainted. Indoors or outdoors.
- II. Appropriate for: All ages, Families (intergenerational), Adults, Seniors
- III. Materials: None

IV. Process:

The participants shake hands and introduce others to each other. There is a high spirit of friendliness and a use of much energy.

V. Source: Playfair, p. 64.

4. Moving Name Game

I. Description: Get-Acquainted

II. Appropriate for: Grades 4-7, 10-12, Families (intergenerational)

III. Materials:

IV. Process:

A. The participants place the syllables of their name to a rhythm and create a series of movements so that there is one distinct and easily repeatable movement for each beat in their name.

B. The first person does his/her name and movement. The second person repeats the first person's name and movement, and does his/her own.

C. The third person does the first two, and then his/her own.

V. Source: Playfair, p. 65.

5. Twig Matching

I. Description: Get-Acquainted

II. Appropriate for: All ages, Families (intergenerational), Adults, Seniors

III. Materials: Fallen twigs from the trees (about 10" long), one for each two participants, each twig is broken in half, name tags for all, ripped in half

IV. Process:

A. Each participant gets a twig half and then finds the other person with the other half that fits his/her twig.

B. After connecting the two halves, the two partners try to identify the tree from which it came.

C. Each participant then gets half of two different name tags, one of which is his/her own. She/he then tries to find the owner of the other half of the "stranger's" name tag while others are trying to find him/her.

V. Source: Cooperative Sports & Games Book, p. 182.

6. Touch Blue

I. Description: Group Building. Easy Cooperative Activity

II. Appropriate for: All ages, Families (intergenerational), Adults, Seniors

III. Materials: None

IV. Process

A. The leader announces, "Everyone touch blue!" (or another color, object, etc.) and all the group members must touch something of that color on another person.

B. The leader continues with a variety of different colors, objects, etc. Be sure to have the participants progressively - but comfortably - begin to have more physical contact with others. "Touch a shoe" and "Touch a bracelet", for example, will do this.

V. Variations: There are endless variations and can include directions on how to "touch blue". For example, have them "Touch a knee with your left thumb". Or have them touch the color, object, etc. in slow motion.

VI. Source: For the Fun of It!, p. G-10.

7. Water Cup Pass

I. Description: Group building - Cooperative exercise.

II. Appropriate for: All ages, Families (intergenerational), Adults, Seniors

III. Materials: Water cups for all, 1 quart of water

IV. Process:

A. Everyone stands in a circle with a paper cup under his/her arm. One person's cup is filled with water. That person begins by pouring the water into the next person's cup without hands, and so on around the circle. Only use the extra water if the first water poured is spilled.

V. Source: Adapted from For the Fun of it!, p. G-14.

8. Swamp Chute

I. Description: Play on a lawn or carpet. Do this one for fun. A good large group activity.

II. Appropriate for: All ages, Families (intergenerational), Adults

III. Materials: Parachute

IV. Process:

A. The participants hold the edge of the parachute and sit with their legs under the chute.

B. "It", the alligator, crawls around under the chute and pulls legs.

C. Once under the chute the person becomes another alligator.

V. Source: More New Games, p. 171.

9. Ultimate Frisbee

I. Description:

II. Appropriate for: All ages, large groups.

III. Materials: Soccer or hocker field with goals, 1 frisbee

IV. Process:

A. Divide into two teams with no less than four players to a team.

B. Use basketball rules. No dribbling.

H. SPECIAL ACTIVITIES & LEARNING EXPERIENCES

1. The Big Bang Theory

The Universe, 14.5 Billion Years Ago

The universe - the only one we have evidence of, though it may have existed in previous incarnations and may one day die and be reborn - was created 14.5 billion years ago, when a superdense ball of primordial matter, drifting through a black, formless void, suddenly exploded. This was the "big bang."

The scientific reason for that shattering cataclysm remains a mystery. The searing heat of those first few moments of creation forever evaporated the fingerprints of the Prime Mover - whether they were the familiar forces of physics or a spiritual force in the form of a personal God.

We do know that in the ensuing chaos matter vigorously fought antimatter for eternal dominance. When particles of opposite dispositions approached each other too closely, both were instantaneously annihilated, producing radiant bursts of pure energy. The battle for what would become the essence of galaxies, stars, and of life itself raged on for millions of years.

The victor, of course, was matter. The legions of antimatter, what few survived, were banished to remote islands in space, and others were imprisoned, it's believed, in gravitational traps at the centers of numerous present-day galaxies, including our Milky Way.

As the universe expanded, rushing outward to fill the void, it also began to cool. By the time of its one-billionth birthday, it was sufficiently cool to start condensing into galaxies, swirling masses of primal mist.

Matter, now having few foes, was under rule of the god gravity, which gathered together inside each galaxy gases and dust, and fashioned stars. Some blazed in isolation, others in great constellations that human beings eons later on a planet that had yet to be formed would imagine resembled dippers, bears, horses, and crabs.

Stars continued to form as the universe aged, cooled, and further expanded. Gravity, in its all-pervasive reach, eventually served as a brake to slow the expansion, limiting physical reality to a bubblelike shell whose dimensions one day would be daringly estimated by a great physicist, Albert Einstein.

Populated now with clusters of matter, the universe was a few billion years old. There were countless galaxies, but only an amorphous hint of our own Milky Way; numerous stars, but not our sun; many planets, but not the Earth.

At a later point in cosmological time, either accident or the hand of God, depending on one's personal belief, began to erect a state of high order at one infinitesimally small place in the swirling Milky Way. It was to become our solar system.

2. Examples of Origins of . . .

Horses - Browser's Book of Beginnings (p. 202)

Music - Ibid (p. 231)

Drama - Ibid (p. 258)

Modern Dance - Ibid (p. 268)

Painting - Ibid (p. 270)

Bicycle - Ibid (p. 313)

Sports - Ibid (p. 370)

Swimming - Ibid (p. 381)

Tennis - Ibid (p. 385)

Soccer - Ibid (p. 388)

Baseball - Ibid (p. 390)

3. Information on the Reproductive Process

a. The Incredible Egg

By means of the egg life has evolved and has been passed on from generation to generation.

There were eggs long before birds and long before invertebrate creatures. Eggs refer to the shell or more specifically to the germ cell or nucleus. It is the germ created by the female in the ovaries that is entered by the sperm created by the male in the testes.

Eggs can be fertilized within the animal or after the egg has been laid (e.g. many fish).

The land egg or reptilian egg or "hard" egg has a special place in the story of life because it is one of nature's greatest innovations. It made possible the conquest of the land, first by reptiles then by birds and mammals. If the land egg had not developed the land would have remained empty except for plants, invertebrate life, and amphibians. This egg can be laid and incubated on land. In order to be successful this egg had to provide everything the water had.

The chicken and egg controversy can be halted. Eggs preceded reptiles which preceded birds. Birds emerged from reptiles. Feathers are formerly scales.

Hen's eggs are porous allowing gases to move in and out. It is believed that bacteria is prevented from entering. (There is some concern about that, today.)

b. Chicken Ova

When you eat an egg for breakfast, you are eating a single cell. The tiny patch of white that floats to the top of the yolk of a raw egg when you break it into a dish is the ovum itself.

Before the ovum leaves the ovary on its way to being laid, an enormous yolk forms to one side of it. Some of it seems to be made by the ovum itself, but amazingly, most of it is made in the hen's liver, from which it is carried in blood vessels to the ovary. The yolk, however, is part of the cell - a food storage compartment held into a round shape by a thin membrane - when you break the membrane, the yolk spills all over. This single cell, made up of the ovum, its yolk, and surrounding membrane, is among the largest ova in the world.

The ovum, with its yolk, travels down a tube called the oviduct that leads, eventually, into the bird's cloaca, from which it will be laid. (Cloaca means "sewer," a name chosen because bird feces and urine leave the same opening.) As it travels down the oviduct, layers of raw egg white, made by cells in the oviduct, are wound around it. There are two kinds of white: one is translucent (you can see light through it); the other looks like two twisted, thicker white strings. The thicker strings are like ropes that hold the slippery yolk more or less in the center of the slippery white. Around the egg white, another membrane is formed, again by special cells in the oviduct - followed by three layers of shell, made mostly of calcium. You can prove that there are at least two shell layers in the most obvious way: a brown egg is brown on the outside only. The inside of a brown eggshell is white. The eggshell is covered with small holes, called pores, through which air enters and waste gases leave. When the shell is complete, the hen pushes the egg out. At this point, the egg is gathered and put into a box, ready for your breakfast.

The egg we are describing here will never be a chicken. To become a chicken, the hen's ovum has to be fertilized. And for that you need a rooster. Sperm come out of the rooster the same way eggs come out of a hen: through the cloaca. Mating in chickens is called cloacal approximation, which simply means getting the two cloacae together. That would seem rather tricky, but it works every time. The rooster shown on page 50 mates with each of his hens every evening starting with the

oldest, ending with the "spring chickens." Each hen lays a fertilized egg or two the following morning. The ovum is joined by a sperm while it is in the oviduct, before egg white or shell have been wound around it. Commercial egg farmers go to great lengths to be sure no roosters are among their hens.

Occasionally, you see an egg with small spots of blood in the yolk or white. Because the first sign that an egg has been fertilized is the beginning of a red network of blood vessels (they will eventually reach around the yolk to absorb food for the growing embryo, the still developing, unhatched chicken), people have assumed a blood spot means a careless farmer has allowed a rooster in the henhouse. Blood spots, however, are the hen's own blood. As her ovary gets ready to expell a ripe egg, tiny blood vessels may break, leaking a few drops of blood around the ovum. "Organic" eggs, the latest fad at health food stores, are fertilized eggs; a blood spot on the yolk of such an egg could probably be the embryo's own.

Because even a fertilized egg that gets in with the others by accident is kept refrigerated, the fertilized ovum (by now it would be called an embryo) is dead. Were it alive, blood vessels would soon grow from the embryo, out into the surrounding yolk to absorb nourishment for the growing chick. The egg white, beside acting as a shock absorber protecting both the embryo and its yolk from getting bumped, provides additional food for the embryo. The embryo itself now looks like a backward question mark. It next grows a tube, called a yolk stalk, into the yolk. Blood vessels in the yolk stalk absorb nourishment from the yolk. Within a few weeks, the yolk and white are nearly used up, and the chicken is almost ready to hatch. What is left of the yolk is taken into the chick's belly, through where the yolk stalk is connected. A tiny scar remains, much like your own belly button. Now, the chick begins to breathe air from the air space at one end of the shell. You can see the air space between the shell membrane and the shell itself at the broad end of an egg. Finally, the chicken gets out of the shell, in an orderly manner, by pecking a circular hole in one side.

c. If/When You Find an Egg

Note if there is a little roll of dried membrane along the inside of the broken edge and no trace of yoke or white the egg was moved by the parent. If the opposite the egg was broken by a predator.

d. Fungus

Reproduction occurs by spores. What is visible of fungi is the "fruit," the structure that contains the spores. Microscopic fungal threads do the work of decomposition on the host.

e. Ferns

Ferns are reproduced by spores in a primitive two stage process in the same way plants were produced millions of years ago. The mother plant releases spores from tiny capsules to blow in the wind. If the spores land on moist ground they develop into the second stage of reproduction, a tiny plant called the prothallus containing the male and female organs. Like sea plants from which they emerged the prothallus has swimming sperm and is dependent on the presence of water, in this case merely a film, to accomplish fertilization.

f. When Life Began

Scientist and the Bible both hold to the theory that life began in the seas. "Birth of the Earth" is from the water. The first great radiation of fish began in fresh water in the Devonian period.

g. Cattails

Cattails are monoecious, i.e. they have separate male and female flowers on the same plant. Male flowers are clustered at the top of the stem and fall away as soon as the female flowers that form the brown cigar-shaped inflorescence are fertilized.

h. Aphids

Aphids are short-lived, rapid-growing. A female can produce thousands of offspring in a few weeks. Only a mother is needed. This process is called "parthenogenesis" - self-duplication.

i. Frogs and Toads

The courtship of frogs and toads is noisy. Females presumably like the sounds made by males. They breed at night because they are safer from predators and the hot sun. The croaks of the male frog seem to drive other males away, but lets the females know he is willing to mate. Frogs and toads are prolific egg layers because they take little care of the incubated egg.

In cold regions frogs and toads hibernate in mud. Hibernating in the summer is called aestivation. (A good example of this is the presence of the cricket frogs at LOMC.)

A riddle: What is it which first lives in water and drowns in air, lives next in air and drowns in water, then buries itself at the bottom of water and breathes nothing?

J. Conifers

Conifers have male and female cones. The scales on the cone are arranged in a spiral around a central axis that contain pollen sacs and ovules. Pollen from males is dispersed by wind to pollinate the ovules in the larger female cones.

k. Cherry Trees

Every cherry fruit always starts out with two ovules. Both become fertilized, but only one survives to become the seed.

l. Birds

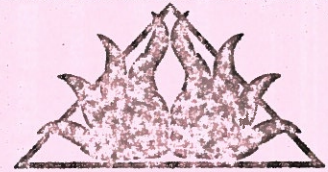
Bird singing by males is to ward off males and to advertise for a bride. Before birds can nest the male and female must mate. The reproduction cycle begins with spring migration.

m. Human Reproduction

A very sensitive and helpful article on human reproduction is found in Sara Stein's book, The Science Book, pp. 138-144.

Bird Nests BIRD-NEST FRAME

Equipment Card

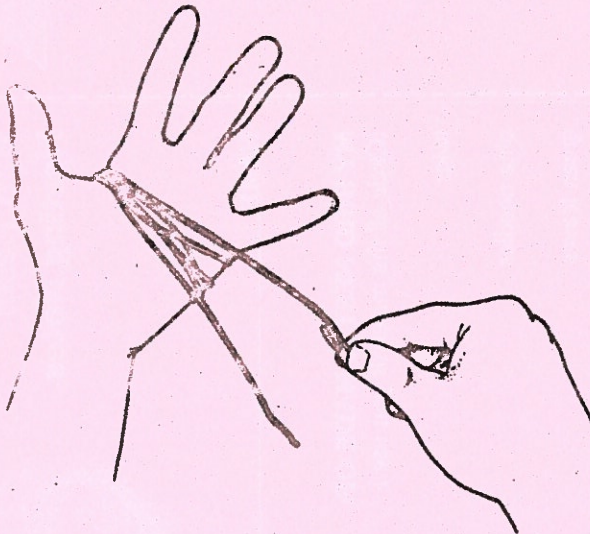


MATERIALS

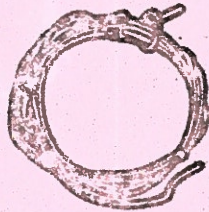
- 1 two-meter length of thin wire for each participant (aluminum wire works best)*
- 1 pair of scissors*
- *Available from Delta Education.

MAKING THE FRAMES FOR THE YOUNGSTERS (INSTRUCTIONS FOR THE LEADER):

1. Cut 1 two-meter length of wire for each participant.
2. Coil each wire into a circle approximately seven centimeters in diameter. One way to make the circle is to coil the wire around your hand.

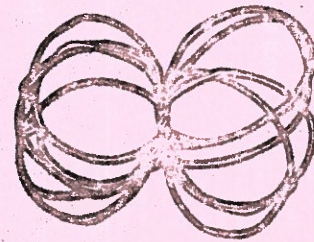


3. Take one loose end of the coiled wire and wrap it tightly around the coil three or four times.

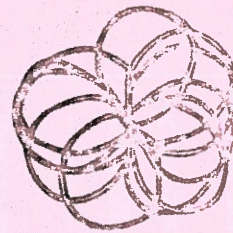


MOLDING THE FRAME (INSTRUCTIONS FOR THE PARTICIPANTS):

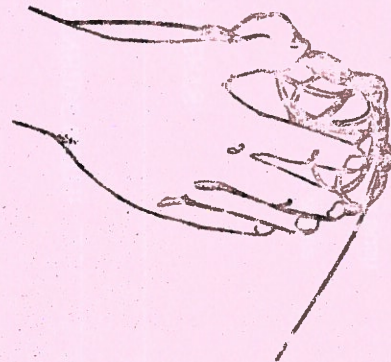
1. Separate the coil into two circles, forming a figure eight.



2. Spread the coils out into a flat flower shape.



3. The frame can then be molded into a nest shape by pressing it against a bent knee or the toe of a shoe.



4. Materials can now be woven into or molded on the frame.

DETA BIOLOGY INSTRUCTIONAL STRATEGIES

Bird Nests

Nesting Notes



NAME _____

MY BIRD NEST IS MADE OF:

(Circle all the materials you use.)

- twigs green grass
- pine needles dried grass
- green leaves hair or feathers
- dried leaves mud or dirt
- bark other: _____

AND IS LINED ON THE INSIDE WITH: _____

MY BIRD BUILDS ITS NESTS:

(Circle one.)

- on the ground in a tree
- in a clump of grass in a bush
- other: _____

Bird Nests

Nesting Notes



NAME _____

MY BIRD NEST IS MADE OF:

(Circle all the materials you use.)

- twigs green grass
- pine needles dried grass
- green leaves hair or feathers
- dried leaves mud or dirt
- bark other: _____

AND IS LINED ON THE INSIDE WITH: _____

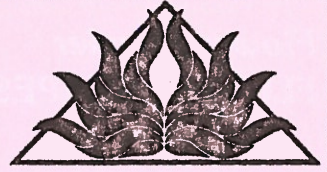
MY BIRD BUILDS ITS NESTS:

(Circle one.)

- on the ground in a tree
- in a clump of grass in a bush
- other: _____

Flower Powder POLLEN COLLECTORS

Equipment Card



POLLEN BOARD

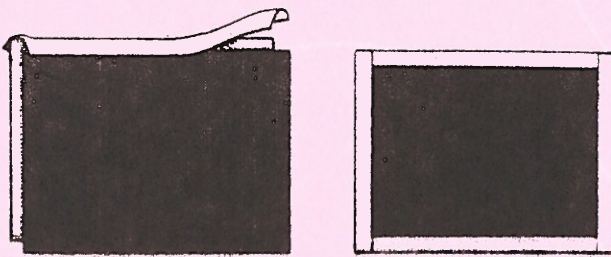
MATERIALS FOR ONE BOARD:

- 1 piece of cardboard*, 10 cm x 15 cm
- 1 piece of black velveteen* or corduroy*, 10 cm x 15 cm
- masking tape*

* Available from Delta Education

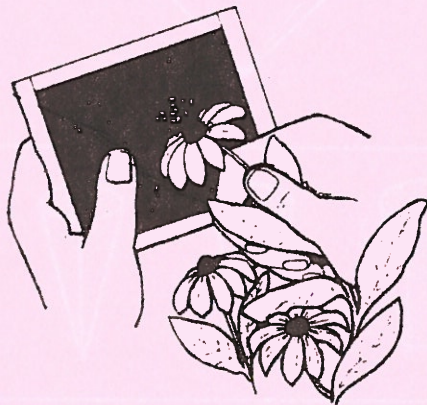
MAKING THE POLLEN BOARD:

1. Place the black material on top of the cardboard.
2. Cover the edges of the cardboard and material with masking tape.



USING THE POLLEN BOARD:

1. Grasp a flower gently by its stem.
2. Hold the pollen board in your other hand, and gently rub or press the flower against the board. Do not smash or pick the flower.



ARTIFICIAL BEE

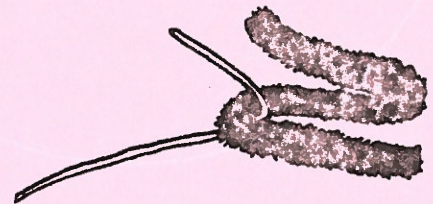
MATERIALS FOR ONE BEE:

- 1 4-6 cm piece of black pipe cleaner* (called "chenille" at craft and hobby stores)
- 1 20-cm length of thin wire*
- white paper
- black felt pen*
- rubber cement*

* Available from Delta Education.

MAKING THE BEE:

1. Bend the pipe cleaner into thirds to form a "Z" shape. Flatten the shape.



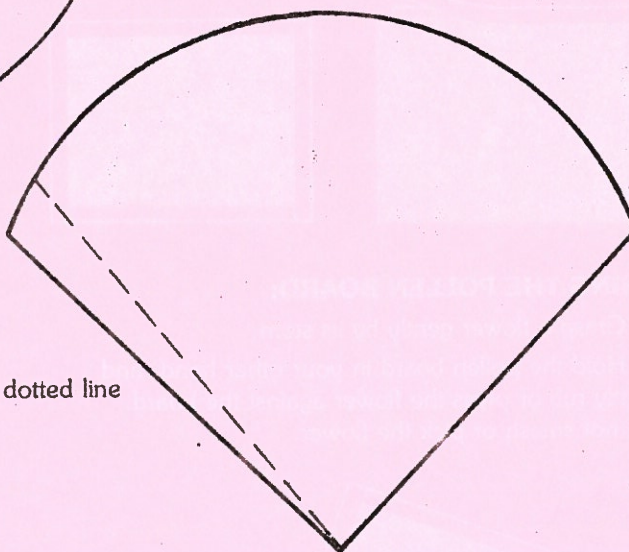
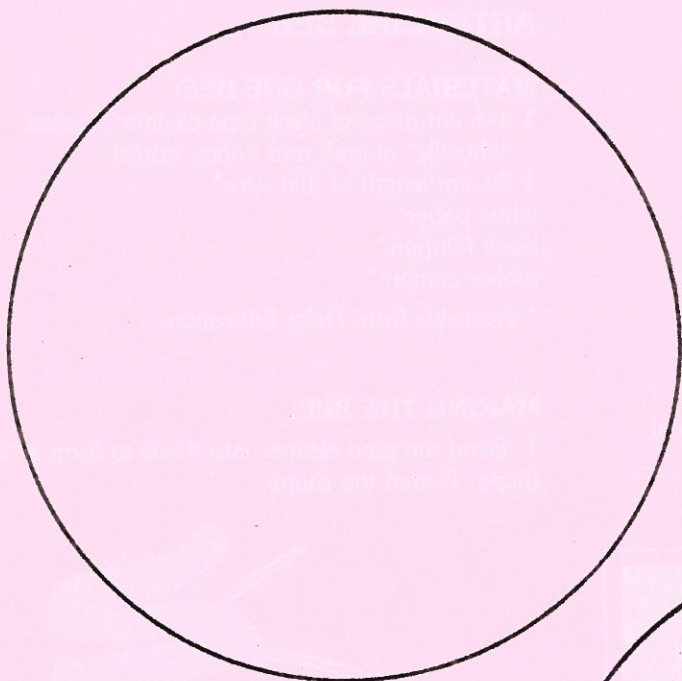
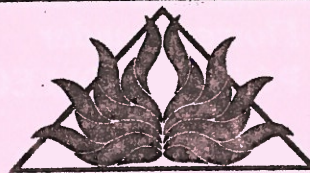
2. Thread the thin wire through one of the loops formed in the flattened pipe cleaner. Twist the wire together and then wrap it around the end of the pipe cleaner.



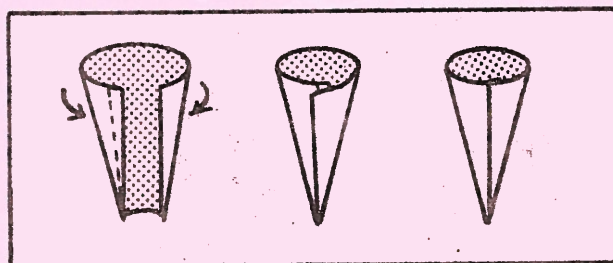
3. Cut out a tiny piece of paper this big . Make two dots on it with the pen and glue the "eyes" to the end opposite the wire.



Flower Powder
FLOWER SHAPES



Overlap edge to dotted line



Lichen Looking Action Card #1

Lichen Colors

HOW MANY DIFFERENT COLORS OF LICHENS CAN YOU FIND?

Each time you discover a lichen of a new color, break off a tiny piece of the lichen no larger than this size ● and tape it to this card.

MATERIALS: tape



Lichen Looking Action Card #2

Lichen Shapes

HOW MANY DIFFERENT SHAPES OF LICHENS CAN YOU FIND?

Place a piece of wax paper over each different shape and trace its outline.

MATERIALS: wax paper, pen or pencil



Lichen Looking Action Card #3

Lichen Critters

WHAT KINDS OF ANIMALS DO YOU FIND ON THE LICHENS?

Each time you find an animal, place it in a bug box or plastic bag for observation. What do you think the animal is doing on the lichen?

MATERIALS: bug box or magnifying lens, plastic bag



Lichen Looking Action Card #4

Tree Lichens

WHICH TREES HAVE LICHENS AND WHICH DON'T?

Collect a leaf from each tree that has lichens. Keep these leaves in the "LICHEN" bag.

Collect a leaf from each tree that does not have lichens. Keep these leaves in the "NO LICHENS" bag.

What features of some trees might prevent lichen growth on the bark?

MATERIALS: 2 labeled bags



Lichen Looking Action Card #5a



For Plentiful Lichen Populations

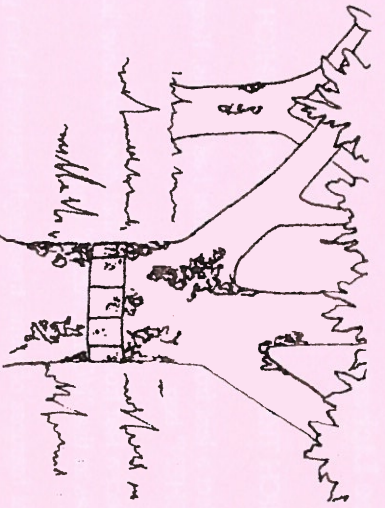
HOW MANY LICHENS?

Place the plastic or wax paper band around the trunk of a tree (or around a large rock) so the band end labeled "N" is on the NORTH side of the tree or rock. How many lichens are there in each band section? Use this card to keep score.

10	9	8	7	6	5	4	3	2	1	N
----	---	---	---	---	---	---	---	---	---	---

10	9	8	7	6	5	4	3	2	1	N
----	---	---	---	---	---	---	---	---	---	---

Try another tree. Are the lichens evenly spaced on the tree or do they grow mainly in certain areas? What might cause this? Do the lichens seem to be clustered on the west, east, north, or south side of the tree?



MATERIALS: sectioned band, pen or pencil, compass

Lichen Looking Action Card #5b



For Sparse Lichen Populations

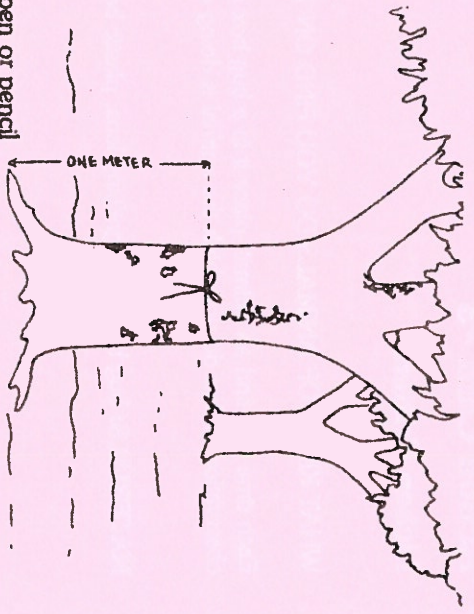
HOW MANY LICHENS?

Select several trees (or large rocks) with lichens. Tie the marked string around the trunk of one of them, one meter from the base of the tree. You can use the marked-off string to measure one meter. The one-meter area merely limits your counting area. How many lichens are there below the string? Try this on several other trees (or rocks) and compare results. Use this card to keep score. Do the lichens seem to be more plentiful on one side of the tree (or rock)?

Rock or tree.

Rock or tree.

Rock or tree.



MATERIALS: string, pen or pencil

SESSION II

Theme: The Saving Present Parent

Intentions

Enable the participants to:

Develop an understanding of God as the nurturing, loving parent who gives birth to the earth with reflections on various Biblical and personal images of God.

Catechism

All this he does out of fatherly and divine goodness and mercy . . .

Scripture

Genesis 1:1-2:4
 Genesis 3:1-9
 II Samuel 23:2-4
 I Chronicles 29:10-19
 Job 10:8-12
 Psalm 23
 Psalm 32
 Psalm 46
 Psalm 47
 Psalm 72
 Psalm 92
 Psalm 93
 Psalm 95
 Psalm 96
 Psalm 97
 Psalm 98
 Psalm 99
 Psalm 103
 Psalm 110
 Psalm 111
 Psalm 136
 Psalm 149
 Isaiah 40:10-11
 Isaiah 49
 Matthew 6:24-35
 Philippians 2:5-11

II
CB. BIBLE STUDIES

1. The Good, the Bad, and the Footprint - Part I

I. Description: This is part one of a three part Bible Study to be used on continuous days.

Part 1: The Good - How good is God's complete and whole Creation? What are the signs of a good ruler? How is God a good ruler?

Part 2: The Bad - How do we humans mess up God's Creation and subsequently human life? Humankind has been given the authority "to have dominion" over the Earth. What are the signs of our "bad dominion" over people? Over the natural environment?

Part 3: The Footprint - We can be caring and sensitive to all of God's Creation. How can Christians show God's mark ("logo") and "walk softly" in the world while working for God's good? How can we take part in God's "good ruling"?

II. Appropriate for: Grades 7 & older

III. Biblical Text: Psalm 72:1-14

IV. Materials: Bibles, paper and marking pens

V. Process:

- A. Have the participants quickly brainstorm the characteristics of a good ruler. Take 5 minutes. The leader can organize the characteristics into the categories so that sub-groups of 3-4 participants can work on a brief skit or role-play of a good leader. They may need to be reminded of other authority figures in their lives (teacher, pastor, parent, etc.) that can provide a good role model for a positive ruler.
- B. Presentation on a "Good Ruler"
 1. The participants perform a skit or role-play of a good ruler. Keep presentations to no more than 5 minutes. Direct the audience to take special mental notes of what a good ruler is like.
 2. Another way to approach the indications of a good ruler would be for the participants to find evidence in the natural world how God has been a good ruler of nature. How do things care for each other? How does God provide for them? Have the participants bring back one or two such signs and explain their reasons for choosing them to the rest of the small group.
- C. Once the presentations are completed, process what each group observed about the presentations. Write these "characteristics of a good ruler" in one column on the left side of piece of paper.
- D. Then ask the participants to relate how God has been a good ruler of the world. Direct their responses to how God has shown His "powerful establishing, wise shaping, and joyful valuing". Bring out both human and environmental concerns. As the participants state these ideas, write them down on the right of the corresponding ideas in the first column.
- E. Read Psalm 72:1-14
 1. Ask participants to watch for characteristics mentioned in the Psalm that were written on the newsprint. Check the items off on the newsprint.
 2. Now look in the Psalm for characteristics not mentioned on the newsprint. Add them to the list.
 3. Do participants understand what these characteristics mean? Discuss.
- F. Close with a prayer giving thanks to God for His good ruling.

VI. Source: Stewardship of Creation, pp. 27-28.

2. The Saving Present Parent

I. Description: Develop an understanding of God as one who is involved with creation to make it complete.

II. Appropriate for: Various ages. Plenty of opportunity for adapting.

III. Biblical Texts: Genesis 3:1-9; Job 10:8-12; Psalms 23, 46, 93, 95, 96, 97, 98, 99, 110, 136; Isaiah 40:10-11, 49:15, Philippians 2:5-11

IV. Materials: Bibles, newsprint, markers, and pencils

V. Process:

A. How do you describe God?

One or more of the following procedures can be used.

1. Participants compose a list of occupations which depend upon hands, e.g., artist, carpenter, mechanic, etc.
 - a. Review the list and ask each participant to select one to three occupations he/she thinks best describes God for him/her.
 - b. If more than one is selected prioritize the choice.
 - c. Share ideas and reasons.
2. What dimension is your God?
 - a. J. B. Phillips suggests these descriptions of God. The leader can write them down on newsprint.
 - + Resident Policeman - tells you right from wrong, conscience, sets limit.
 - + Parental Hangover - parent tapes, God is a mother or father image, the voice one hears.
 - + Grand Old Man - God just watches, cares, acts benevolently, but not necessarily involved.
 - + Meek and Mild - God is not punitive, adapts to the situation, nice person.
 - + Absolutely Perfect - a circle, no beginning or ending, all is beautiful, nothing wrong, almost no fun, a philosophical being.
 - + Heavenly Bosom - God hides the faithful in Himself, no fears.
 - + God-in-a-Box - God and Church are synonymous, a building is pictured when the word "God" is said.
 - + Managing Director - God choreographs everything, beings might even be puppets.
 - b. Ask participants to each choose one of the above that is closest to their idea of God.
 - c. If they do not like these images have them make up their own.
 - d. Ask the participants to draw a picture of the one image they chose. Hold up the pictures and have the participants gather with others who have similar pictures. Groups can talk about why they picked this particular image. Share with large group.
 - e. A variation: participants choose the image they would have selected at a younger age and the image they would select now. Share comparisons.
3. Ask participants to find a natural object that symbolizes God for them. Share thoughts with group.
4. Participants select one person they identify with God. Share person and reason.
5. Participants select one animal they would identify with God. Share animal and reason.

B. Activities to explore the parental/nurturing role.

1. Adaptation Experiences. There are various ways that animals adapt to their environment. Adaptation is any feature of an organism to improve its ~~choices~~ of survival and reproduction.
 - a. Scram or Freeze (Cf. II E 6)
 - b. Seed Dispersal - Adaptation (Cf. II E 9)
 - c. Attention (Cf. II E 10)
 - d. Food Grab (Cf. II E 11)
 - e. The Thicket Game (Cf. II E 12)
2. Caring for the young
 - a. Bearly Born (Cf. II E 13)
 - b. Find a critter, often times a bird or mouse, that is no longer in its nest, and care for it.

Changes

- c. Pretend you have a baby. How would you care for it? Act out/Discuss.
3. Group Activities
- Inflictions (Cf. II G 3)
 - Introduce some First Aid techniques that participants should know in their particular situation.
 - Cook out a meal. Feed one another.
- C. When one or more of these activities are completed discuss briefly the images of God and/or the place of God in the situation.
- In the environmental activities one can note how God works in the created order to assure survival. Adaptation is in the plan of God to nurture a species.
 - In other activities the image of God may be more symbolic.
- D. Bible Study
- Select several passages that work in the situation you find yourself. It is too much to use all the texts. Read the texts and discuss how the author is describing God.
- Genesis 3:1-9. This is the story of the Fall. God appears seeking out Adam and Eve in spite of their disobedience. He holds them accountable and removes them from the Garden, but He seeks them out and keeps them in communion with Himself.
 - Job 10:8-12. The passage appears amid a section where Job is bemoaning his fate and how God has made life miserable for him. However, Job presents a God who creates and nurtures.
 - Psalms 23. God is the Good Shepherd. This can be compared to John 10:11-18. A pastoral setting where life appears pleasant and easy. However, note that the Shepherd is with us as we walk through the Valley of the Shadow of Death and as we sit at a table in the presence of our enemies. The opponent may be powerless but it is destroyed. We are able to live with the situation.
 - Psalms 46. Luther was inspired by this Psalm to write "A Mighty Fortress Is Our God." These powerful images of God portray a safe island, the power to make something desolate, and the end of war.
 - Psalms 93, 95, 96, 97, 98, 99, 110. God is a majestic ruler.
 - Psalms 136. This is an outline of the history of Israel. The repetition reminds us of the depth of God's compassion.
 - Isaiah 40:10-11. God is depicted as a ruler who comes in might, a good shepherd, and a mother.
 - Isaiah 49:15. This is a positive statement about God stated in the negative. The words "compassion" and "womb" have the same Hebrew root word.
 - Philippians 2:5-11. Paul describes God who comes in Jesus Christ.
- E. Option: Read "A Story of Lenten Extremities" (Cf. II I 1)
- F. Care of the young.
- What do participants know about how various animals care for their young?
 - Here are a few details:
 - Blue Gill, Sun Fish, and Bull Heads. Fish build nests in a bowl shaped depression in the gravel. Very territorial. Males guard the nest jealously.
 - Catfish. After fertilizing the eggs the male picks up 40-55 eggs in his mouth and carries them for a month until hatched. The male then holds them for another two weeks. He does not eat during this time. If a young catfish is threatened it will return to the father's mouth for sanctuary.
 - Trout and Salmon. These fish bury their eggs. Because they are safer from predators, fewer eggs are produced.
 - Turtles. Once they have laid their eggs motherhood ceases. This is generally true of snakes. Bull snakes are an exception.

e. Finches. Mothers and fathers regurgitate seeds for their new offspring. It is the original pre-chewed meal. Insects are fed the young when they get older.

3. Participants may want to research various traits of animals and play charades with the group.

G. The parental character of God.

1. List all the characteristics of God that have been developed during this study. Write on newsprint.

2. Review the list with the group and ask them to decide if a characteristic is male or female. If they agree it is both choose the one that is dominant.

3. Help the participants see that God is the SAVING PRESENT PARENT.

H. Luther's Explanation to the First Article of the Apostles' Creed.

1. Recite with the group the whole explanation.

2. Focus on the words, "All this he does out of fatherly and divine goodness and mercy . . ."

3. How do participants understand this phrase?

I. Summarize: What was learned?

IV 3. A Study of Spiders or Putting It and Keeping It Together.

I. Description: Helps participants learn about spider webs, the spider's care for the web, and how God maintains the world.

II. Appropriate for: Youth

III. Biblical Text: Psalm 136

IV. Materials: For every two or three participants - a plastic spray bottle, an 8 X 8 inch piece of fiberboard or flat ceiling tile, an 8 X 8 inch piece of three-ply cardboard, 8 yards of crochet thread, 60 nails, a thimble, a pair of scissors.

V. Process:

A. Information. For the most part, the spider webs we see are spun by females. The material is silk which is released through openings in the abdomen called "spinnerets." In the case of a garden spider, the silk mill actually occupies the entire abdomen. It is composed of six sets of glands which produce different types of silk, such as silk for building web foundations, silk for spinning cocoons, and silk for ballooning. Spiders recycle their webs. They eat damaged portions of the web.

B. Find a location with many spiderwebs.

1. Talk about spiderwebs. How do people feel about them? Of what are they a sign? What do participants know about them?

2. Show how to locate and highlight almost invisible webs by spraying around the web so the mist falls down on the web. Ask the participants what might have constructed the web and what the web might be used for.

3. Find as many webs as possible. Don't destroy them. Ask participants to choose their favorite web for the next step.

C. Web making

1. Ask:

a. How does a spider build her web?

b. Does she start in the center and move out, or does she begin with the outside frame?

c. How does she get from one corner of the web to the other?

d. To what does she attach her silk?

e. Where does she place the most threads?

2. Making a web.

a. Give participants the needed equipment and go through the web building process step by step.

b. Use the following questions to guide the construction. Remind the participants to place a nail in the fiberboard at each point where the web would be attached to branches and at each point where two or more threads intersect.

- + Where will the web be attached to the branches or twigs? (Place a nail at these points.)
- + What will be the general shape of the web? Where will the points be that outline this shape?
- + How will the threads be arranged? Will they all go in the same direction?
- + Where will two threads come together (intersect)? Three? Four?
- c. When the nails are positioned the participants can weave the web with the thread.
- d. Examine each other's work when completed. Are there different types of webs represented? How efficient are they for catching prey?

D. Bible Study of Psalm 136

1. Explain that the God who creates the world also takes care of it. There are two major events in the Bible where this is demonstrated. These are people experiences. The first is the crossing of the Red Sea where the Israelites escape the Egyptians; the second is the death and resurrection of Jesus Christ.
2. Read Psalm 136 together. Ask participants to give titles to the sections listed below.
 - a. Vss. 1-3
 - b. Vss. 4-9
 - c. Vss. 10-22
 - d. Vss. 23-25
 - e. Vs. 26

E. Summary

1. Ask participants to compare weaving a spider web with God's works described in Psalm 136. On newsprint make a chart with two columns. Head one column "What Spiders Do" and the other column "What God Does." Under each heading write activities that are similar and different. You can begin with either column. As suggestions are made, you may find yourself going back and forth between columns.
 2. Discuss how God cares for the world today? Some possible directions are:
 - a. God gives the human and nonhuman worlds the resources with which to survive.
 - b. God is active in the world though we do not see God. We use the word "Spirit."
- F. Encourage participants to observe spider webs throughout the program session and look for developments.

4. It Takes a Lot of Gall

- I. Description: Participants learn about galls and God's process of nurturing His creation.
- II. Appropriate for: Youth
- III. Biblical Text: Matthew 6:24-35
- IV. Materials: Bibles and materials indicated for activity.
- V. Process:

- A. Do Swell Homes (Cf. II E 2)
- B. Read Matthew 6:24-35
 1. Note that it is a part of the Sermon on the Mount.
 2. What verses talk about food? water? shelter?
 3. Who provides these things?
 4. What should human beings do according to vss. 33 and 34? Do these words have anything to do with adequate space?
 - a. What is God's Kingdom?
 - b. What is "righteousness?"
 - c. You can help participants understand that "seeking first God's kingdom and righteousness" refers to doing justice and kindness, goodness and mercy, acting in peace and showing equality throughout

IV C

the whole world.

C. Relating Activity

1. Review the role galls play in the scheme of the natural world.
 - a. How do the insects intervene in the life of a plant?
 - b. How does the plant take care of building the home for the insect providing shelter and nourishment?
 - c. How do galls then serve the needs of birds?
2. How would the participants say the gall fits into Matthew 6? In what ways might the gall and Jesus' words compare?
3. Ask the participants if they know what it means to describe a person as "having gall." The word gall means overboldness, disruptiveness, and maybe rudeness. Help the participants see that it might have to be that a person who supports peace, love, or justice in today's world might be one who acts "with a lot of gall." Use some examples from other persons' or your own personal experience.
- D. Watch for more galls during the week.

5. Camouflage: How God Covers and Protects Us

- I. Description: Participants learn that camouflage is one method of survival in the natural world such as forgiveness is God's gift for survival in the human community.

II. Appropriate for: Youth

III. Biblical Text: Psalm 32

IV. Materials: Bibles and materials for activity

V. Process:

- A. Do the activity "Invent an Animal" (Cf. II E 7) or "Invent a Plant" (Cf. II E 8)
- B. Discuss with the participants what human beings need to be protected from? There may be several suggestions. Because the one response you are looking for is "evil" it may be necessary to guide participants to this point, since they may be talking about expression of sin or evil. Help them understand that sin and evil contribute to broken relationships between people, between God and people, and between people and the nonhuman world.
- C. Does God provide anything for humans to deal with this problem?
- D. Read Psalm 32. Ask the participants to interrupt the reading any time they see or hear an idea that might be similar to the concept of camouflage which has been experienced earlier. Verses to note are:
 - Vs. 1 - Sin is covered.
 - Vss 5 and 7 - we cannot hide sin from God, but God becomes our camouflage.
 - Vs. 10 - God's love protects.
- E. Discuss how God's forgiveness is God's way of parentally nurturing us.

Ps 32
9/14

C. WORSHIP AND DEVOTIONS

- II B
1. Group Prayer - Day 2
 - I. Description: Write descriptions of day and include in prayer
 - II. Appropriate for: All ages
 - III. Materials: Scrap paper, pencils
 - IV. Process:
 - A. Participants write prayer sentences that describe the day's activities.
 - B. They read them aloud to the group at prayer time.
 - V. Variations: This may be done for several days.

 2. Bird Confession and Absolution ("... let birds multiply on the Earth.")
 - I. Description: Bird and human behavior compared
 - II. Appropriate for: Older youth and adults
 - III. Materials: Response sheet for participants

Leader: We are sorry birds.

Group 1: Forgive us for parroting back to others only what they have given us, and nothing more.

Group 2: Forgive us for pigeon-holing people and disrespecting monumental systems of nature.

Group 3: Forgive us for ostrich-like ignorance of Creation's intricacies when we keep our heads in the cloud of self-interest or the sands of apathy.

Group 4: Forgive us for the cockiness which knows it all and rejects new kernels of truth.

Group 5: And forgive us for being too chicken-hearted to serve with boldness and courage, no matter the outcome.

Leader: God gathers us together as a hen gathers her brood under her wings to warm us with forgiving love. The chicken-hearted receive strength to rise up with the wings of an eagle.
 - IV. Source: Creative Worship, p. 97

 3. Morning and Evening Prayer from the Lutheran Book of Worship
 - I. Description: Traditional services not normally experienced in the parish.
 - II. Appropriate for: All ages
 - III. Biblical Texts: Selected by leader
 - IV. Options:
 - A. Introduce the liturgy at another time for rehearsal so when the service is done people have some familiarity with it.
 - B. Assign sections to groups in advance so they can learn that portion and lead the rest of the group during the service.
 - C. Intersperse the liturgy with explanations.
 - D. Do the service formally (vestments), but in a nontraditional setting.
 - E. Assign some participants the responsibility of creating the worship setting.

 4. Texts for Creating Services of Praise to God

Use I Chronicles 29:10-19 and/or Psalm 92:1-8

 5. The Present Saving Parent
 - I. Description: An experience that introduces the theme specifically.
 - II. Appropriate for: All ages
 - III. Biblical Text: Psalm 103
 - IV. Materials: Eggs, (fruit, though less dramatic)
- II

V. Process:

A. Preparation

Rewrite Psalm 103 using images of parental care. E.g.

- God is like the parent who -
- Stays with us when we are sick
- Crowns us with love when we don't deserve it
- Overcomes holding our sinfulness against us
- Encourages us to be vigorous
- Does not always criticize us
- Slowly gets angry
- Does not stay angry
- Shares our feelings

Other images can be added.

B. The Service

1. Introductory song(s)
2. Introductory comments:
 - a. We look to God as a Parent. There are many characteristics we might call motherly and fatherly. You may want to make some observations at this point.
 - b. Tell the participants you are going to give each of them an egg to treat as though it was their child. They will be responsible for the egg for the next (you fill in the period of time). They can name it, mark it for identification, care for it, make a place for it to reside.
3. Sing "Children of the Heavenly Father"
4. Read Psalm 103 as you have rewritten it and make appropriate comments.
5. Prayer
6. Closing Song
7. Benediction

VI. Comment:

Make plans for participants to share their egg-parenting experience at some time.

6. Celebrating the Enduring Love of God

I. Description: A worship design that lifts up God's abiding presence in the creation and the history of the people of Israel.

II. Appropriate for: Older youth and adults

III. Biblical Text: Psalm 136

IV. Materials: None

V. Process:

A. Review the text:

1. Vss. 1-9 - Creation
2. Vss. 10-15 - Experiences in Egypt and the Exodus
3. Vss. 16-22 - The wandering in the wilderness
4. Vss. 23-25 - Summary of God's action
5. Vs. 26 - Conclusion

B. Design a liturgy celebrating each of the facets of the text.

IV 7. God Is the Wholly Other

I. Description: A worship that looks at the meaning of "the fear of the Lord" from the perspective of real fear and not awe.

II. Appropriate for: Older youth and adults

III. Biblical Text: Psalm 111

IV. Materials: None

V. Process:

A. Create a situation in which fear can be remembered and possibly relived.

1. Tell true stories (not ghost stories) that are adventurous, e.g., being involved with a bear in the campsite.
2. Discuss any feelings of fear during the camping experience.

3. Pantomime a prey that is under siege by a predator.
 4. (Warning: Do not create a fearful situation.)
- B. Focus on what fear causes us to feel. Be as dramatic as possible.
- C. When we fear -
1. We sense another who is beyond us, over whom we have no control (the thief lurking around the house).
 2. We sense ourselves being aware of every nerve ending in our bodies (it tingles).
 3. Our attitudes are impacted (we are intimidated by every noise we hear).
 4. Our behavior is changed (we can feel frozen or desire to run).
 5. We may question our sense of worth, our very being.
 6. Our perceptions change.
 7. Sometimes we become remorseful.
- D. Read Psalm 111
1. Note that "fear" is used in this Psalm.
 - a. People often translate "fear" as "awe" or "respect."
 - b. "Fear" in this text is not intended to mean to be afraid.
 - c. In this text "fear" means to realize that God is "wholly other" than ourselves.
 - + God is not someone we create.
 - + God is not someone who lets us get by without being critical.
 2. Ask the assembly to listen to the text read it a second time thinking of God as someone "wholly other" than we are. To fear God is to sense his otherliness and our very being. From this point we see God reaching out to us. He bridges the gap.

E. ENVIRONMENTAL (NATURE) LEARNING EXPERIENCES

1. Adopt-a-Tree

- I. Description: Become personally familiar with a particular tree.
- II. Appropriate for: All ages
- III. Materials: Paper, pencils, crayons.
- IV. Process:
- A. Each participant find a tree to adopt for themselves. Write an adoption certificate for each participant and tree.
 - B. Each participant learn as much about the tree as possible.
 1. What kind is it?
 2. How tall is it?
 3. How big around?
 4. How old?
 5. Who lives in it or on it or near it?
 6. What does it give us?
 7. What kind of seeds does it make?
 - C. Make rubbings of its bark. Draw its picture. Write a poem about it. Hug it. Listen to its inner stirrings. Love it. Make a booklet about it. Protect it from harm.
 - V. Source: The Nature Specialist, Miller, p. 33.

*Choose the Tree
and Ask
What it gives
you.*

2. Swell Homes

- I. Description: Participants locate galls.
- II. Appropriate for: Youth
- III. Materials:
- A. For each person - five strips of cloth for flagging galls.
 - B. For each group of eight - several sharp knives, several tweezers, a magnifying glass, a small milk carton.
- IV. Process:
- A. Give a brief history of galls. Some insects grow up in homes that are swellings in plants. Parasitic insects place eggs into a leaf or stem of a plant, and the plant forms a structure around the developing larvae. The gall provides food and shelter for the larvae.
 - B. Locate several galls so the participants know what they are. Then give them flagging and send them off to find some more. Use the flags to identify where they are.
 - C. As a group go from flag to flag observing the various galls. Collect the flags as you go. Select a few samples of galls along the way.
 - D. Spread the galls out on a table or the ground. Open them to see what is in them.
 - E. Describe the galls. Give them names.
 - F. Discuss:
 1. What benefits do you think gall occupants receive from living in their specialized homes? Food? Water? Protection? Protection from what?
 2. Were the occupants in the various galls the same or similar?
 3. Do all plants have galls? If not, consider the reasons why some do not.
 4. How are the galls different from each other? Size? Shape?
 5. Do galls seem to injure or damage the host plant in any way?
 - G. What do the participants think are the four things that are necessary for an organism to live. Give them hints to see food, water, shelter, and adequate space.
 - V. Source: OBIS

Galls

3. Dot Adaptation

- I. Description: Introduce protective coloration and natural selection. Need 10 participants to make this successful.

II. Appropriate for: All ages

III. Materials: Fabric with all-over design (florals) or patterned tablecloth.
Colored dots made by using a hole punch on ten different colors of paper. Small paper cups. Newsprint and markers.

IV. Process:

- A. Give each participants a cup containing a single color of dots. Count out ten dots of each color. Scatter the dots on the cloth. A total of 100 dots is on the cloth.
 - B. Explain that five hungry birds have now appeared on the scene and will hunt and eat dot insects. At a given signal five participants are to look down and pick up dots until they have fifteen each (75 total). These participants are to be like birds and must look away each time they pick up a dot, and they must pick up the first dot they see when their gaze returns to the cloth.
 - C. When this phase is completed, gather the edges of the cloth together, shaking it so that the remaining twenty five dots fall into the center. Five other participants now separate the remaining dots into their colors and count them. The number of each color is recorded on a chart and all the dots returned to the cloth.
 - D. Round two (really, the next generation) now begins. Since the dots that were left were not eaten, they have "survived," reproduced for next year or generation, their numbers have tripled. Therefore, the participants who have the dot cups are to triple the numbers on the chart and count out that number of dots. 75 dots have now been added to the remaining 25. Scatter these on the fabric.
 - E. Five other participants are designated as birds and repeat the procedure, picking dots, looking away, etc., until fifteen for each (total of 75) are collected.
 - F. Once again, the remaining dots are counted and tabulated on the chart.
 - G. A lively discussion on the implication of this activity should ensue. Be sure to include all the participants as counters, birds, etc.
 - H. Items to discuss: selective pressure, evolution, adaptation, camouflage, depending on the group's ability and intelligence.
- V. Source: The Nature Specialist, Miller, p. 41.

4. Picturing Adaptation

I. Description: Examine ways animals and plants adapt to their environment.

II. Appropriate for: All ages.

III. Materials: Pictures of living things with obvious adaptation, at least one for every pair of participants. (Ranger Rick and other nature magazines are good sources.) Index cards, 2 colored marking pens.

IV. Process:

A. Preparation:

1. For each organism write a phrase that describes the adaptation on an index card.
2. In another color on a second index card write how that adaptation enables the organism to survive.

Examples:

<u>Picture</u>	<u>Adaptation</u>	<u>How it helps organism to survive</u>
Squirrel	A long tail	Helps it keep its balance when jumping through the air
Frog	Bulging eyes on side of head	Helps it see predators or prey all around it.
Hawk	A hooked beak	Helps it tear up the meat it catches.

- B. Object of game: match the two index cards to form a sentence.
- C. Spread pictures out so all can see. Give out the index cards and ask the participants to place the card next to the picture it best describes. Continue until all cards are placed. Read the cards. Follow with discussion.

V. Source: The Nature Specialist, Miller, p. 54.

5. Toothpick Camouflage Hunt

I. Description: Demonstrate how protective coloration (camouflage) acts to protect organisms from predators.

II. Appropriate for: All ages.

III. Materials: Fifty toothpicks in five different colors: green, brown, yellow, red, blue. Rope to mark off an area 30 to 35 meters in diameter. Newsprint and markers for a chart.

IV. Process:

- A. Count out 50 toothpicks with participants watching - ten of each color. Make a large circle, about 10 meters in diameter, with the rope, on a grassy place, or other flat area.
- B. Scatter the 50 toothpicks within the circle in a random fashion. The participants stand around the perimeter.
- C. At a signal, they pick up as many toothpicks as possible in a two-minute time period. (Shorten the time if necessary.) Count each color retrieved and record on chart.
- D. Review the chart and talk about the most common colors prey animals come in, and how this allows them to blend into and disappear in the background they live in.

V. Variations: Discuss the survival value of just the opposite kind of protective coloration as seen in skunks, monarchs and other brightly colored animals. (They announce their presence because they have other means of protection.)

VI. Source: The Nature Specialist, Miller, p. 67.

6. Scram or Freeze

I. Description: Participants assume the role of predators and cryptozoa and search for cryptozoa on the site.

II. Appropriate for: Youth - a group of 16 is best.

III. Materials:

- A. For each team of two or three - two large plastic zip-lock bags, two plastic or paper cups.
- B. For the entire group - two four-meter lengths of brightly colored yarn, two large containers (boxes), magnifiers, a marking pen, a milk carton.

IV. Process:

- A. Preparation: Check that the site has an adequate number of cryptozoa. Need many rocks, fallen trees, and other debris. Cryptozoa (kryptos - hidden, zoia - animals) are critters that live under these various things. Mark the plastic containers "Scram" and "Freeze."
- B. Action: Part I - Scram and Freeze Game
 1. Tell participants they are going to play a game involving a predator and many prey.
 2. Lay out pieces of colored yarn on the ground at one end of the game site to make the boundary of the prey's shelter. Then pace off seven to ten meters from the shelter boundary and lay out the other piece of yarn on the ground for the prey's starting line.
 3. Assign one person the role of predator, everyone else plays the prey.
 4. Ask the prey to line up on the starting line facing the shelter. The predator should stand about three meters behind the starting line with his/her back to the prey.

IV E

5. Instruct the predator to start the game by shouting "Scram!" When he/she does so the prey start moving toward the shelter. The predator may turn around at any time but, before doing so, must growl loudly. When the prey hear the predator's growl, they should freeze. Any prey that the predator sees moving are considered caught and must stand at the sidelines until the next round.
6. Continue the round until all the prey are caught or reach shelter.
7. Play several rounds to give several people an opportunity to be the predator.

C. Action: Part 2 - Cryptozoa Survey

1. Tell the participants they are going to investigate the scam-and-freeze behavior of animals that live under objects such as rocks, logs, sticks, fallen leaves, and other ground litter.
2. Tell them that they are going to pretend to be predators hunting for animals living under objects. As predators (e.g., raccoons, skunks, or birds), they will carefully turn pieces of wood, leaves, and rocks over to find animals. Discuss safety and animal handling with the teams. Tell the participants to use the cups to scoop up the animals after observing them. Remind them that some of the animals may be dangerous and should not be picked up. Make sure the teams understand that they must return all objects to their original positions after looking under the objects.
3. Divide the group into buddy teams. Give each team one "SCRAM" bag, one "FREEZE" bag, and two cups. The bags are the predators' stomachs.
4. Challenge the participants to look for animals beneath various objects and to identify the animals as either "scrammers" or "freezers" by watching what the animals do when they are uncovered. Tell them to sort the animals by placing them into the "stomach" that identifies the animals' escape behavior. Each team needs to collect only one of each kind of animal.
5. After about ten minutes call the teams together and share the experience.
6. Discuss the following questions:
 - a. How do you think "scramming" helps an animal to survive? How could "freezing" help?
 - b. Do any of the animals both scam and freeze. Which ones?
 - c. Are the "scrammers" easier to find than "freezers?" Why?
 - d. Do "scrammers" all tend to be the same color? What about "freezers?" How do you think color helps an animal survive?
7. Explain the meaning of the word "cryptozoa."
8. Release the animals to their original location.

V. Source: OBIS

7. Invent an Animal

I. Description: Participants invent an animal that blends into the habitat.

II. Appropriate for: Youth

III. Materials:

- A. For each participant - a vegetable (potato, string bean, carrot, etc.), a small paint brush.
- B. For each team of two - some tempera paints, paper cups for mixing paints, Invent-an-Animal Junk Box (toothpicks, popsicle sticks, masking tape, rubber bands, string, clay, cotton, pipe cleaners, construction paper), container of water, paper towels, scissors.
- C. For entire group - white non-toxic latex paint, large paint brush, strips of flagging, litter from site (twigs, leaves, other natural materials).

IV. Process:

- A. Select two areas with different prevailing colors for activity sites. About eight square meters per participant. The two sites should have a visual barrier between them or be far enough apart so that one group

Preparation - adaptation into the habitat

I 11/15

cannot see what the other group is doing. Clearly mark the boundaries of each site with flagging before the activity.

B. Action

1. Setting the Stage

- a. Introduce the challenge - Participants are to invent an imaginary animal that blends into its habitat by camouflaging a white vegetable.
- b. Outline the activity. Explain that there will be two teams and each will work in a different site. Each participant will:
 - + Find a home or habitat for the animal in the team site.
 - + Camouflage the animal so that its color and shape blend into or match its surroundings.
 - + Place the animal in its habitat spot without burying or hiding the animal.
 - + When the animals are in place the teams switch sites and try to find the other team's animals.

2. Inventing Animals

- a. Point out the camouflage materials to the participants.
- b. Divide the group into two teams and send one team to each site to choose habitats for their animals. Point out boundaries.
- c. Set out the materials as the teams select habitats.
- d. After the participants have selected habitats, let them invent their animals. Use natural materials as much as possible.
- e. When animals are completed place the animals in their habitats.

3. Hunting for Animals

- a. Send out the teams to find the animals at the other team's site.
- b. Hunters are to pick up the animals when found.
- c. After a time span call teams together. Have they found all the animals? If not, the participants can give clues as to where they can be found.

C. Camouflaged Comments

1. Why were the hard-to-find animals so difficult to locate? Why were some animals easy to spot?
2. If you had been predators searching for animals to eat, which animals would have survived?
3. Look at the animals from the two sites. In what ways are they different? Why might they be?
4. In what other habitats might some of these animals also be camouflaged?
5. Mention that camouflage is one type of animal adaptation. Explain that an adaptation is any feature of an organism that helps it to survive and reproduce.

VI. Source: OBIS

8. Invent a Plant

I. Description: Participants construct models of plants that are adapted to living under specific environmental conditions.

II. Appropriate for: Youth

III. Source: OBIS

9. Seed Dispersal - Adaptation

I. Description: Participants modify dried beans or peas so that they may be dispersed by various natural forces.

II. Appropriate for: Youth

III. Source: OBIS

10. Attention

I. Description: Participants create a design which will attract attention in a particular habitat.

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II. Appropriate for: Youth

III. Source: OBIS

11. Food Grab

I. Description: Participants design devices that can capture prey or gather plants. A study of food-gathering adaptations of animals.

II. Appropriate for: Youth

III. Source: OBIS

12. The Thicket Game

I. Description: An activity to define adaptation.

II. Appropriate for: Youth

III. Materials: Blindfolds.

IV. Process:

A. Take the group to a thicket.

B. Blindfold one person who will be the predator. The predator counts to 15 slowly while the other participants hide. The hidiers must be able to see the predator all the time.

C. After counting, the predator removes the blindfold and looks for the "prey." The predator cannot change location. The predator sees how many other participants can be found identifying them by name and location. When the prey are identified they join the predator because they have been "eaten" and become predators with the original person.

D. All the predators put on blindfolds. The original predator counts to ten out loud. All the remaining prey are to move in closer, but still remain hidden.

E. The game continues until all the prey are found or one of the prey has been able to reach the predators.

F. Discuss the experience. What would have made it easier to be the last or get very close to the predators. Some ideas: changing clothes, being smaller, climbing a tree, etc.

G. Discuss adaptive methods of animals for their own survival.

V. Source: Project Wild, Elementary, p. 95ff.

13. Bearly Born

I. Description: Identify survival needs of black bears and humans

II. Appropriate for: youth

III. Source: Project Wild, Elementary, p. 5ff.

F. ARTS AND CRAFTS LEARNING EXPERIENCES

1. Corn Husk Dolls

- I. Description: Making corn husk dolls.
- II. Appropriate for: All ages
- III. Materials: Corn husks, corn silk, yarn, wire or twist'ems, markers, styrofoam ball for head, glycerine.
- IV. Process:
 - A. Prepare corn husks. Rip off the bottom core and discard rotten portions. Keep the silk in a separate pile. Spread husks and silk in sun to dry.
 - B. The dried husks must be remoistened in hot water to which two teaspoons of glycerine have been added. Soak for five to ten minutes until pliable.
 - C. Tie materials together with wire and yarn.
- V. Source: The Nature Specialist, Miller, p. 38.

2. Leaf Skeletons

- I. Description: A craft that displays the fine network of veins that transport food and raw materials throughout the leaf.
- II. Appropriate for: All ages
- III. Materials: Discarded toothbrush, piece of board, piece of old carpet.
- IV. Process:

Tack the carpet piece to the board to serve as a pounding board. Place a fresh green leaf, top side up, on the board. Hold it firmly in place with one hand, while tapping it gently with the brush until the fleshy part is worn away, leaving only a skeleton. Turn the leaf over from time to time as needed. It may be pressed and dried, or it may be dyed. Mount on contrasting construction paper.
- V. Variations: Boil the leaf in water that contains washing soda (Na_2CO_3). When the flesh of the leaf feels slimy, remove. Gently brush the soft flesh from the stiffer veins.
- VI. Source: The Nature Specialaist, Miller, p. 48.

G. GAME AND SPORT LEARNING EXPERIENCES

II F

1. Blind Group Together

- I. Description: Acting out the role of King/Queen
- II. Appropriate for: Grades 7-12, families (intergenerational), Adults
- III. Materials: Blindfolds, long rope
- IV. Process:
 - Each group member is tied to a long rope, blindfolded, and then the whole group is tangled up. The group must untangle itself.
- V. Variations:
 - Before the group is tangled up, pull one participant aside and announce to the group he/she is the King/Queen of Untangled Knots. After the group is tangled, the King/Queen alone is to untangle them all. When the group is untangled, talk about how the King/Queen did the job.
- VI. Source: Source: Initiative Games, p. 24.

2. Light - No Light

- I. Description: The temptation to cheat.
- II. Appropriate for: Grades 4-12, Families (intergenerational)
- III. Materials: Flashlight(s) for "it(s)", safety flashlight for leader
- IV. Process:
 - A. This activity is played much like flashlight tag as "it" tries to catch the others sneaking up behind her/him. See source for directions.
- V. Variation: With this activity the participants can talk about the temptation to cheat in one way or the other.
- VI. Source: Clouds on the Clothesline, p. 69.

3. Inflictions

- I. Description: Persons become handicapped and depend upon one another.
- II. Appropriate for: Youth
- III. Materials: As needed
- IV. Process:
 - A. The group takes a nuke.
 - B. Along the way the leader announces that one or more of the participants has developed a handicap. Handicaps include: Blindness, deafness, broken leg, broken arm, other.
 - C. The leader can decide that eventually all the members of the group have one handicap. The level of dependency increases.

II

I. PERFORMING ARTS

A Note About Story-Telling

Story-telling is an ancient art that is very beneficial for both the listener and the story-teller. The novice story-teller should be sure to use dramatic expressions in the reading and be familiar with it before they start. Visualize what happens in the story so that it can be told with conviction and imagery. Most of all, have fun with the images - don't be afraid to change the text of the story!

As a story-teller increases with skill, he/she should feel free to create his/her own stories for the particulars of the setting and message to be shared. The LOMC Resource Center has a number of books of stories and poems that can be used at campfires and as "bed-time" stories.

1. The Story of Lenten Extremities

There was a woman who had two sons and no husband. It was her joy, her labor and all her pain to raise them on her own. They were bright, likely lads of brown eyes and black, and she loved them equally with a yearning love.

Before she left for work, she stroked their cheeks and gazed into their eyes. When she returned, she cooked.

She watched in misty gratitude as her children enjoyed her cooking; she stole glances at them when they slept - her light-boned Brown, her Black so bold - and she wept.

Thus daily did she love them, but with a breaking heart and pain.

For they fought.

From the time they learned to talk, her sons made weapons of their words, knives of their tongues and fire both amber and jet of their eyes. They hated each other. They said so, loud and heartily.

But she mothered the both of them; she was the oneness and the blood between them. She loved them and as they together were her heart, their hatreds tore her heart in two. . . .

They grew stout lads. They grew sinewed youths, with muscles like traps and fists that didn't hesitate.

Now their fighting caused cuts in their lips, splits on their knuckles and broken noses - all of which wrung the blood from their mother's heart.

It hurt to see their wounded faces, for she loved them. It hurt to see their faces enraged, for she loved them. It hurt to see them divided, for they were together her fulness and all her heart. . . .

Know this alone; that as the lads grew into men, they found more manly ways to prosecute their injuries and means more modern, more efficient.

They bought guns.

"Oh God!" their mother prayed, "What can I do to change them soon, to save them for me and from themselves?" . . .

Thus, she prayed. And in the end she found a way, a terrible way. She would herself take their hate, and hope to take it away.

And so it happened. Late on a Friday, late in a Lenten gloom, late, late in the life of a mother, when one son Brown spun round with his gun, discharging more than a word - a bullet - at one son Black, the mother of both was found between them.

Wangerin Jr., Walter, "A story of Lenten Extremities," Lutheran Magazine, p. 5.

2. "The Great Medicine Dance"

The Tsis-tsisstas people have danced the great medicine dance for a long, long time, longer than anyone can remember or even imagine. The dance represents the making of this universe and was conceived and taught to the people by the Creator, Maheo, and his helper, Great Roaring Thunder. It portrays the making of the sun, moon, and stars; of rain, wind, and snow; of Grandmother Earth and the blue sky above her; of the mountains and rivers; of all things, big and small. The dance is performed especially in times of starvation, distress, and wide spread death. This, our most sacred ceremony, was brought to us by the Sutai medicine man Horns Standing Up, under the guidance of the Creator himself.

Long ago, when the earth and the people dwelling upon it were young, our people were starving. The earth itself was starving, for no rain was falling. Plants and trees wilted. Many rivers dried up. The animals were dying of hunger and thirst.

The Cheyenne had nothing to eat except some old, dried corn and their dogs, which used to carry their packs in those days before we had homes. There were not many dogs remaining, and very little corn. So the people left their old hunting grounds, left the land which had nourished them for generations, and started off in search of food. They went north, where the drought was less severe, but found little game and no buffalo at all.

One evening they came to a stream in which water still flowed. The leaders and old chiefs sat down beside this stream and sadly watched the thin, weary people pitching their tipis. Then it came to the chiefs, as in a vision, what ought to be done. They ordered all the men to go to the women, each man to the woman he felt most attracted to, and beg her to give him something to eat. The men did as they had been directed, and each chose the woman who was to feed him.

Among the warriors was a young medicine man. He went up to a beautiful woman who happened to be the wife of the head chief. She set a bowl of dog soup before him and waited for him to finish eating. Then he said: "I have chosen you from among all women to help me save our people. I want you to go north with me, as the medicine spirits have commanded. Take your dog teams and bring supplies for a long journey - now, right away."

Though she was the chief's wife, the woman did what the medicine man had asked. She was ready to travel in no time, and the two left unobserved in the dark of the night. Two days and one night they traveled without stopping, urging on the dogs who carried the travois with the tipi poles and hides and other things needed for survival.

At last they rested. The man told the woman to put up the lodge and to prepare two beds of soft, fragrant sage for them to sleep on. He said, "Make the tipi face the rising sun." He also told her that Maheo, the Creator, had

sent him a vision revealing that the two of them must go north and bring back the great medicine lodge, Maheo's symbol of the universe, and with it a sacred ceremony which they would teach to the Cheyenne. "In my vision," he said, "Maheo promised that if the people accept and perform this holy ritual, the rains will fall again and the earth rejoice, the plants will bring forth green leaves and fruit, and the buffalo will return.:

And so they traveled, the woman every evening pitching the tipi facing east and preparing the beds of sage on opposite sides of the tipi, the man sleeping on his bed, the woman on hers. One night she said: "How is this? You made me run away with you, but you never approach me as man approaches woman. Why did you make me go with you, then?"

He answered: "We must abstain from embracing until we enter the great mountain of the north and receive the sacred medicine dance. After we emerge from the mountain, I shall embrace you in a renewal-of-life ceremony by which people will continue to be born, generation after generation, through the woman-power of perpetuation."

At last they came to a vast, dark forest from whose center rose a cloud-wreathed mountain reaching far into the sky. Beyond the mountain they saw a lake of unending waters. They came to a large rock at the foot of the mountain, rolled the rock aside, and discovered an entrance. They went inside the mountain and, closing the opening behind them, found themselves in the mountain's great medicine lodge, which was wonderful to behold. Today the medicine tipi which the Cheyenne put up for their sun dances at Bear Butte is an imitation of that sacred mountain lodge.

The young man and the woman heard voices coming out of the mountaintop - the voices of Maheo the Creator and his helper Great Roaring Thunder. Instructing them in the holy ways to perform the sacred ceremony, Maheo spoke for four days. When they had learned all there was to know about the dance, the Creator said:

Now you will leave and teach the people what I have taught you. And if they perform the ceremonies in the right way, they will be favored for generations to come. The sun, the moon, the stars will move again in harmony. Roaring Thunder will bring soothing rain and winds. Corn and chokecherries will ripen again. Wild turnips and healing herbs will grow once more. All the animals will emerge from behind this mountain, herds of buffalo and antelope among them, and follow you back to your village and your people.

Take this sacred hat, issiwum, and wear it whenever you perform the sun dance. With issiwum you will control the animals - the buffalo, the antelope, the elk, the deer - who give themselves to the people for food. The Tsis-tsistas shall never be hungry again, but live in plenty. Put on this sacred buffalo hat as you leave, and Grandmother Earth will smile upon you forever.

And so the young medicine man of the Sustain and the dog-looking woman left the mountain through the secret passage. As they rolled the rock aside and emerged, buffalo without numbers streamed out of the mountain behind them, and the earth brought forth green shoots. Herbs and plants sprouted under the gentle rain, and the earth was like new, glistening in freshness. Thus the man and the woman walked sacredly, clad in buffalo robes painted red, and the medicine man wore his horned cap. Their dogs walked before them, dragging their travois poles, while behind them followed a thundering herd of buffalo, and after these came all manner of animals, male and female, big and

small.

At the day's end the man and the woman put up their tipi and lay down on their beds of sage and rested, and all the animals settled down to rest also. And at some time during this journey back to their village, the man and the woman did lovingly what was necessary to ensure renewal and continuation of life through woman-power. Each morning during their travels, the man sang the sacred songs which the voice of Maheo had taught him.

At last one evening they arrived near the stream where the people were still camped, awaiting their return. The medicine man and the woman did not go into the village at once, but spent the night outside. In the morning the medicine man put on issiwum and entered the camp, accompanied by the woman. He told the people of all that had passed, told them that he had brought them the knowledge of the great medicine lodge and the great sacred dance, the songs and ceremonies that went with it, and above all, issiwu, the sacred buffalo hat which had the power to control the wandering of the animals. He told the people that if they performed the sacred sun dance, they would have plenty of buffalo to eat and would never suffer hunger again.

The people put up the medicine lodge according to the young man's instruction, painted their bodies in a sacred manner, and sang the right songs. The children made clay figures of buffalo, antelopes, and elk and brought them into the lodge as a symbol of life's renewal. Since then, whenever the little figures are placed inside the medicine lodge during the dance, some of those animals will come near to gaze upon the sacred tipi, and some of their animal power will linger on. In the same way, our old friends, the Sioux people, fasten the figure of a man and a bison, both cut from buffalo hide, to their sacred sun dance pole. Then an eagle will come in and circle above the dances to bless them.

Thus the Tsis-tsis-tas people performed the great medicine ceremony for the first time, and all was well again. And the people named the young medicine man Horns Standing Up, because the sacred hat has two horns at each side.

Erodes, Richard, and Ortiz, Alfonso, American Indian Myths and Legends (New York: Panteon Books, 1984) pp. 34-37.

SESSION III

Theme: Natural

Intentions

Experience the integrity and goodness God has created in the natural world with special emphasis on niches, community, and interdependence.

Catechism

He has given me and still preserves my body and soul with all their powers. He provides me with food and clothing, home and family, daily work, and all I need from day to day.

Scripture

Genesis 1:26-2:25
 Exodus 17:1-6
 Deuteronomy 8:1-20
 Psalms 1 and 8
 Psalm 24
 Psalm 41
 Psalm 65
 Psalm 104
 Psalm 136
 Psalm 148
 Jeremiah 1:1-10
 Ezekiel 34:2b-4
 Matthew 6
 John 2:13-22
 I Timothy 4:4
 I John 1:1-2:11

II C

B. BIBLE STUDIES

1. Psalm 104 (If not used in Session I)

I. Description: Explore the nature of interdependence, habitats and niches environmentally and Biblically.

II. Appropriate for: Grade 7 and up

III. Biblical Text: Psalm 104

IV. Materials: Bible, Song sheet, paper, pencil

V. Process:

A. Play "Oh, Deer!" (Cf III E 1)

B. Review some basic concepts with the participants.

Interdependence and interaction

Ecosystems

Habitat

Order and chaos

Worship (Worthyship) and valuing

C. Read Psalm 104 out loud.

D. The leader then presents the following:

This Psalm can be divided into two general parts - 1) vss. 1-26, a description of God's creative work, and 2) vss. 27-35, an enthusiastic description of God's constant care of Creation with an emphasis upon the dependency of creatures upon God. The central theme is the Lord's glory and wisdom as manifested in the created world. The Psalmist's philosophy is that nothing is made for itself alone, but each is made for another. The parallel is Genesis 1:1-2:4.

E. Divide the group according to the passages below. (See 4. below.)

1. vss. 1-4 - The first stage of creation.

2. vss. 5-13 - Springs of water.

3. vss. 14-18 - Vegetation.

4. vss. 19-23 - The moon and the sun.

5. vss. 24-26 - The sea and its animals.

6. vss. 27-30 - All life looks to God.

7. vss. 31-35 - Doxology. The psalmist expresses his hope that God will find joy in all of His Creation.

F. Ask each group to rewrite the assigned text and report back to large group. Below are comments the leader can make after each presentation.

1. vss. 1-4 The parallel is Genesis 1:1-8. God is not fully revealed; He is hidden. The Creation is the mask of God (Luther). The light is His robe, heaven is the shelter that contains life. Clouds, wind and fire are His messengers and servants. All that is, is in His hands and for His purposes

2. vss. 5-13 The "stuff" of God's Creation has its limits, like the water in vs. 9. But God has also created the "stuff" of Creation to inter-act. Thus, the water serves the animals. Though partially implied, the Psalmist indicates how one system serves another and then a third. The water serves the trees, the trees give birds a place to nest, and the birds sing.

3. vss. 14-18 The parallel is Genesis 1:11-13. Here is amplified the Psalmist's image of an interdependent ecosystem which God has created.

4. vss. 19-23 God has given everything its own opportunity. The darkness, which He creates, is the time for animals to stalk their prey and be fed by God. The daylight is when a human can earn one's living. It is all God's ordering.

5. vss. 24-26 The parallel is Genesis 1:20-23. The Psalmist acknowledges God's wisdom as the heart of His shaping of the world. Even he realizes the multitude of things God has made. The Psalmist also realizes that God has made things for their own value. As the NEB translates, "... and in it plays Leviathian, that sea monster which you (God) made." God makes something with which to sport; God enjoys something in and of itself! You might indicate that one of the things which God does on the seventh day is to behold what He has made - a way to give and recognize value in something. You might take an object in which the participants can see "value" (costing something) and then ask them if it has value other than when it is being used ("celebrated") for the purpose it was designed.
6. vss. 27-30 The parallel is Genesis 1:29-30. God provides, and God takes away. All things are dependent on Him. The word for "breath" and "spirit" in Hebrew is the same. God uses part of His Creation to serve another part.

2. The Good, The Bad, and The Footprint- Part 2: The Bad Boots

I. Description: The ideal role of the "King"

II. Appropriate for: Grades 4-9; Families with children

III. Biblical Text: Ezekiel 34:2b-4

IV. Materials: Bibles, newsprint and marking pen for the leader

V. Process:

- A. In a designated area outside, find natural things that are seriously and disturbed when stepped on. Don't overlook non-living things: water, rocks, dirt. Work in small groups. Participants are to remember the things they find.
- B. When the participants return have each group tell what they found. The leader is to make a list of those things down the left side of the newsprint with the marker.
- C. When all the groups have reported, go through each item with the whole group and indicate how humans can do permanent damage to the natural environment. As the leader does each item, ask the participants the following questions and write down their responses on the newsprint to the right of each item:
- What will happen to the item if it doesn't remain alive/intact?
 - What will then happen to the other parts of that habitat (natural community) because of the demise of the item?
- D. Ask the participants if they can think of a farm animal that can be easily led. Direct them to the sheep. Maybe you can tell them a story about the sheep and how they need constant care and attention.
- E. Read Ezekiel 34:2b-4. Someone read it aloud as a parent scolding a child.
- F. Ask the participants if they can see any similarity between the items they selected and the sheep. (Guide them to understand that the things they selected are like sheep in as much as they need care and protection.)
- G. In the Bible passage, who is the shepherd? (It is a "king" who has not properly cared for his people.)
1. What is the negative behavior of the shepherds?
 2. Are there any similarities between our behavior and the Shepherd's?
- H. Close with the comment that Christians are to be "good kings/queens" and not ignore the needs of other people and the environment and its many habitats.

3. The Image of God

I. Description: Recognize that the Image of God refers to the human's management of the environment

II. Appropriate for: Grades 6-12, Adults, Seniors

III. Biblical Text: Genesis 1:26-2:25

IV. Materials: Bibles for all - RSV, newsprint and marker for the leader, scrap paper and pencils

V. Process:

- A. Read Genesis 1:26 out loud in unison. Ask participants what they think it means to be made in the "image of God". Help them realize this does not mean physical likeness. It means the opportunity for humankind to live in a relationship with God and the role humankind plays in the created order.
- B. In order for the participants to understand the ideas it may be helpful to do the following activity. Ask a few participants to tell a story or draw a picture of something that they really have enjoyed making or something that they were proud of making. Help them to see themselves as a "powerful establisher", "wise shaper" and "joyful valuer".
- C. Ask the participants to read to themselves Genesis 1:26-2:25 (in order to hold the attention of some participants, this may have to be read out loud in some manner). Ask them to look for what humans are instructed to do and what human beings do. These will come up in relation to 1:28 (overlord), 2:15 (caretaker), and 2:20 (onlooker).
- D. Begin to impress on the participants the words in quotations (C above) and what they mean. Ask them to illustrate how they can act in God's Creation today as overlords and caretakers. Have them give specifics in their own lives and home environments.
- E. Draw the participant's attention to 2:1-3. What does God do? (What the leader wants to do is to see that God's behavior here is one of giving worth to His Creation). He is a valuer. One way to get at this is to ask the participants to each select a plant. Tell them to spend 5 minutes studying and relating to that plant. Ask them to return to group when they are done doing so. What did they see? How do they feel about the plant? Does it have value to them? The word for the brief activity they just did is that of an "onlooker".
- F. In closing, review with the participants that as the "image-of-God" they are overlords, caretakers and onlookers (valuers).

4. The Saint Francis Model III C

- I. Description: St. Francis shows a way to treat the world in a "natural" state
- II. Appropriate for: Grades 6-12, Adults, Seniors, Grades 4-5 with simplification
- III. Biblical Text: I John 1:1-2:11
- IV. Materials: Story of life of St. Francis

V. Process:

- A. Retell the story of the life of St. Francis. Get the participants excited about it! Be graphic.
- B. Note the transformation from being a troubadour for himself and his friends to being a troubadour for God and the poor.
- C. Read I John 1:1 - 2:11.
 1. How does St. Francis's life parallel with I John?
 2. What is the big event that makes Christian love possible?
 3. Who is the model for Christian love?
 4. How did St. Francis follow the ideas of love stated in I John?
- D. Bring St. Francis into today's world. Where would he most likely be found? What types of communities? How would he fit in?
- E. One of the aspects of his life is that he went against the tide of his day with his actions. Did he deserve the treatment he got? Are there any parallels with the story of Jesus? Here may be an opportunity to talk about peer pressure, going against the tide, fear of reprisal, etc. Being a Christian isn't all a bed of roses. One can be unpopular as a Christian. Does one dare?
- F. Be sure to draw attention to caring for all the inhabitants of all the habitats. St. Francis did this as second nature.

III 5. The Image of God Revisited

I. Description: The Psalmist points out human responsibility.

II. Appropriate for: All ages

III. Biblical Text: Psalm 8

IV. Materials: Bibles, 4 1/4" X 5 1/2" paper for each person, and pencils

V. Process:

- A. Pass out the paper to each person. Ask one person to be "God" and one other to be "person". Ask the others to choose an animal, a vegetable, a mineral, or a heavenly body. Make sure there is at least one in each category. Each person puts down his/her selection on the paper.
- B. The participants are then asked to hold their paper in front of them and mill around without talking. Each person is to set oneself in the proper relationship with all the others in the group according to what is on the respective card. They are to keep moving until they are satisfied with where they stand.
- C. Once everyone has stopped moving ask the participants to put their paper on the ground and step back. Ask participants why they located themselves where they did. If the group does not agree with where a person has located oneself the card can be moved. Try to let the group shape the order of the cards that best demonstrates how the group envisions humankind's relationship with God and the rest of the world. Help the group arrive at a decision. Do not force your agenda on them as the leader.
- D. For the next part of the exercise ask the participants to pick up their cards. Read Psalm 8 to them twice. Ask them to listen carefully. Tell them before you read the Psalm that when you are through reading the second time they are to mill around and try to relate themselves to each other in the way that best describes what Psalm 8 says. Again, no talking while milling.
- E. Allow the group to mill and locate themselves. When finished ask the participants to put down their paper. Talk about the location of their papers. If the participants want to move the papers, let them. The leader may also need to do some adjusting. Focus on humankind's role in relationship to God and to the rest of the world.
- F. Lastly, ask the participants, "what are humankind's responsibilities according to the Psalmist?" when they have finished making comments, summarize what they have done and said.

IV 6. What's Your Niche?

I. Description: A Bible Study that explores the idea of profession and calling.

II. Appropriate for: Older youth and adults

III. Biblical Text: Jeremiah 1:1-10

IV. Materials: Bibles, pictures of interiors of cathedrals showing the space, alcoves and their contents.

V. Process:

- A. Draw a picture or show pictures of a cathedral.
 1. Show how there are alcoves around the interior of the building for statues and altars.
 2. These are places where worshippers can focus on one particular thing.
 3. They are called niches.
- B. The word niche in environmental studies is used for a particular place in an ecosystem where certain organisms exist.
 1. Depending upon the age level of the group talk about places where elephants and tigers live, polar bears and seals. Or where are the broad leaf evergreens (tropical areas, fruit trees) and narrow leaf evergreens (conifers)?
 2. Observe the area you are in.
 - a. Study a small forested area, maybe 4' X 4'. Identify as many plants and animals as are there.

- b. Move to an open field of the same size and identify what is there.
- c. Are there similarities and/or differences? Discuss why.
- 3. Emphasize that this is one way we talk about "niche."
- C. A second definition of niche - an organism's profession, i.e. what the organism contributes to the ecosystem.
 - 1. Point out some of the professions of organisms that are easily identifiable:
 - a. A tree. Purifies air. Gives off moisture. Protects various animals. Feeds some. Breaks wind.
 - b. Bees. Pollinate.
 - c. Wind. Prunes. Distributes seeds. Pollinates.
 - d. Birds. Pollinate. Distribute seeds. Fertilize earth.
 - e. Galls. Feed birds.
 - 2. Riddles: what's my Profession. Give the following clues and let the participants discover the answer.
 - a. My profession is to break down pine needles in the conifer forest to make new soil. (Fungus)
 - b. My profession is to chew up and expell dried deciduous leaves to create new soil in a deciduous forest. (Worms)
 - c. I am the most professional in the dispersing of seeds. (Bird)
 - d. My profession is to pollinate, protect, and disperse seeds of small flowering plants. (Ant)
 - e. Most botanists agree that I was the first to practice the profession of pollination. (Beetle)
 - f. Because my seed is so tough it must find an animal that has the profession of eating my fruit and allowing my seed to pass through the digestive tract to break down the coating so my seed can germinate. (Poke Weed)
 - g. My profession is named after an Old Testament character because I pass seeds through my system and they emerge with my droppings. It is the Jonah Syndrome. (Jonah)
 - h. One of my professions is to bite and sting any consumer of a sun flower or a black cherry tree blossom. (Ant)
 - i. My profession is to make touching my leaf so irritating that you will not disturb me again. (Stinging Nettle)
 - j. I have a unique profession. I secrete a chemical in my leaves so animals will not eat them. (Oak)
 - k. My name is Christian Sprengel. In the 18th Century I pioneered the investigation of pollination. I found the protective hairs, scales, and spurs that retain the nectar and said they were evidence of God's forethought and careful design. what was my profession? (A Lutheran pastor)
 - 3. If the leader and/or participants are interested they can make up more of these clues.
- D. Share with the participants that in the human world Christians talk about a calling - people being directed by God to a particular profession.
 - 1. Read Jeremiah 1:1-10
 - 2. Look at these facets of the text:
 - a. Vs. 5 - When was God involved with Jeremiah in shaping him for leadership?
 - b. Vs. 6 - What was Jeremiah's response to God and his excuse?
 - c. Vss. 7-8 - How does God respond to Jeremiah?
 - d. Vss. 9-10 - What is Jeremiah's profession? What does God call him to do.
- E. Discuss that professions/callings are not only Church related occupations.
 - 1. Could you say that the professions of the various animals are a calling by God?

2. Discuss what would happen if the various organisms did not fulfill their calling/profession, e.g., birds not eating fruit, worms not eating leaves, etc.
3. Help participants discover that all of God's creatures have a calling to give fully of themselves to the ecosystem so the ecosystem can function.

F. How do participants see their profession/calling today? Besides the need to survive and to reproduce what else do humans have to offer?

7. The Earth Is the Lord's

- I. Description: A study focusing on letting the world be left natural.
- II. Appropriate for: Older youth/adults
- III. Biblical Texts: Psalm 24, Deuteronomy 8:1-20
- IV. Materials: Bibles
- V. Process:
 - A. Find a quiet spot in the out-of-doors and ask the participants to close their eyes and listen to the reading of Psalm 24.
 1. Read the passage slowly several times.
 2. Instruct participants in advance to listen carefully and let whatever images appear in their minds develop.
 - B. Participants share what they saw in their minds.
 1. Did they have any images at all, or was it a blank?
 2. What verse or images stood out for them?
 3. Was there anything exciting?
 4. Where were you in the images?
 - C. Review the text. Participants open their Bibles and reread the text.
 1. To whom does the earth belong?
 2. Who is this "good" person?
 3. What shall God give that person?
 4. What event is being expected?
 - D. Help participants understand that the imagery is the ascending of the mountain in Jerusalem where the Temple is located. The people are bringing the Ark of the Covenant. The Ark contains the Torah. It is also the symbol of the presence of God, the King of glory.
 - E. Using the ideas from this Psalm when we look at our world what does it mean to:
 1. Recognize the earth belongs to God and not to us?
 2. We are to have clean hands and pure hearts?
 - F. Does this have anything to do with how we treat our fellow creatures in this world?
 - G. Do one or more of the activities that engage the participants in looking carefully at this world.
 1. Food Chain Game (Cf. III E 15)
 2. Snug as a Bug (Cf. III E 16)
 3. Shake It (Cf. III E 17)
 4. Envirolopes (Cf. III E 18)
 - H. A question to be raised with the participants is: How important to the ecosystem/habitat being observed is the human being?
 1. What effect do humans have on these systems?
 2. How would the participants define the humans' role?
 - I. Read Deuteronomy 8:1-20
 1. This passage talks about the people of Israel entering the Promised Land.
 2. Can this text say anything to us about how we should treat our land?
 - a. How does our land compare to the Promised Land?
 - b. To whom does it belong?
 3. The object of this study is that we do not need to destroy and conquer our world. It can be natural. It is sufficient unto itself. Nature has its own integrity.

I + III
C

8. The World Is a Temple

I. Description: Treating the World as Sacred

II. Appropriate for: Adults

III. Biblical Text: John 2:13-22

IV. Materials: None

V. Process:

- A. Show a picture of the Temple in Jerusalem at the time of Jesus.
 1. Discuss the function of the temple.
 2. Read John 2:13-22. What activities were going on in the Temple in addition to the religious activities?
- B. Talk about the world as the Temple of God.
 1. How is the world like a temple in terms of its intended use?
 2. Is it sacred?
 3. Is there any similarity between how we treat the world and the way people were treating the Temple in Jerusalem?
- C. What was "wrong" with what the people were doing in the Temple?
 1. Can something good be said about the situation?
 2. Did the merchants not make things simpler for the travelers?
- D. Things to ponder about the Temple activities and Jesus, reaction to them.
 1. Commercialism vs. celebration. "My house shall be a House of Prayer not a den of robbers."
 - a. Commerce needs to pay attention to certain things to survive: quality of product, cash flow, service to the customers.
 - b. Commerce overrode celebration at the Temple. In like manner it can override the celebration of the earth.
 - c. The earth and its resources valued commercially has a dollar value; valued celebratively it has intrinsic value.
 - d. When God rested on the seventh day He did not check monetary values; He acknowledged the value of all He created - wor(thy)ship.
 2. Convenience vs. Covenant
 - a. The trend in any commercial enterprise is to seek convenience. What do you think is the motivating factor for the need for more electrical energy today?
 - b. Convenience can become the primary end and the means to that end can be an ignoring of covenants, agreements between entities.
 - c. A covenant deals with the means. There are relationships that must be honored. We live with our world, not against it. God lives with His world, not in opposition to it.
 - d. Convenience has a way of side stepping the covenant. E.g., the covenant of marriage is less sacred in the eyes of some people who build relationships on the basis of convenience - whatever satisfies at the time.
 3. Commodity vs. Community
 - a. When we look at our world do we see things independent from each other or do we see the interdependence of all things?
 - b. We can become atomistic and myopic in our vision rather than global.
 4. In the Christian Community we are called to:
 - a. Celebrate life - see the world as good as God created it.
 - b. Acknowledge the meaning, depth, and sacredness of covenants.
 - c. See the ecosystem and how all things relate.
- E. Jesus was not considered a friend of the Temple commerce when He overthrew the system. It may be necessary that He enter our worldly Temple today and overthrow some of the wrong things we have made sacred and replace them with that which is sacred.

C. WORSHIP AND DEVOTIONAL EXPERIENCES

1. God's Running Water - a programmed devotion

I. Description: Participants move from one location to another on a water course. IV
3

II. Appropriate for: All

III. Biblical Texts: Exodus 17:1-6, Psalms 1, 41:17-20, 65:9-13

IV. Materials: Bibles, song sheets, printed description of activities of each station.

V. Process:

A. Create Stations with written instructions

B. Stations Description/Activity

- | | |
|---|---|
| 1 | A spring, seepage point, or small drainage flow; identify water coming from the Earth with the life-giving power of God; touch, smell, hear the water. (Exodus 17:1-6) |
| 2 | Water moving over rocks, sticks, gravel, and barriers; it is moving toward a larger body (implications for Christian life and community); try to block the flow of water (be careful not to do environmental harm) and watch what happens; God's continuous flow of power and care. (Psalm 65:9-13) |
| 3 | A large tree; the power of God; the mighty oak from the small acorn; growth is nurtured by God's continuous life-giving power. (Psalm 1) |
| 4 | Follow the stream or drainage to a collection point, e.g., a pond. Recognize God's use of water. (Psalm 41:17-20) |

C. Gather at worship site

a. Pray

b. Sing

c. Use one of the following:

1. Brief Meditation by leader

2. Process experience with passage

2. In Appreciation of Each Other VII
3

I. Description: Express appreciation to each other in group and recognize group as people of God.

II. Appropriate for: All

III. Biblical Text: Psalm 148

IV. Materials: Bible, paper, pencil, tape, song sheets, magic markers

V. Process:

- A. At the first chance to be completely alone with your group, do group building activities so that participants will get to know each other better.
- B. Have participant write what they think others might appreciate or like about him- or her-self. Include: what they do best, hobbies, skills, interests, character traits (older campers). Tape each person's paper to his/her back.
- C. Participants collect two or three things they appreciate in the natural world. They may find things to appreciate for their beauty, usefulness, ecological function, uniqueness, etc. Items must be fastened to a piece of paper.

- D. When they have returned with their objects, have each participant share with the group the reasons for appreciating the object. End this sharing with a brief discussion on the question, "What do you most appreciate that God has made?"
- E. Tape their objects to the paper on each one's back.
- F. Have the group "mingle" with pencil in hand. As they look at each other's paper on the back, have them sign their name next to the item (written or object) that they appreciate. Give them about five minutes.
- G. Choose several people to read portions of Psalm 148.
 - Group A. - vs. 1-2
 - Group B. - vs. 3-4
 - Group C. - vs. 5-6
 - Group D. - vs. 7-8
 - Group E. - vs. 9-10
 - Group F. - vs. 11-12
 - Group G. - vs. 13-14
- H. Have each person write two sentences of 1) what they appreciate about the person to their right, and 2) what they appreciate about the object on the back of the person to their left.
- I. Combine these sentences into a prayer.
- J. Conclude singing, "He's Got the Whole World in His Hands"

III
B

3. Group Prayer - Day 3

- I. Description: Developing prayer petitions.
- II. Appropriate for: All Ages, Families, Adults
- III. Materials: Pencils, scrap paper
- IV. Process:
 - A. The group discusses all the things they wish to pray for or about.
 - B. Have each participant think of the topic he/she would like to pray about.
 - C. Have the group decide if they want to write out their petitions or speak as they are moved.
 - D. Pray.

4. Antiphonal Reading

- I. Description: Celebrate the Land of God
- II. Appropriate for: Youth and Adults
- III. Biblical Texts: Psalms 136
- IV. Materials: Bibles of the same translation for each participant
- V. Process:
 - A. Create an exciting environment for antiphonal reading
 - B. Proceed with the reading
 - C. Dramatize the celebrative nature of the Psalm at the end of the reading with noise-makers or colorful banners being waved.
- VI. Variations: If done at night, make use of light patterns from "antiphonal sides".
 - swirling flashlights
 - torches lit (have emergency fire control equipment on hand)
 - fire pots lit (")

IV
B

5. The Mosquito Is One of God's Answers to Prayer

- I. Description: Celebrating the interrelationship of God's creation.
- II. Appropriate for: All ages
- III. Biblical Text: Matthew 6:5-15
- IV. Materials: A container with a mosquito

V. Process:

A. Preparation

1. Develop a litany with the assembly responding with these words: " You have given me and still preserve my body and soul with all their powers. You provide me with food and clothing, home and family, daily work, and all I need from day to day."
2. Catch a mosquito and place in jar. Amass other items if you do the variation.

B. Possible Order

1. Opening Song(s)
2. Show a jar with a captured mosquito. Announce that this mosquito is one of God's answers to prayer.
3. Sing several songs that are prayers. You may want to quote Luther who said, "The person who sings prays twice."
4. A dialogue with the assembly.
 - a. Does God answer prayer? How?
 - b. For what do we often pray?
 - c. Why do we pray?
 - d. How do you think this mosquito is an answer to prayer? Don't push for an answer unless someone clearly states the answer. Keep them in suspense.)
5. Do a litany that you have created earlier with the assembly.
6. Answer 4d above (Now push for an answer.)
 - a. The mosquito is food for fish and birds.
 - b. It makes possible entertainment and employment.
 - c. It is in the human food chain.
7. Share with the assembly the words of Jesus about prayer.
 - a. Read Matthew 6:5-15.
 - b. Ask the group what they heard (more than likely the Lord's Prayer).
 - c. Did they hear from vs. 8, "Your Father knows what you need before you ask?"
8. Homily: build on vs. 8.
 - a. God's answer to prayer has been in the development stage for a long time.
 - b. God's providence in part is His ongoing creating.
9. Closing Prayer
10. Closing Song

VI. Variations:

- A. The leader may choose other organisms that come across as enemies, but are really friends.
- B. "The Beauty and the Beast" could be applicable here, too. It might be dramatized.

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E. ENVIRONMENTAL LEARNING EXPERIENCES

1. Oh Deer!

- I. Description: The participants will be able to identify and describe food, water, and shelter as the components of habitats and understand the "limiting factors" that cause fluctuations in wildlife (and human) population sizes.
- II. Appropriate for: All ages. Need 10 participants.
- III. Materials: 3' X 4' newsprint sheet, marker for leader
- IV. Process:
- A. Begin by telling the participants that they are about to participate in an activity that emphasizes the most essential things that animals need in order to survive: food, water, shelter, and suitable space. This activity will emphasize the first three.
 - B. Count off in fours. Ones go to one area on the activity site. Twos to another, threes and fours, so on.
 - C. Mark two parallel lines on the ground 10 to 20 yards apart. Have the ones line up behind one line; the rest of the participants line up behind the other line.
 - D. The ones become "deer." Ask the participants what the essential components of habitat are: food, water, shelter, and suitable space. For the purpose of this activity we will assume that the deer have enough space in which to live. We are emphasizing food, water, and shelter. The deer need to find food, water, and shelter in order to survive. When a deer is looking for food it should clamp its hands over its stomach. When it is looking for water, it puts its hands over its mouth. When it is looking for shelter, it holds its hand together over its head. A deer can choose to look for any one of its needs during each round or segment of the activity; the deer cannot, however, change what it is looking for during the round. If it survives the round it can change what it is looking for in the next round.
 - E. The twos, threes, and fours are food, water, and shelter. Each participant gets to choose at the beginning of each round which component to be during the round. The participants depict which component they are in the same way the deer show what they are looking for.
 - F. The game starts with players lined up in their respective lines, deer on one side and habitat components on the other with backs to the other participants.
 - G. The leader begins the first round by asking all the participants to make their signs. Give the participants a chance to put their hands in place.
 - H. When everyone is ready say go. The participants face each other.
 - I. When the deer see the habitat component they need they are to run to it. Each deer must hold the sign of what it is looking for until getting to the habitat component person with the same sign. Each deer that reaches its necessary habitat component takes that person to the deer side of the line. Any deer that does not find a component person must become a part of the habitat. The habitat component persons cannot run. Only the deer can run. Only one habitat component person per deer.
 - J. On a chart the leader keeps track of the number of deer there are at the beginning of the game and at the end of each round.
 - K. Play about 15 rounds moving the pace briskly.
 - L. At the conclusion gather the participants to discuss the experience. The deer population increased as long as the components were available. They decreased when the components were not. This is common in nature.
 - M. Also talk about what animals need to survive.
 1. What are some of the limiting factors?
 2. Are wildlife populations static?
 3. Is nature balanced?

V. Source: Project WILD - Elementary, p. 131ff. Project WILD, Secondary, p. 107ff.

I
B

2. Forest Community

I. Description: Help participants become aware of the natural communities and compare it to human communities.

II. Appropriate for: Grades 4-9, Families (intergenerational), Seniors

III. Material: 18 toothpicks for each sub-group

IV. Process:

- A. Talk about the hometowns of each participant. What does one find there to help people stay alive? Have them consider the following:

inhabitants	plumbing	communications systems
factories	stores	restaurants
apartments	garbage collectors	energy sources
houses	streets	transportation
- B. Divide the group into smaller ones of 3-4 each.
- C. Send each subgroup out to locate the items they've talked about (listed above) and have them try to identify the natural item that corresponds to the one on the list. How is the forest like a town or city? How do the life-support functions of human and natural communities compare? Mark the findings with toothpicks.
- D. Bring the subgroups together again to share feelings and ideas. Discuss how the natural community uses the things listed to depend on one another, work together, and live independently.
- E. Before continuing have each subgroup pick up their toothpicks and return them to the leader.

E

V. Source: Eco-Acts, p. 110.

III

3. Interview a Spider

I. Description: Participants generalize that wildlife ranges from the microscopic to many tons in size and occurs in a variety of forms, colors and adaptations.

II. Appropriate for: Grades 5-8, Families (intergenerational)

III. Materials: Scrap paper, pencils, tape recorder optional.

IV. Process:

- A. The participants will become reporters and use interview techniques to research and write about wild animals, or use the tape recorder instead of writing.
- B. For purposes at LOMC, do NOT emphasize the techniques of this activity in terms of research and interview techniques. Have the participants especially note how the spider web is connected to all the things around it and how the spider uses those things as a part of its life-support system (the interconnectedness within a habitat).

E

V. Variation: This may be used in conjunction with "The Web of Life."

IV

4. The Web of Life

I. Description: Participants dramatize a food chain

II. Appropriate for: All ages, Families (intergenerational), Adults, Seniors

III. Materials: 3 - 5' pieces of kite string for each participant, a name tag for each participant (name tags should list different living things found in the specific environment of the activity, e.g., frog, snake, sun, hawk, squirrel, etc.), a safety pin for each participant (or piece of masking tape)

IV. Process:

- A. Distribute 3 sections of string, a name tag, and a safety pin to each participant.
- B. Ask the participants to form a circle and pin their name tags in place. Then tell them that they are now the thing on the name tag.

- C. Briefly discuss the concept that all living things interact with other things in their surroundings (habitat).
- D. Ask one person to start the web of life by handing the end of one of their strings to another who interacts with them in the environment. (The leader may have to explain what is meant by "interact" - gets food, energy, etc.). As each one hands out a string have them explain how the living thing they represent is related or interacts with the other. Continue around the circle until each participant has given out all of their strings.
- E. After all strings are given out, briefly comment on the pattern of interrelationships.
- F. Ask the participants what would happen if one living thing was removed from the web. Select a key person and have him/her drop the string and discuss the potential results if he/she were removed from the environment.
- V. Variations:
- A. After the participants have become a little more familiar with each other and each one's talents, they could repeat this type of activity, but instead noting how one participant depends on another for certain things, e.g., Joe needed Mary to boost him over "the wall".
- B. Instead of 5' lengths of string, use a ball of string.
- VI. Source: Eco-Acts, p. 86
5. Count the Parts of a Quadrant I
G
- I. Description: Participants discover the many organisms in a plot of ground.
- II. Appropriate for: Grades 4-8, Families (Intergenerational)
- III. Materials: String or surveyors' tape
- IV. Process
- A. Measure a 100' square plot in the forest. Mark with string and surveyor's tape.
- B. Bring the participants to the designated plot and tell them that they need to count the number of different things in the plot.
- C. Remind them of all the different types of things they might find: trees, insects, animals, flowers, grasses, bushes, etc.
- D. Have each person (or subgroup of 2) count all the different types of items in a category.
- E. After 15 minutes, have the group gather together again and tell each other what they found and how many. As an extension, they could project how many items of that kind might be at LQMC through simple math. (The 100' square plot is 10,000 square feet. An acre is 43,560 square feet. LQMC has 600 acres, or 31,798,800 square feet. About 3,180 - 100' square plots can fit into LQMC. Multiply the number of each item by 3,180 to find out how many of them are at LQMC. For example, if the participants found 100 beetles in the plot, there would be about 318,000 beetles at LQMC.)
6. Microtrek Scavenger Hunt I
G
- I. Description: The participants will go on a "scavenger hunt" for wildlife. They will be able to understand that humans and wildlife share environments and to generalize that wildlife is all around us.
- II. Appropriate for: Grades 4-9, Families (Intergenerational)
- III. Source: Project WILD - Elementary, p. 21
7. Shrinking Habitats
- I. Description: The participants simulate a process of land development.
- II. Appropriate for: Grades 4-7, Families (Intergenerational)
- III. Source: Project WILD - Elementary, p. 187; Project WILD - Secondary, p. 173.

8. Habitat Lap Sit

- I. Description: Participants physically form an interconnected circle to demonstrate the components of habitat and their dependency on each other.
- II. Appropriate for: All ages, Families (intergenerational), Adults
- III. Materials: None
- IV. Process:
 - A. Participants number off from one to four. Ones are food, twos are water, threes are shelter, and fours are space.
 - B. Create a circle to play the now traditional game of lap sit. The people stand in the circle in order one through four, one through four, etc.
 - C. Once the circle is formed, try the lap sit routine.
 - D. After you have the routine down tell the participants that on the next try there will be certain components asked to remove themselves from the circle.
 - E. Do the activity again then say: "Due to a drought we have lost all of our water." The water components leave the circle.
 - F. You can do this several times with reasons why components leave the circle. See if it is possible for the circle to survive with components leaving.
 - G. Discuss the implications of the game.
- V. Source: Project WILD - Elementary, p. 33; Project WILD - Secondary, p. 47.

9. Charlotte's Web

- I. Description: Participants deal with the interrelatedness of things.
- II. Appropriate for: Grades 4-12, Families (intergenerational), Seniors
- III. Materials: 100' of string, blindfolds for everyone
(See Variation in D. for additional supplies.)
- IV. Process:
 - A. In this activity a horizontal replica of a giant spider web is strung among the participants using interconnecting string.
 - B. All the participants are blindfolded with one being designated as the spider. All others are flies and mosquitoes.
 - C. The participants hold their string taut among them while the spider is placed in the center of the web. The participants on the outside pluck the strings while the spider tries to locate the flies by feeling the vibrations. Once a fly has been caught and "consumed" the two exchange roles.
 - D. The participants are then asked to think of other examples of predator-prey relationships (i.e., what would the spider eat? what does a fly eat?).
- V. Variations:

The participants are given animal roles on cards and they each search out prey. When they encounter another participant the consumed participant is out of the activity. When only one participant is left a chain is made of who "consumed" whom to understand the relationship. It may be tried several times to find variations in food web patterns. This activity will help the participants understand the predator-prey process. It can be used to explain the cycles in nature.
- VI. Source: Eco-Acts, p. 81.

10. Mr. Sun's Restaurant

- I. Description: A study of the sun's energy flow.
- II. Appropriate for: Youth
- III. Source: Eco Acts, p. 222

11. Sun's Bucket Brigade

- I. Description: Participants experience the water cycle.
- II. Appropriate for: Youth
- III. Source: Eco-Acts, p. 79

12. Logs to Soil

- I. Description: Participants sample and examine a rotting log.
- II. Appropriate for: Youth
- III. Materials:

- A. For each team of three or four - a saw, a bag, a trowel, a container for holding samples, e.g., egg carton, marking pen, ruler, large envelope, four 3 X 5 cards cut in thirds, 12 paper clips, glue.
- B. For the group - a piece of flagging for each log "bump"

IV. Process:

A. Preparation

1. Site: Any place with soft pulpy rotten logs. Look for logs that have decomposed.
2. Sampling technique:
 - a. Select a log. Clear away litter and dirt around the log.
 - b. Make two parallel cuts about 20-25 centimeters apart with a saw.
 - c. Remove the slice of wood.
 - d. Measure the profile of the wood with the ruler. Remove a chunk of log material from the profile every 3 cm, starting from the forest litter on the top of the log down to the ground side. Put samples in the egg container keeping samples in separate sections.
3. Prepare an action card for each team with the following information:
 - a. What might have caused your tree to fall? How long has it been down? How old was it when it fell?
 - b. Which part of the log is decomposing or rotting fastest? How can you tell?
 - c. Where in the log do you find the most moisture?
 - d. What kinds of plants and animals can you find living in or on your log?

B. Action

1. Explain to the group that there is a mystery to solve in these woods. Stand on one of the log-lumps and ask the participants what it is. If they cannot figure it out, reveal that the lump is a fallen tree. Ask the participants how it is different from a tree that is still standing.
2. Show the participants the demonstration log. Have them help you remove the litter, and then dig down to the bottom of the log with their hands. Review the saw safety rules. Show them how to use the saw to make two parallel cuts in the log. Remove the section of log between the cuts and show the vertical profiles remaining on the log. Then show them how to take samples and store them.
3. Participants find a log, saw through it, and collect profile samples. Give them the action card and ask them to answer the questions.
4. If a team finishes early let them try another log in another setting.
5. Discuss the action cards.

C. Logs-to-Soil Game

1. Give each team an envelope containing twelve cards, twelve paper clips, and a container of glue.
2. Have each team member take small bits of their log samples from their egg cartons and glue the piece onto a separate card. Then have them clip the cards to the envelope in random order. Make sure that the remainder of each sample stays in the egg carton to serve as a permanent record of the proper order.

3. After the teams have finished their puzzles, have them exchange envelopes. Challenge the teams to arrange the sample cards in the proper profile order, i.e., the same order as the samples appear in the egg cartons.

D. Logging Observations:

1. What difficulties did you have in putting the samples into the proper order? What clues did you look for?
2. What similarities and differences did you find in the samples from different logs?
3. What evidence is there that the fallen tree is beneficial to the plants and animals in the environment?

V. Source: OBIS

13. Night Hike

I. Description: A night time environmental experience.

II. Appropriate for: All ages, Families (intergenerational), Adults, Seniors

III. Materials: 2 flashlights for leader, supplies for the specific activities to be done (see C. below)

IV. Process:

- A. There are many possibilities for a night hike, but the general focus is that of a silent (no-talking), sensory experience.
- B. Introduce the activity to the participants by telling them about their "night eyes" and some of the things that they will do along the way. Be sure they are prepared for an outdoor experience at night (jackets, bug repellent, etc.). It needs to be emphasized, especially with Grades 6-12, for the need of silence - noise chases the animals away.
- C. Begin the Night Hike in silence. While moving, involve the participants with such activities as:
 1. Listening for human made and natural sounds. How many are there? What are these sounds from?
 2. Doing a "blind walk" with partners.
 3. Making human "amoebas" (from New Games) along the road.
 4. Following a specified star across an open field. Have each person walk solo for 100 yards or more until they meet the leader. Each participant should be separated by about 30' (two leaders are needed for this activity).
 5. Having each participant "stop, look, and listen" along a trail or road, spacing them apart about 20'. Go back for them when it is time to continue.
- D. Make several (or more!) stops along the way and do any number of sensory activities.
 1. Feel something on the ground and try to discover what it is by touch alone. Are all the sides the same? Is something wet?
 2. Go to a known observation point and watch for deer or other nocturnal animals.
 3. Use sensory observations to detect the differences of temperature, wind, and air moisture in different locations, i.e., bottom of a ravine, ridge-top, meadow, forest, etc.
 4. Do the Great White Sheet trick from OBIS. Place a flashlight in a weighted jar that is tied to a rope and lower it into the pond about 3' over the dock. Watch what is attracted to the light. (If there is any doubt about the stability of the participants on the dock, have everyone wear a PFD.)

14. Circle of Life

I. Description: A study of interrelatedness

II. Appropriate for: All ages, families (intergenerational), Adults, Seniors

III. Materials: None

IV. Process:

A. Have the group sit in a circle outdoors, preferably not on a lawn.

B. Pick up an object (any natural object - pine cone, leaf, etc.) that is near.

C. One participant starts the game by naming a plant, animal or other constituent of life that feeds on the object, is eaten by it, protects it, or that decomposes it.

D. The object is then passed to the right and the game is continued by having that person name something else that would be associated with it in the ways noted above.

E. A failure to answer within a given time can earn the person the first letter of the word, "dead", the person being out of the game upon receipt of all four letters. Any answer may be challenged by any person in the game and majority approval of the challenge results in a letter. (See variation in D. 2 below.)

F. Other rules may be added later to increase the difficulty of the game such as: not being allowed to repeat any previously mentioned constituent; or having to say how people can make sure the object will be eaten, protected, decomposed, etc., by the second natural item.

G. The object being passed may be changed after a set number of passes or when the leader feels possibilities for answers are reasonably used.

V. Variations:

Using the word, "dead", may prove to be a negative experience for the participants, especially on the last day - it excludes people from the whole group. Instead, try having each person earn the letters of the word, "cycle", for each correct answer that is given. See how many times each participant can make the word, "cycle".

VI. Source: D. 1. Source: Eco-Acts, p. 84.

15. Food Chain Game

I. Description: Participants survive as an animal in a make-believe food chain by getting enough to eat while avoiding being eaten.

II. Appropriate for: Youth, at least 10 persons

III. Materials:

A. For each animal - a sash about 20 cm by 100 cm, a paper bag ("stomach")

B. For the group - 4-5 liters of popped corn, a data board, marking pen, timer, roll of masking tape.

IV. Process:

A. Preparation

1. Make sashes of three different colors of cloth. Have enough so 3/4 of the group will be grasshoppers, 1/3 to be frogs, and 1/3 will be hawks.

2. Place a piece of masking tape about 4 cm from the bottom of each "stomach" bag.

3. Game can be played anywhere.

B. Action

1. Introduce food chains. Ask the participants if they know what mice eat and what eats mice. Diagram the relationship they describe and introduce it as a food chain. Ask the participants if they can think of other food chains.

2. The Food Chain Game

a. Describe the limits of the area. Spread popcorn over the area. This is to simulate food that grasshoppers eat.

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C

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C

- b. Hand out "stomach" bags and a grasshopper sash to 1/3 of the group. Tell the participants to put their "food" in their "stomachs" when the game starts.
- c. Hand out a bag and a frog sash to a second 1/3 of the group, and hawk sashes to the last 1/3. When the game starts, frogs will try to capture (tag) hoppers, and the hawks will pursue frogs. When a frog captures a hopper, the hopper's stomach contents are transferred to the stomach of the frog. When the hawk captures a frog, the hawk takes the frog's whole stomach. Hawks do not eat hoppers in this game.
- d. State the challenge. Set the timer for five minutes and holler "Go!" The first game usually lasts only a few seconds with one of two things happening. Hoppers are gobbled up before they have a chance to forage, or the frogs are gobbled up and hoppers continue to eat popcorn and get fat.
- e. Analysis. How many animals survive? For a hopper to survive, popcorn must fill the stomach bag to the bottom of the tape. For a frog to survive, popcorn must fill the stomach bag to the top of the tape. Hawks must have the equivalent of one frog with sufficient food to survive. If at least one of each kind of animal survives, you have an ongoing food chain. Return the corn to the activity area after each game.
- f. Instant Replay. Learning by making rule variations. Ask for suggestions on rule changes that might result in more of a balance after the five-minute day. Usually one rule is changed for each replay. When you have settled on your new rules, play again. Suggest these changes if the participants cannot offer any:
 - + Change the number of hoppers and/or frogs and/or hawks.
 - + Let each hopper come back as another hopper once after being captured and transferring "stomach" contents.
 - + Provide a "safety zone" for frogs and/or hoppers where they can be safe.
 - + Timed releases. Let hoppers go first to forage unmolested. One minute later release the frogs, and later the hawk(s).
 - + Spread out more popcorn.

C. Discussion

1. After each game analyze the results.
 - a. How many hoppers got a full stomach? Frogs? Hawks?
 - b. Compare game results after each rule change.
2. Other questions:
 - a. What would happen if there were only half as many popcorn plants? What would happen to the animal that depends on those plants?
 - b. If there were no frogs, what would happen to the plant population? The hopper population? The hawk population?
 - c. Do hawks need plants to survive? Explain.
 - d. Can you describe some food chains of which you are a part?
 - e. Are there any plants or animals that are not part of any food chains?

D. More links:

1. Look for evidence of plants being used for food. Can you find the animals responsible?
2. Find some ladybugs, or better yet, some ladybug larvae. Put them in with some aphids in a small container and observe. Describe the food chain of which they are a part.

V. Source: OBIS

16. Snug as a Bug I + III E
 I. Description: Participants locate shelters that animals have constructed on and among leaves and twigs. (Includes an arts and crafts project.)
 II. Appropriate for: Youth
 III. Source: OBIS
17. Shake It! I + III E
 I. Description: Participants find a community that matches a mystery community by shaking down trees and shrubs.
 II. Appropriate for: Youth
 III. Source: OBIS
18. Envirolopes I + III E
 I. Description: Participants find examples of the variety in nature as suggested on several envirolopes.
 II. Appropriate for: Youth
 III. Source: OBIS
19. Noah's Ark I E
 I. Description: A fun method for discovering animal movement and behavior.
 II. Appropriate for: Youth, six or more.
 III. Materials: Index cards and pencils
 IV. Process:
 A. The idea is to find your mate amid the herd of cavorting beasts and birds on Noah's Ark. Begin by counting the number of players in your group, then make a list of animals half as long as the list of players.
 B. Write the name of each animal on two 3 X 5 cards. When finished there should be as many cards in your hand as there are players in the group - one card for each player. If you have an odd number of players, write the name of one of the animals on three cards, making a threesome to accommodate the extra player.
 C. Shuffle the cards and pass them out. Each child reads the card and becomes the animal whose name is on the card, keeping one's identity a secret. Now collect the cards again.
 D. On signal, the players all begin acting out the sounds, shapes, and typical movements of their animals, with the intention of attracting their mates.
 V. Source: Sharing Nature with Children, Cornell, p. 81.
20. Instincts for Survival I E
 I. Description: A game to increase awareness and appreciation for the environment. Participants play a specific animal and "survive" in an ecosystem.
 II. Appropriate for: Youth, 15 or more players
 III. Source: Clouds on a Clothesline, Pearce, p. 5f.
21. Meet a Friend
 I. Description: Participants discover a friend in nature.
 II. Appropriate for: Youth
 III. Source: Clouds on a Clothesline, Pearce, p. 25.
22. Judge Nature Says
 I. Description: Participants deal with the issue of survival in the natural environment.
 II. Appropriate for: Youth, 20 or more
 III. Source: Clouds on a Clothesline, p. 26f.

Yg

23. Lassoing an Ant

- I. Description: A clever way to get participants into a population study.
- II. Appropriate for: Youth and adults
- III. Materials: Long piece of rope
- IV. Process:
 - A. Appear with a fairly good sized piece of rope. Quietly, but with apparent concentration, begin fashioning and testing a large lasso loop. To the inevitable questions, reply that you are going to "lasso an ant!"
 - B. Lead your group of doubters off to a nearby clearing and with great enthusiasm cast your loop.
 - C. Almost without fail a "close inspection" of the loop will turn up at least one ant. That inspection, by the way, can lead to all sorts of other challenges -- like counting and categorizing all the different sorts of life found within the loop.
- V. Source: Acclimatizing, p. 92

Yg

24. Nothing Lives Alone

- I. Description: A game that explores interrelationships
- II. Appropriate for: All ages
- III. Materials: Various natural objects
- IV. Process:
 - A. Place a natural object in the middle of the group's circle, and ask them to imagine what would ordinarily "fill in" the spaces around it. Begin with easy items (pine cone, beach pebble, snail shell), and then produce something more difficult - like a certain type of bird's feather. What would be right next to it? What would be right underneath it? Directly above it? Further away, but still around it?
 - B. Have each participant take a turn.
 - C. Build layers, or circles out from that focal point, and finally you have a community.
 - D. Now produce an object brought in from a different community. Ask the same questions of this object and try to reconstruct this community which is out of sensory contact.
 - E. Then return to another object from the immediate area and try again to construct the community with ever widening circles which may touch other neighboring communities.
 - F. What lives in one's community?
 - G. What associations are there in overlapping communities?
- VI. Source: Acclimatizing p. 91

F. ARTS & CRAFTS LEARNING EXPERIENCES

1. Linear String
 - I. Description: The participants make designs with string.
 - II. Appropriate for: All ages
 - III. Materials: String, paper, glue
 - IV. Process:

2. Natural Object Sculpture
 - I. Description: Putting objects to use in a different manner
 - II. Appropriate for: All ages, families, adults and seniors
 - III. Materials: Assortment and variety of natural objects, glue, pins, and other fastening devices, wood or heavy paper base
 - IV. Process:

Participants make a sculpture using natural materials and objects, except for any fastening devices. The sculpture may be placed on a wood, paper or cardboard base.

3. Seed Design
 - I. Description:
 - II. Appropriate for: Grades 4-9, Grades 9-12 during traveling/trip experiences, families, adults, seniors
 - III. Materials: Large assortment of seeds collected by each participant, string or gimp (vinyl lacing)
 - IV. Process:

Participants make any number of items (jewelry for example) that they can wear.

4. Sunprints or Natureprints (depending on your perspective!)
 - I. Description: An experience of shapes and designs in nature
 - II. Appropriate for: Grades 4-8, Families
 - III. Materials: Water in a basin, sunprint paper, natural object
 - IV. Process:

The participant makes a negative print of a natural object on the special paper, and develops it with water. This activity doesn't take long.

5. Adaptation Artistry
 - I. Description: A study of adaptation
 - II. Appropriate for: Grades 4-9, Families
 - III. Materials: Drawing, painting, clay sculpture and/or paper mache' materials, construction paper, glue, pencils
 - IV. Process:

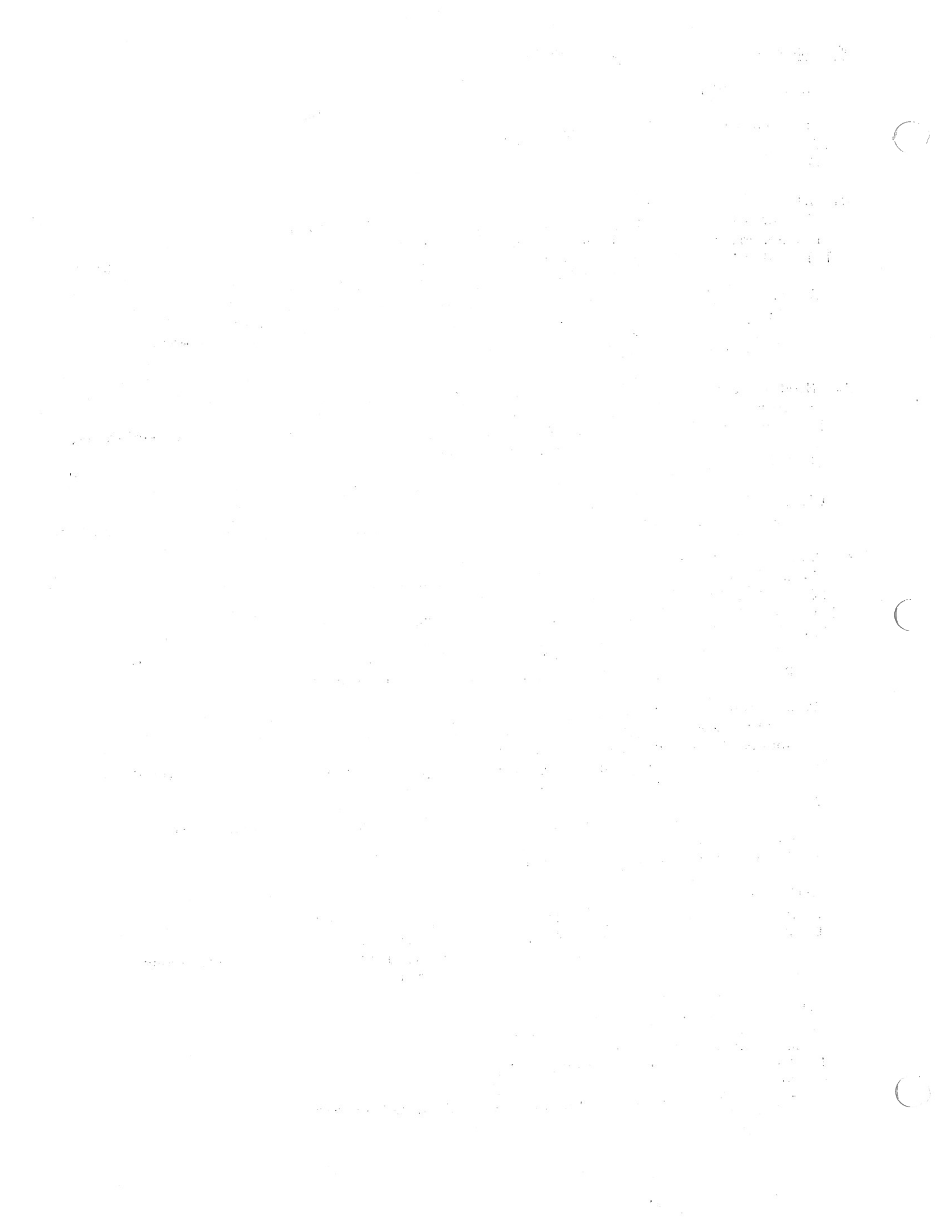
The participants design and create imaginary birds that describe their adaptations.
 - V. Source: Project WILD - Elementary, p. 97.

6. Fruit and/or Vegetable Prints
 - I. Description: Prints and designs from natural objects
 - II. Appropriate for: Grades 4-9, Families, Seniors
 - III. Materials: Selected fruits, vegetables, natural items, etc., cut cross-sectionally, paper, ink or paint

7. Animal Tracks
 - I. Description: Discover animal foot prints
 - II. Appropriate for: All ages
 - III. Materials: Pre-mixed plaster of paris
 - IV. Process:

The participants make plaster casts of animal tracks.

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G. GAME AND SPORT LEARNING EXPERIENCES

1. Article Exchange

- I. Description: Group Building
- II. Appropriate for: Grades 7-12, Families (intergenerational), Adults, Seniors
- III. Materials: Open area, indoors or outdoors
- IV. Process:
 - A. The participants make two concentric circles of equal number. The inner circle faces outward and the outer circle faces inward. When the leader sings a song, the two circles move in opposite directions.
 - B. When the leader stops singing, two partners will be facing each other. They should say "Hi (or Howdy)! My name is _____" to each other and then exchange some article on their person with the other (i.e., watch, shoe, belt, ring, etc.).
 - C. When the leader starts to sing again, two more partners are found and process is repeated. Repeat it four or five times.
- V. Source: Guide for Recreation Leaders, p. 29.

2. Bundle of Twigs

- I. Description: Participants appreciate the strength of community
- II. Appropriate for: All
- III. Biblical Texts:
- IV. Materials: Rope or twine, twigs, Bibles,
- V. Process:
 - A. Inform the participants that they are going to be involved in an activity that determines their individual strength.
 - B. Ask them to stand as close together as possible with everyone facing outward. Loosely tie a rope around the whole group. Give each participant a point to move around.
 - C. When you instruct them to move, each participant tries to move the entire group toward his/her point. Allow a couple of minutes for this exercise. It will be difficult for anyone to move the entire group. Announce the end of the exercise.
 - D. Now give the total group one point to head toward. When you instruct them to move the whole group will move.
 - E. Have them sit down, with the rope still tied around them. Tell the story "Bundle of Twigs" (Cf. III I 1)
 - F. At the close of the story, compare the participants' experiences to the story.
 - G. End with a prayer for God's help in working together.

3. Human Treasure Hunt

- I. Description: Group Building. Through a "search-and-find" activity, the participants have fun meeting each other and learning about the "valuableness" of the others in their group. There are four variations
- II. Appropriate for: All ages
- III. Source: Playfair, pp. 73-77.

4. Blob Tag

- I. Description: Group Building
- II. Appropriate for: All ages
- III. Materials: None
- IV. Process:

One person is "it" and tags another. The two of them are then "it" and must hold hands, elbows, etc. with each other at all times. They go for a third. When "it" has 6 or more people, then the participants may subdivide into smaller "its" of no less than 3 people each.

V. Source: New Games Book, p. 107.

5. Sardines

- I. Description: Group Building
- II. Appropriate for: Grades 4-8
- III. Materials: None
- IV. Process:
One person goes and hides. After a suitable interval, the rest go to find the hider. When someone finds the hider, he/she hides alongside and keeps quiet until everyone is hiding in the same place. The first finder becomes the hider next time.
- V. Variations:
This can be played in the dark, provided that the boundaries are very clear to the participants and that no one is in danger of getting lost.
- VI. Source: For the Fun of It!, p. G-11

6. Five Changes

- I. Description: Group Building
- II. Appropriate for: All ages
- III. Materials: Comfortable area in which to sit
- IV. Process:
The group gets a partner and the partners sit back-to-back. Each person makes 5 changes about their appearance without the person to their back seeing them. They then face each other, and each partner tries to figure out what the other partner changed about his/her appearance. This can be done several times, each time not "unchanging" the things that were done first.
- V. Source: Playfair, p. 168.

7. Bear

- I. Description: Group Building
- II. Appropriate for: All ages
- III. Materials: A tree or wall with a soft landing area, piece of tape or chalk
- IV. Process:
The group attempts to make a mark as high as possible on a wall or tree with a piece of tape or chalk. The wall or tree is to be used for support. The group should not attempt to climb it.
- V. Source: Initiative Games, p. 16.

8. Yurt Circle

- I. Description: Interdependence and cooperation
- II. Appropriate for: All ages
- III. Materials: None
- IV. Process:
Group stands in a circle and holds hands. Must have an even number of people. Count off by two's. On instruction, the one's lean forward and the two's lean backward. Bodies, legs and arms are to remain stiff. Reverse the procedure.
- V. Source: More New Games, p. 123

9. Triad

- I. Description: Experience of competition, or survival and adaptation
- II. Appropriate for: All ages. Minimum of 12 participants.
- III. Materials: Open playing field, 3 soccer balls, 6 markers for 3 goals
- IV. Process:
 - A. Divide the players into three teams of equal size. On the playing field set up three goals in the shape of a triangle.
 - B. The game begins with a jump ball (like basketball) in the center of the playing field. All three balls are put into circulation at once and players try to move the ball through either of their opponents' goals

- C. The balls may be rolled, kicked, or thrown to teammates. No player may hold a ball for longer than 5 seconds.
- D. Teams devise strategies to protect their own goal while trying to advance to score goals.
- E. The leader may call time-outs so that teams can rest and strategize.
- V. Source: Clouds on the Clothesline, p. 74.
10. Triangle Tag
- I. Description: Methods of survival
- II. Appropriate for: All Ages
- III. Materials: None
- IV. Process:
- Three people hold hands. One of the three is "the target" which the other two try to prevent a fourth person outside of the triangle from tagging.
- V. Source: More New Games, p. 43.
11. Monster Relay
- I. Description: A swimming pool activity
- II. Appropriate for: Grades 4-11, Family, Intergenerational
- III. Materials: Whistle for leader
- IV. Process:
- A. Divide the group into teams of 8-10 people.
- B. Set up a "monster" relay where everyone has a role. Some swim through shallow water, some through deep water. Have some do cartwheels in the shallow end while others swim with one hand in the air. The design of the relay depends on the abilities of the swimmers.
- V. Source: Clouds on the Clothesline, p. 55.
12. Water Bugs
- I. Description: A pool activity
- II. Appropriate for: Grades 4-7
- III. Materials: None
- IV. Process:
- Give teams names of water creatures. Set up relays that imitate the ways in which those creatures have adapted to swimming or moving through/over their watery habitat.
- V. Source: Clouds on the Clothesline, p. 56.
13. Stand Up
- I. Description: Cooperation exercise
- II. Appropriate for: All Ages
- III. Materials: None
- IV. Process:
- The group subdivides into partners, and the partners stand back-to-back and lock arms in order to stand up without using their hands. Partners double up and do it again until the whole group is together.
- V. Source: New Games Book, p. 65.
14. Camouflage Game
- I. Description:
- II. Appropriate for: All ages, Families (intergenerational), Adults, Seniors
- III. Materials: An open area with small shrubs, 30'X30', box of colored toothpicks
- IV. Process:
- The participants look for and gather toothpicks and notice which colors are the most obvious. See the source of a detail of procedures.
- V. Variations: Use this activity to start talk about adaptation.
- VI. Source: Eco-Acts, p. 82.

JD 15. Punctured Drum

- I. Description: Cooperation Game
- II. Appropriate for: All ages
- III. Materials: 55-gallon drum with 10 nail-size holes for each participant, water source that can constantly run, one gallon container
- IV. Process:
 - The problem: The group must attempt to fill a multi-punctured drum using a one gallon container. Only portions of the group members' anatomies may be used to plug the holes.
- V. Source: Initiative Games, p. 31.

JD 16. Don't Spill the Pot

- I. Description: Cooperation Exercise
- II. Appropriate for: Grades 7-12; Families (intergenerational), Adults, Seniors
- III. Materials: A canoe for each 2 or 3 participants, PFDs and paddles for all, one pot, wood, tinder, matches, lashing twine
- IV. Process:
 - A. The problem is to boil a pot of water between two canoes.
 - B. The recommended method: Build a base platform with wet logs. Then build a fire on top of the platform. Keep the canoes steady enough not to spill the pot. Proper canoe balance is essential.

17. The Bone Game

- I. Description: A sit-down activity originating with Native Americans.
- II. Appropriate for: Grades 6-12, Adults, Seniors, overnights and Trip Camps
- III. Source: New Games Book, pp. 79-81.

I. STORY TELLING1. "Bundle of Twigs" II
b

I. Description: Strength of Community

II. Appropriate for: All

III. Materials: Copy of story, string, twine or rope, handful of twigs

IV. Process:

A. Sit in a circle

B. Tell story

"Once upon a time, there was a rather large family of brothers and sisters. They would often pinch each other or say nasty things to each other. And as a result, they felt awful! Their parents noticed this terrible behavior and were concerned for their children because they loved them so much.

"One day the parents took their children aside and instructed each of them to get a twig. When the children returned, they sat down to hear what their parents had to say.

"We want you to be able to get along in the world," the mother explained.

"We fear that you will not be able to survive once we are gone. After all, you don't work or play together nicely with your brothers and sisters. What makes you think you can get along with other people in the world when you cannot even get along with your siblings?"

The father nodded in agreement and took his twig and held it up for the children to see. "Yes. When this twig is without support from other twigs see how easily it breaks?" (AT THIS POINT, SNAP YOUR TWIG IN HALF.)

"It will be the same for you if you do not get along with your brothers and sisters and others in this world."

"On the other hand, what if we were to tie several twigs together?" said the mother with a smile. Their mother took the twigs from the children and tied some string around them. (AS YOU CONTINUE TELLING THE STORY, COLLECT THE TWIGS FROM EACH CAMPER AND TIE A PIECE OF STRING AROUND THE BUNDLE.) Then she tried to snap them in half. (ATTEMPT TO BREAK THE BUNDLE OF TWIGS.) They wouldn't break!

The father remarked, "When you work and play together, you will be strong. If you try to do things in your own way all the time or if you work against each other, you will not last long, I am afraid. So children, I ask you to be strong."

"Those children changed their ways. They had to work hard to get along with each other. But, when they did, they discovered that they could do lots of fantastic things together!"

2. Beauty and the Beast

I. Description: Classic fairytale that describes a friend who appears as an enemy.

II. Appropriate for: All ages

III. Materials: None

IV. Process:

A. Tell/read the story

B. Comparisons:

1. In instances of pollination and protection of plants there may appear to be an adversary relationship but actually it is a friendly relationship.

2. Some people are fearful of God and their experience of Him. Yet, to know Him is to know one that loves.

SESSION IV

Theme: Wild

Intentions

Gain insight about the "wild" characteristics of nature as descriptive of:

- a. Order in the non-human world,
- b. Disorder in the human world, rebellion against God and God's creation, and
- c. The annihilation of order due to the unleashing of uncontrollable power.

Catechism

God also protects me in time of danger and guards me from every evil . . . though I do not deserve it.

Scripture

Genesis 3:1-24
 Genesis 7:17-23
 Exodus 14:21-29
 Exodus 20:1-17
 Deuteronomy 6:4-19
 Deuteronomy 8:1-16
 Psalm 39
 Psalm 51
 Psalm 121
 Isaiah 5:1-30
 Malachi 2:10
 Matthew 4:1-11
 Matthew 14:28-33
 Romans 6:4
 II Corinthians 5:6-7
 Ephesians 5:1-2
 I John 1:7

B. BIBLE STUDIES

1. The Temptations of Jesus

- I. Description: We are tempted as Jesus: refuse to listen to God, playing God and forgetting God affects our treatment of the world.
- II. Appropriate for: Older youth and Adults. Can be adapted for younger children.
- III. Biblical Texts: Matthew 4:1-11, Deuteronomy 6:4-19, 8:1-16
- IV. Materials: Bibles, newsprint, marking pens
- V. Process:
 - A. Read Matt. 4:1-11. Identify the three temptations as you come to them in the reading and ask the participants to put the temptations in their own words after the reading of each temptation.
 1. vss. 2-4 - Turn stones into bread
 2. vss. 5-7 - Jump from the Temple pinnacle
 3. vss. 8-10 - Bow down to Satan
 - B. Help the participants understand in each temptation:
 1. Why Jesus should respond to the temptation from Satan's point of view.
 - a. vss. 2-4 - He was hungry. Don't people have a right to eat?
 - b. vss. 5-7 - God will not let His Son get hurt. By the way, is that true?
 - c. vss. 8-10 - Jesus wants to be Lord of all.
 2. How Jesus could respond if He desired.
 - a. vss. 2-4 - Change stone into bread. We presently use petroleum products as filler in food. We do the same with trees.
 - b. vss. 5-7 - He could suspend some of the laws of nature. Miracles are not unheard of. God can do as he wants, can't He? Isn't God Master of All?
 - c. vss. 8-10 - Can the ends justify the means. What's there to kneeling to Satan one day and standing up against him the next? (People will excuse violence today when they feel the cause is justified.)
 3. How did Jesus respond and what His response means.
 - a. vss. 2-4 - Compare Jesus' response to Deuteronomy 8:1-6. Note particularly vs. 3. How do you understand this response? Have the participants answer this question first in their own words. Guide them in their responses to understand that the words God speaks are words that help us live in the total system that God has created. Comparison can be made with instructions that come with a piece of machinery or a toy that tells you how to use it, care for it, repair it, and get help to solve particular problems.
 - b. vss. 5-7 - Compare Jesus' responses to Deuteronomy 6:14-19. Note particularly vs. 16. Ask the participants how did they understand this response. Guide them again in their answers to see that it is not that someone asks God to alter His plans nor plays with God's creation. One does not challenge God by playing God nor appealing to God to get what he/she wants. As one listens to God, one respects the uniqueness and authority of God.
 - c. vss. 8-10 - Compare Jesus' responses to Deuteronomy 6:4-15, noting vs. 13. Again ask the participants how they understand Jesus' response and help them see that when you are satisfied with what you have you can tend to forget God. The object of worship is the Creator, not His creation.
 4. What would you say sin is? Lead the participants in a discussion of this question, pointing out the following ideas.
 - a. vss. 2-4 - Refusal to listen to God about how to live in this world: how to live with other humans and in the natural environment.
 - b. vss. 5-7 - Refusal to let God be God. Disrespect for the authority of God.
 - c. vss. 8-10 - Forgetting God.

- C. Lead the participants to summarize what the basic sins are in the temptations and ask them how they participate in sin
1. In their relationship to God?
 2. In the way they treat the environment?
 3. When playing, participating in recreational activities?
- D. Continue with generalizing about the nature of sin. Discuss the following with them asking the participants to give examples of how they see others sin. As the group "warms up" to this type of discussion they may be able to talk about themselves.
1. Sin is refusal to listen to God.
 - a. Rejection of God's Word
 - b. Not caring about God's plan for the world
 - c. Playing as though the world was a toy
 2. Sin is playing God.
 - a. Rejecting the Lordship of God
 - b. Treating the environment as if people were the sole owners and as they were the sole actors.
 - c. Playing and disrespecting others in the world; not being aware of the ramifications of one's actions to others, natural habitats, state, country, other continents, or even in the future.
 3. Sin is forgetting God.
 - a. Not worshipping God
 - b. Thinking of the environment as a god or thing to be worshipped in and of itself
 - c. Placing personal, family, or group gratification over anything else, including God and service to God
- E. Close this experience with a statement that indicates we are in a world of sin, but that sinning is no reason for us to feel hopeless. In this same world of sin there is forgiveness from God. The temptations of Jesus are temptations that all humans experience. They can be observed in the way we treat other humans, in the ways we treat God's Creation, and in the ways groups (or communities) of people treat other groups and the environment. However, we are to look to God's grace, too.

VI. Variations:

- A. Make this an all-day experience. Do Learning Experiences from the other sections for this day to complement each verse section.
- B. This experience needs to be simplified for younger participants.

2. Adam's Sin

- I. Description: A cartooning of Adam's sin.
- II. Appropriate for: Grades 4-8; Families with children
- III. Biblical Text: Genesis 3:1-24
- IV. Materials: Scrap paper, crayons, Bibles
- V. Process:
 - A. Read Gen. 3:1-24 in a dramatic manner, using voice inflections, pauses and body motions. In your reading, help participants use their imaginations.
 - B. Give participants paper and crayons. Tell them to make a cartoon of this story. They can work individually or in two's. They will need to decide the number of frames, etc., in the cartoon strip. Some in the group may be artists, others writers of the lines, etc.
 - C. When the cartoon strips are completed share them with the group.
 - D. Note that vs. 5 indicates he wished to be like God. Do the cartoonists catch this?
 - E. Discuss how the participants see sin acted out in today's world. The idea of being a conqueror of all of creation can be a good complex, too.

3. The Roots of the Problem

I. Description: The objectives of this study are to increase the participant's awarenesses concerning the root causes of poverty, illness, injustice, energy shortages, and the lack of peace; and to help participants understand how our use of natural resources affects our brothers and sisters (human and non-human) around the world.

II. Appropriate for: All ages

III. Biblical Text: Exodus 20:1-17

IV. Materials: Bibles, Two 3' X 3' sheets of newsprint for each sub-group (3),
Two marking pens for each sub-group,

V. Process:

- A. Read Exodus 20:1-17. Participants will easily recognize this passage as the Ten Commandments.
- B. Divide the group into three sub-groups. Assign one group vss. 3-7, another group gets vss. 8-12, and the third group has vss. 13-17. Spread the groups out physically, with the leader standing in the center. Read vss. 1-2 yourself, then vss. 3-7 by the first group read in unison, followed by the second and third groups. This choral reading lends freshness to a familiar passage.
- C. Play game with them like "Triangle Tag" (Cf. IV G 9). The purpose is to find out what happens when "rules" aren't followed. Play the game as directed the first time. Before starting the second round, secretly give instructions to one or two participants not to follow the game rules. After the second round is finished, process what happened: Was someone excluded? Could someone have gotten hurt? What reactions did people have?
- D. Explore the participant's attitudes to the Commandments. Ask participants share what these verses mean to them. Are they important? Why? Most will express the notion that these Commandments point out how we should live.
 1. Are the Commandments intended to separate the good from the bad?
 2. Or are the Commandments intended for us to live inclusively with the world?
- E. Do an environmental activity that illustrates how humans have caused environmental damage.
 1. Oil Spill (IV E 1)
 2. Deadly Links (IV E 2)
 3. Shrinking Habitats (III E 7)
- F. Discuss the problem of sin with the participants. Review each of the Commandments with these items and questions in mind:
 1. Pretend the Commandments are a club. What sins do they seek to stop in our world?
 2. Pretend the Commandments are a mirror. What sins do they reflect in your life?
 3. Pretend the Commandments are a ruler. How do we measure up?
- G. Discover with the participants how the Commandments relate to stewardship of Creation. With grades 4-7 youth you will have to guide this process, but many grades 8-12 youth can work on it independently in sub-groups of two or three, sharing their findings with the whole group when they finish. You want them to read these verses carefully and discover anything that suggests ways to care for the Earth and its people, and its God.
 1. Vs. 3 - A caution not to confuse our gods of greed, prosperity, and buying with the real Lord God.
 2. Vs. 4 - A caution not to make a god out of nature.
 3. Vs. 5 - Our mishandling of natural resources surely extends to the third and fourth generations.
 4. Vss. 8-11 - Resting from work and labor restores both the land and the people. The Sabbath has close connections with Shalom, that is, peace and wholeness with God. The Sabbath also connects with Creation.

5. Vss. 12-16 - These define the basics of just relationships between people. Underlying all these Commandments we find a strong current of respect for others, life, marriage, property, and good name. What a difference it would make if we truly respected the integrity of Third world nations! There are some considerations regarding the natural environment that can be drawn from these verses, too.

a. Although we assume that the Commandments in these verses pertain to relationships with people, those in vss. 13, 14, and 15 do not specifically say so. Consider especially some of the implications of vss. 13 and 15.

b. Vs. 13 - We kill other things by our everyday behavior -
 + What do we do intentionally?
 + What do we do unintentionally?
 + Does what we do affect only the present?
 + What do we do to harm the future?

c. Vs. 15 - Are we not stealing our resources from other people and natural habitats when we take from them what we need without regard for their needs for living? In a sense, we are also stealing from future generations by our careless consumption now.

6. Vs. 17 - Speaking out against coveting, this verse suggests a whole new way of relating economic classes and nations. We often think of the poor coveting what the rich have. But, in reality, the rich also covet the poor people's possessions, and, since the poor lack power, the rich usually get what they want. For instance, when a multi-national sugar company covets a plantation in Central America, it usually achieves its ends by making an "offer no one can refuse," often through financial power-plays and political manipulation.

H. Develop "Commandments for Creation". As a group, work on "Ten Commandments for Creation," listing things we can do to exercise good stewardship (caretaking) of Creation.

1. As the group works on this list, encourage them to think of God's role as the starting point for all subsequent Commandments, "I am the Lord your God, therefore. . . ."

2. When the "new commandments" are done, ask participants to make a poster. Use it where all can see it during a worship or devotional experience.

VI. Variations: This bible study experience will work best when spread over a whole day.

VII. Source: "On Using 'Stewardship of Creation'", Kerr.

4. The Good, The Bad, and the Footprint - Part 3: The Footprint

I. Description: Following in the way of Christ.

II. Appropriate for: All ages; Families (intergenerational); Seniors

III. Biblical Texts: (Use only RSV) Romans 6:4, II Corinthians 5:6-7, Ephesians 5:1-2, I John 1:7

IV. Materials: 5 RSV Bibles

V. Process:

A. This process is not laid out in any order. Develop your own.

B. Begin with a Night Hike, Barefoot Trail Walk, animal tracking, and/or following someone's footprints.

C. Divide the group into four sub-groups and assign each sub-group one of the passages above, giving them one Bible for the group. Have each sub-group figure out what "walk" means in each passage and then have all the sub-groups report back to the whole with their definitions.

D. Explore the meaning of "walk" with the participants.

E. Ask the participants, "How could you do the walk/hike we did above differently so that it would reflect how Christians should 'walk'?" Brainstorm their ideas. Have the group decide on a way to do this "new walk" and repeat the activity in A. above or a similar one.

1. "Walk" in these passages has more to do with a journey of faith and progressing from one perspective in life to another than it does with merely taking one permanent perspective in life. Also the term is in relationship to following Christ.
2. Romans 6:4. Through baptism Christians are able to overcome the problems of life and to always follow Christ as reconciled and forgiven ("newness of life") people.
3. II Corinthians 5:6-7. The issue here is that we are open to the guidelines of Christian faith, not some list of strict codes. As Christians, we are not concerned so much with the tangible things about us, but with the guidelines of faith.
4. Ephesians 5:1-2. This passage takes the meaning of faith a bit further and explains it as love. Notice that "love" is not mentioned exclusively for humans, but could include God and the Earth.
5. I John 1:7. This last passage talks of the "walking in the light". The "light" is Christ, and when we walk with Christ, others in the Christian community walk in fellowship with us.

5. Wild - Dependency, Depravity, and Destiny IV

- I. Description: Discuss the various meanings of the word "wild" to discover its various implications. C
- II. Appropriate for: Older youth and adults
- III. Biblical Texts: Isaiah 5 and Psalm 39
- IV. Materials: Bibles, pencils, paper
- V. Process:
 - A. Introduce the various definitions of "wild." (Cf. Background Paper, pp. 21-26).
 1. Wilderness
 2. Human arrogance
 3. No control of destiny
 - B. Read Isaiah 5:1-30 (TEV is easier to understand).
 1. Ask two people to read.
 - a. One person reads portions with quotation marks.
 - b. Second person reads portions without quotation marks.
 2. Divide the group into three subgroups with each subgroup given the responsibility to listen to the text looking for apt descriptions of one of the definitions of the word "wild."
 - a. Give each subgroup one of the definitions and be sure the definition is understood.
 - b. Provide paper and pencil so the participants can check a phrase or a verse they feel is appropriate.
 3. It may be necessary to read the text several times.
 - C. Give subgroups an opportunity to discuss their findings with each other.
 - D. Have subgroups share their findings with the entire group.
 1. There are no right and wrong answers.
 2. It is important to discuss the various facets of the word "wild."
 - a. Wild as wilderness may not appear to the participants. Wilderness in the Bible tends to be a rejected, desolate, barren area. It does not refer to a balanced non-human ecosystem.
 - b. Try to draw the conclusion that "wild" is an apt word because it speaks of:
 - + God's graceful creating and sustaining
 - + Humanity's depravity
 - + The future as being in the hands of someone else.
 - E. Pick up the last point.
 1. Read Psalm 39.
 2. Do the people of faith look to the future and anticipate controlling it in some way?
 3. Or do the people of faith look to the future and put their hope in God?

4. Humanity has a choice:
 - a. Pass the present on to those in the future.
 - b. Destroy the future, bring death to birth and to death.
5. This can create quite a lively discussion.

C. WORSHIP AND DEVOTIONAL EXPERIENCES

1. "Sermon on the Dump" I B

- I. Description: Ask the question "Whose garden is this?"
- II. Appropriate for: All
- III. Biblical Text: Psalm 121
- IV. Materials: Trash heap, Bible, song sheet
- V. Process:
 - A. Go to an old trash heap. If not available, sit in a circle around a trash can and then dump the trash on the ground.
 - B. Have the group dig around in the trash, feeling it, smelling it, and seeing it. Have them sort out the trash (like on the shelves of a super-market) by color, touch, and/or function (of its "pre-trash" state). Determine for what purpose the trash has been used. Do this for 5-15 minutes.
 - C. Read Psalm 121. Briefly talk about what this Psalm is saying in this context:
 - 1. Is this God's earth or ours?
 - 2. What does the trash say?
 - 3. What does the Psalmist say?
 - D. Pray
 - E. Sing

2. Water Confession and Absolution ("... and the Spirit of God was moving over the face of the waters") IV B

- I. Description: How we deserve God's wrath rather than God's love
- II. Appropriate for: Older youth
- III. Biblical Texts: Genesis 7:17-23; Exodus 14:21-29; Matthew 14:28-33
- IV. Materials: Bibles, response sheets for participants
- V. Process:
 - Reader 1: Genesis 7:17-23
 - Group: We have made a mess of our lives. We deserve to drown.
 - Reader 2: Exodus 14:21-29
 - Group: We chase after the wrong things. We deserve to drown.
 - Reader 3: Matthew 14:28-33
 - Group: We are people of little faith. We deserve to drown.
 - Leader: God sends rainbows to follow floods.
He provides dry paths amid raging torrents.
All things work together to God's Glory.
He bids us to walk on water.
In spite of ourselves.
God has named us as His daughters and sons
in our baptismal bath and dried in the light of
His Son who changes water into wine,
wine into blood,
blood into forgiveness,
and forgiveness into life!

VI. Source: Creative Worship

3. Hole Confession IV B

- I. Description: An experience of Confession
- II. Appropriate for: All ages
- III. Biblical Text: Psalm 51
- IV. Materials: Scrap paper, pencils, articles of trash, shovel
- V. Process:
 - A. Dig a hole in the forest about 1' deep. Save the top soil and the top layer of debris and plants in the order they are found.

- B. Have the participants bring an article or two of trash. Have them label how the trash represents their own personal mistreatment of the environment. Tape the label to the trash. Do this in silence.
- C. Have the articles of trash passed around so each label can be read individually.
- D. Each participant should place (not throw) his/her article into the hole. Continue in silence.
- E. Once all the articles are in the hole, each participant can take a shovel of dirt and put it in the hole, then reassemble the topsoil and top plants and debris. Do this in silence.
- F. Ask the participants how this represents God's forgiveness of our mistreatments. Let them discuss this until they begin to lose interest.
- G. Read Psalm 51 and comment.
- H. Close with a song and/or prayer.

VI. Variations: Instead of a hole in the forest, have the participants write their "confession" on a piece of paper and throw it into a fire. No trash articles need be used.

IV B 4. Group Prayer - Day 4

- I. Description: Step four in the process of developing a prayer style.
- II. Appropriate for: All ages
- III. Process:
 - A. Take a few moments for the participants to prepare themselves for prayer.
 - B. Ask each one in the group to develop a sentence of prayer.
 - C. The leader begins the prayer.
 - D. Have each person say their sentence.
- IV. Variations: Have the group hold hands. When one person is finished, they squeeze the hand of the person to their right, indicating that that person can start his/her prayer sentence.

IV C 5. Sour Grapes

- I. Description: A lively experience sitting among bramble to talk about sinful behavior
- II. Appropriate for: All ages
- III. Bible Texts: Isaiah 5:1-7, Malachi 2:10
- IV. Materials: none
- V. Process:
 - A. Select a location with a moderate amount of bramble.
 - 1. Gather the assembly in that place.
 - 2. Each person finds a place to sit.
 - 3. Be careful so no one gets hurt, but do not be afraid of being uncomfortable.
 - B. Read Isaiah 5:1-7 from the Jerusalem Bible

Let me sing to my friend
the song of his love for his vineyard.

My friend had a vineyard
on a fertile hillside.
He dug the soil, cleared it of stones,
and planted choice vines in it.
In the middle he built a tower,
he dug a press there too.
He expected it to yield grapes,
but sour grapes were all that it gave.

And now, inhabitants of Jerusalem
and men of Judah
I ask you to judge
between my vineyard and me.

What could I have done for my vineyard
that I have not done?
I expected it to yield grapes.
Why did it yield sour grapes instead?

Very well, I will tell you
what I am going to do to my vineyard:
I will take away its hedge for it to be grazed on,
and knock down its wall for it to be trampled on.
I will lay it waste, unpruned, undug;
overgrown by the briar and the thorn.
I will command the clouds
to rain no rain on it.
Yes, the vineyard of Yahweh Sabaoth
is the House of Israel,
and the men of Judah
that chosen plant.
He expected justice, but found bloodshed,
integrity, but only a cry of distress.

C. Homily

1. Note the similarity to the Garden of Eden story
2. The sinful world appears as sour grapes
3. What are the sour grapes?
 - a. God planted justice, but there is bloodshed
 - b. God planted integrity (i.e. wholeness, community), but there is distress.
4. Is God angry about what happened?
 - a. The parable says that he knocks down the fence and lets the animals wander in and chew up the field and trample it.
 - b. Briars are allowed to grow into the vineyard.

D. Prayer of admission of misdeeds

1. Give examples of sour grapes - the way humans mistreat the environment
2. After each example repeat the following words from Malachi 2:10 (group or several individuals)

"Have we not all one Father.
Did not one God create us?
Why then do we break faith with one another and hate the covenant made
with all creation?"

E. Benediction

Repeat Luther's words: God protects us in times of danger and guards us
from every evil . . . though we do not deserve it."

F. Lead the group out of the bramble and go to a very comfortable grassy
place.

1. Sing songs
2. Prayers
 - a. of thanks for God's attitude of forgiveness
 - b. of commitment to change over our lives to be more responsible

E. ENVIRONMENTAL LEARNING EXPERIENCES

1. Oil Spill

I. Description: Estimate the environmental impact of a simulated oil spill

II. Appropriate for: Grades 4-12, Families (intergenerational)

III. Materials: "Popcorn slinger" (a plastic bag), 20 liters of pop corn,
Impact Challenge Cards for each buddy team

IV. Process:

A. Preparation

Make up the following cards.

Card 1 Landscape

Follow the spill and estimate its impact on the landscape. Use a 25-meter length of twine to measure the area the spill covered.

Estimates: Water _____ sq. meters (length times width)
Land _____ sq. meters

Where did most of the popcorn end up? why? How might the underwater landscape be affected? How did the spill change the general appearance of the landscape?

Card 2 Plant Life

Follow the spill and estimate its impact on plant life. How many different types of plants were affected? Which plants were hardest hit by the spill? why? How might an oil spill affect land plants? How would animals that eat aquatic plants be affected?

Card 3 Animal Life

Follow the spill and estimate the impact of the spill on the animal life.
How many different types of animals were covered with oil? Which animals were hardest hit by the spill? Why? Which animals do you think would be capable of escaping from a spill? Which animals might not be able to escape? How might an oil spill affect animals that live under rocks in the water?

Card 4 Human Activities

Follow the spill and estimate its impact on human activities. How might an oil spill affect fishing and other recreation activities such as swimming, water skiing, surfing, diving, etc? How might boats, docks, breakwaters, and other water structures be affected? How might drinking water or food be affected by an oil spill.

B. Action

1. Find a water site with wind and/or current.
2. At the activity site, quickly outline the activity to the participants. Explain to your group of "environmental impact experts" that they are responsible for estimating the impact of the spill on
 - a. the landscape
 - b. the plant life
 - c. the animal life, and
 - d. human activity.
3. Divide the group into buddy teams and assign one or two teams to each of the above areas by handing out Impact Challenge Cards. Remind the teams to work on the assumption that anything the popcorn ("oil")

touches will be covered with oil.

4. Before you toss out the popcorn, ask the teams to predict in which direction the spill will move and how long it will take to reach the shore. Select a buddy team with a watch to measure the time it takes for the spill to reach the shore and other reference points (i.e., dock).
5. Toss out the popcorn and let your environmental experts begin their impact investigations.
6. Join in and follow the movement of the spill with the rest of the group.
7. When the commotion has died down and the spill has been dispersed, gather the teams together to report their impact findings on the landscape, the plant life, the animal life, and human activities. Have the group consider some or all of these questions:
 - a. How quickly did the spill reach the shore?
 - b. What agents dispersed the spill? (wind, current, etc.)
 - c. How might different wind or water conditions affect the spill?
 - d. How could an oil spill be prevented from spreading?
 - e. How could an oil spill be prevented from happening in the first place?
 - f. What about toxic wastes?
 - g. Who should be responsible for cleaning up the spill and for correcting the damages?

V. Variations:

Instead of throwing the popcorn from the shore, have the spill happen from a "canoe tanker". Maybe the more proficient canoeists could try to control the popcorn from canoes.

VI. Source: OBIS

IV e 2. Deadly Links

- I. Description: Participants begin to recognize the consequences of accumulation of some pesticides in the environment.
- II. Appropriate for: All ages
- III. Materials: 20 white pipe cleaners and 10 colored pipe cleaners (2/3 white, 1/3 colored) per person OR white paper dots and colored paper dots, 1 paper bag per grasshopper
- IV. Process:
 - A. Tell the participants that this is an activity about "food chains."
 - B. Divide the participants into three groups: hawks, shrews, and grasshoppers. Work with approximately three times as many shrews as hawks, and three times as many grasshoppers as shrews. Put identification of some kind on each group.
 - C. Give each grasshopper a small paper bag. The container is their stomach.
 - D. Distribute the "food," i.e., the paper dots or pipe cleaners around a large open space while the participants are not watching.
 - E. Give these instructions:
 1. The grasshoppers go looking for food first. The hawks and shrews watch quietly on the sidelines.
 2. At a given signal, about 30 seconds into the activity, the grasshoppers are to stop.
 3. The shrews are now allowed to hunt the grasshoppers. The hawks sit on the sideline watching. Allow just enough time to elapse. When a grasshopper is tagged by a shrew the grasshopper gives up the bag to the shrew and then sits on the sidelines.
 4. The hawks are now allowed to hunt for food. Shrews can continue to hunt for grasshoppers that are alive. The hawks hunt for the shrews. When a hawk catches a shrew the hawk gets the bag.

- F. Gather the group together when the activity is over.
1. What animals survived? Which ones died?
 2. Ask hawks to empty their food bags onto the ground. Count the number of white food pieces and the number of multi-colored food pieces. Do the same for the grasshoppers and the shrews, if any survived.
 3. Inform the participants that there is something called a "pesticide" in the environment. It was sprayed onto the crops the grasshoppers were eating. Farmers do this to protect their crops from failure by grasshoppers eating them. This particular pesticide is one that is poisonous, accumulates in the food chain, and stays in the environment for a long time. This is what the multi-colored food pieces represent.
 4. Of the grasshoppers remaining, if they have any multi-colored food pieces in their bag they are considered dead. If any living shrews have half or more of their food supply in multi-colored pieces they are also dead. The hawk with the highest number of multi-colored food pieces will not die at this time. The eggs that this hawk participates in producing will not hatch successfully. The other hawks are not affected at this time.
- G. Discuss:
1. Consider the possible reasons for use of such chemicals. Where are some of the trade-offs? What are some of the consequences?
 2. What are some possible alternatives to the use of chemicals? Organic techniques? Biological controls (e.g., predatory insects)? Genetic approaches (e.g., sterile male insects that pester the other insects)?
- V. Source: Project WILD - Elementary, p. 197; Project WILD - Secondary, p. 123.

3. A Hike with Rumbles

- I. Description: Noise pollution.
- II. Appropriate for: All ages
- III. Materials: None
- IV. Process:
 - A. Take the participants on a quiet (no-talking hike) away from the human sounds made by others at camp. Have the participants listen for all the different sounds they hear. Count the different sounds.
 - B. Mid-way along the hike, gather the participants and have them say how many different sounds they heard. Then start hiking again, but this time have the participants try to figure out what the sounds are from. If they don't know, have them make up a name for the sound's source.
 - C. Near the end of the hike, gather the group again and talk about what they thought they heard. How many sounds were caused by people? What were those sounds? How does it/doesn't it sound like a town?
 - D. Then ask the participants to be completely quiet and to imagine what it would sound like without human/machine sounds. What would it feel like? Would the animals prefer it that way?
 - E. Discussion may follow for the remainder of the hike on how humans even pollute the environment with noise.

4. Trail Impact Study

- I. Description: The participants take several "tests" of a trail to determine the impact the trail has had on its environment.
- II. Appropriate for: Grades 7-12, Adults
- III. Source: OBIS

5. Barefoot Trail

- I. Description: A sensory experience
- II. Appropriate for: All ages
- III. Materials: none

IV
E

IV. Process:

- A. Find a 50' to 100' trail which is free of hazards to the bare foot and one that will provide several sensory experiences (hard, soft, muddy, grassy, etc.)
- B. Take the participants on a barefoot walk along the designated "Barefoot Trail" and have them observe the various sensual sensations. See if they can walk without disturbing anything, or walk without making a sound, etc.

IV E 6. What Did Your Lunch Cost Wildlife?

I. Description: Participants trace their food sources and apply the knowledge they gain by making changes in some of their consumer choices.

II. Appropriate for: All ages

E III. Source: Project WILD - Elementary, p. 215; Project WILD - Secondary, p. 203.

IV 7. Ethni-Thinking

I. Description: Participants list activities that might be harmful to wild plants and animals.

U II. Appropriate for: Grades 4-8, Families (intergenerational)

III. Source: Project WILD - Elementary, p. 209; Project WILD - Secondary, p. 193.

IV 8. Micro Parks

I. Description: A method for close study of a piece of the environment

II. Appropriate for: Grades 4-7, Families (intergenerational)

III. Materials: 20' of string for each group of 2, and/or 400' of twine, 20 toothpicks for each sub-group, 1 hand lens for each sub-group (2 would be ideal)

IV. Process:

- A. Introduce the activity verbally as you proceed into the designated area: "We have just stumbled into the Gnome National Park. It is the site for many new park areas soon to be opened. These park areas, however, do not have colossal size attractions like the Grand Canyon. This park has features that are so small that they can only be seen by Gnomes."
 - B. Point out that if the participant is not looking they might step on one of these Gnomes' treasures, destroying it forever.
 - C. The leader then outlines the guidelines for the construction of the park areas. Divide the group into subgroups of 2 who are a team for a particular area of the Park.
 1. String is used to mark the park perimeter. A variation might be to outline the boundry of the park with the twine and designate an area for a team to work on, they can then take their string pieces to be laid out as trails between the toothpicks.
 2. The toothpicks are to indicate points of interest that the participants will be stopping at during a guided tour.
 3. Each group member will take a turn at conducting a tour of their area, while the other member of the subgroup will visit another area and get a tour. A description of the tour should be determined by both group members before visiting time commences.
 4. Participants then imagine themselves as Gnomes, and begin constructing a trail in their park area. The leader should stress that the park remain in its natural condition, i.e., not to introduce hotels, souvenir shops, etc., and minimal alteration of the natural resources.
 - D. Allow about 30 minutes for the development of the different areas.
 - E. When completed allow 3-5 minute periods for group members to take turns visiting other areas, rotating the Park Guide each time.
 - F. Conclude the activity by bringing the entire group back together and having everyone return to "normal size".
- V. Source: Adapted from source: Sunship Earth, p. 192.

9. Million-Year-Old Picnic

I. Description: A demonstration that many materials are non-biodegradable and will persist in the environment for many years.

II. Appropriate for: All ages

III. Source: The Nature Specialist, Miller, p. 50.

10. Out of Control

I. Description: Release a portion of lawn from human control and observe changes

II. Appropriate for: All ages

III. Source: OBIS

11. Sensory Hi-Lo Hunt

I. Description: Using only senses find the highest and lowest values for several physical factors on the site.

II. Appropriate for: Youth

III. Source: OBIS

12. Too Many Mosquitoes

I. Description: Find animals that eat mosquito wigglers

II. Appropriate for: Youth

III. Source: OBIS

I
E

F. ARTS & CRAFTS LEARNING EXPERIENCES

1. Litter We Know

- I. Description: Create a collage of litter.
- II. Appropriate for: Grades 4-7, Families (intergenerational)
- III. Materials: Large sheets of newsprint or butcher paper for mounting litter collages, glue, litter collected by participants
- IV. Process:
The participants collect and evaluate litter, then make it into collages.
- V. Source: Project WILD - Elementary, p. 51.

IV
G

2. Feet Paintings

- I. Description: Footprint fun.
- II. Appropriate for: All ages, families
- III. Materials: Large sheets of paper, water-base (tempera) paint, water basin for washing feet
- IV. Process:
The participants paint a picture with their feet.

IV
G

3. Nature Weaving

- I. Description: Create a hanging with natural objects
- II. Appropriate for: All ages
- III. Source: The Nature Specialist, p. 51.

4. Quill Pens

G. GAME & SPORT LEARNING EXPERIENCES

1. King/Queen of the Mountain

- I. Description: Experience what it means to push oneself to the top.
 II. Appropriate for: Grades 4-12
 III. Materials: None
 IV. Process:

- A. Use the traditional rules of this game.
 B. After the game is finished, process what happened. Who "won"? Was there really a "winner"? How did people fall down? Get hurt? Did some people never get to be the king or the queen? Why? How did they feel playing this game when they started? How did their feelings change as the game progressed?
 C. Practice safety.

IV
F

2. Splash Hike

- I. Description: A water and mud experience.
 II. Appropriate for: Grades 4-12, Adventurous Adults and Families
 III. Materials: Creek-walking shoes, Get-wet-in-the-creek clothes
 IV. Process:

- A. The leader steps into the water and instructs the group to "follow the leader". Everything the leader does is copied by the followers.
 B. After a few minutes of hiking, the leader falls to the back of the line to let a new leader take over.
 C. The hike can be as long or short as time allows and interest prevails. It is fun to walk back to "home base" in the water rather than by land. Try walking backwards!
 D. Some "follow the leader" ideas:
 * sit down on a stone
 * play leap frog
 * build a small castle of mud
 * stop, take off one shoe, empty water from it, and put it on again
 * try to gently catch a frog or water spider
 * hop on one foot
 * jump from one stone/log to another (be careful of slippery surfaces!)
 * crouch so that all of you is underwater (except your head!)
 * float on your back downstream (don't do with non-floaters!)
 E. On the way back to "home base" have the participants see if they can find evidence of any damage they have done to the creek and its habitats. Talk about what they have done. Point out that "having fun" can sometimes be damaging to the environment and that heed should be taken to what is done where. Use this extension with Bible study III.

- V. Source: Clouds on the Clothesline, p. 54.

IV
F

3. Dumping Ground

- I. Description: Putting garbage on others.
 II. Appropriate for: Grades 4-9, 10-30 participants
 III. Materials: Bean bags, hacky-sacks, or garbage bags filled with crumpled paper (only!) and tied so that it won't come out, two large lengths of rope placed in two circles 50' apart

IV. Process:

- A. Divide the group into two equal teams and have them stand in straight lines, facing each other, behind their circles.
 B. An equal number of bean bags are placed in each team's circle.
 C. On "Go" both teams run forward. Each player can take 1 bean bag at a time from his/her circle and put it in the opposing team's circle. Players run back and forth continuing to empty bean bags into the opponents' circle.
 D. When the leader calls "Stop" the team having the least number of bean bags in its circle wins.

IV
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V. Source: Clouds on the Clothesline, p. 109.

IV
F
4. Playing Lightly on the Earth

I. Description: The participants a) look for evidence of games that harm the environment that they have played and b) then try to invent and play games with a benign effect on the environment. See the source for details.

II. Appropriate for: Grades 4-9

III. Source: Project WILD - Elementary, p. 211.

III
F
5. Take An Environmental Step

I. Description: A fun way to help participants think about environmentally sound and unsound actions.

II. Appropriate for: Grades 9-12, adults and seniors, minimum of 4 players

III. Source: Clouds on the Clothesline, pp. 36-40.

SESSION V

Theme: Free

Intentions

- Celebrate the freedom of the Christian life to:
- a. Live as co-creators with God
 - b. Share in the "Birth of the Earth"
 - c. Act justly, kindly, lovingly, and responsibly, and
 - d. Exist with a world in which we have no control and do not need to control.

Catechism

Therefore I surely ought to thank and praise, serve and obey him.

Scripture

Psalm 72
 Psalm 73
 Psalm 104
 Psalm 121
 Isaiah 11:1-9
 Isaiah 49:7-26
 Jeremiah 31:20 ff
 Hosea 21:4-23
 Micah 4:1-4, 6:1-8
 Zechariah 8:9-12
 Mark 1:29-34
 Mark 1:40-45
 Mark 2:1-12
 Mark 4:35-41
 Mark 5:1-20
 Mark 6:30-44
 Mark 9:14-19
 Luke 1:67-79
 Luke 16:16-31
 II Corinthians 5:17-21
 Ephesians 1:3-14
 Ephesians 4:1-32
 Ephesians 5:1-
 Colossians 1:15-20
 Philippians 3:17-21

B. BIBLE STUDIES

1. Story of Lazarus - Indifference

- I. Description: The eternal significance of indifference to human need.
- II. Appropriate for: Youth and Adults
- III. Biblical Text: Luke 16:19-31
- IV. Materials: 8-1/2 x 11 paper, pencils, Bibles
- V. Process:
 - A. Give each participant a piece of paper and pencil. Holding the pencil sideways make three large columns.
 1. At the head of each column put:
 - a. Things I care about
 - b. Things I do not care about
 - c. Things I should care about, but do not.
 2. Ask participants to list 10 different items.
 3. Share list in dyads.
 4. Each dyad pick the three most "serious" in each category.
 - B. Participants share their choices and the leader lists them on newsprint.
 1. Review the list.
 2. Are there items on the list that are of little or no consequence?
 3. Are there items that have serious impact on others?
 4. If the list is frivolous the leader can add some things observed during the session.
 - C. Indifference - Help the group to:
 1. Define it
 2. Give examples of it
 - a. During the session
 - b. In the back home situations
 - D. Discuss: Does it matter if one is indifferent?
 - E. Read Luke 16:19-31
 1. Participants recreate the story. Be as dramatic as possible. (If you wish you could rewrite the story using contemporary images.)
 2. Note that there are two parts to the story.
 - a. One happens before death - vss. 19-21
 - b. The other happens after death - vss. 22-31
 3. What was the Rich Man's problem? (He was indifferent to Lazarus's problem.)
 4. Does indifference mean one does nothing? (According to the passage only a very little is done. Enough to get by?)
 5. List the things the Rich Man was indifferent to:
 - a. Lazarus and his plight
 - b. Teachings of God (the Law of Moses)
 - c. The Words from God, God's Speech (the Prophets)
 - F. How do the participants apply this story to their lives?
 - G. Follow this with another study below that encourages the participants to act responsibly.

2. Jesus, the Re-Con-Cycler

- I. Description: Identify Jesus Christ as the one who makes life new.
- II. Appropriate for: Older Youth and Adults
- III. Biblical Texts: Colossians 1:15-20; Genesis 1:27; Mark 4:35-41; II Corinthians 5:17-21
- IV. Materials: Bibles, newsprint sheet and marker for leader
- V. Process:
 - A. Write the word "Reconcycler" in big letters on the newsprint. Ask the participants to break down the word. Let the participants play with the parts of the word.
 - B. Have the participants define the words "recycling" and "reconciling". How are these ideas similar? Dissimilar?

- C. Now ask the participants what recycling and reconciling have to do with Christ. Read Colossians 1:15-20 to find out who Jesus is according to Paul. Pay special attention to vs. 20. God decided to reconcile ("to bring ... back to Himself"; "made peace" - TEV) all things to Himself and to each other.
- D. Turn to Genesis 1:27 and have participants compare it to Colossians 1:15-20. Ask participants what image of God means to Christians. Guide them to understand that being in the "image of God" is to be an imitator of Christ. Luther puts it, "Little Christs".
- E. Read Mark 4:35-41
1. What authority and power does Jesus have?
 2. Can the participants think of other stories that demonstrate Jesus' power and authority? (Healings of all kinds.)
 3. Reconciling is the process of healing (the mending of broken relationships).
- F. Read Corinthians 5:17-21 and answer the question: What is expected of us?
- VI. Variations: This study experience could be followed by some reconciling action or project, such as a site clean-up or the beginning of an environmental improvement project like trail erosion control.

3. Restoring It All

- I. Description: A vision of peace and a description of the Messiah.
- II. Appropriate for: Grades 4-7, Families with younger children, Adults, Seniors
- III. Biblical Text: Isaiah 11:1-9
- IV. Materials: Bible for leader, paper and pencils
- V. Process:
 - A. Play a predator/prey game. (Cf V G 2)
 - B. Introduce Bible passage by saying that the people of the Old Testament lived in bondage to their enemies at various times and looked forward to a major event when they would be set free. This passage is one of many Messianic passages.
 1. Read Isaiah 11:1-9
 2. Participants listen and take note of
 - a. What this person is like
 - b. What this person will do
 - C. Focus on
 1. What does "peace" mean?
 2. The animals that are "naturally" enemies being friends--what does this do to the food chain?

4. God's Shalom Trademarks

- I. Description: Discuss the meaning of peace and the responsibility to distribute it.
- II. Appropriate for: All ages
- III. Biblical Text: Zechariah 8:9-12 (Use RSV only)
- IV. Materials: Bibles for all, newsprint and marker, large sheets of drawing paper for Grades 4-6, many crayons for Grades 4-6
- V. Process:
 - A. Explain the meaning of Shalom. This is the Hebrew word that is most often translated "peace" in English. (Keep in mind that "peace" is not an adequately complete translation; this study will expand the meaning of Shalom.) Ask participants to talk about what peace means to them. Write down their ideas on newsprint.
 - B. Now explore peace in God's plans. Ask the participants to read Zechariah 8:9-12. Before reading, explain that the passage was written after the Exile. (You may have to briefly explain the Exile, too.) The people had returned to rebuild Jerusalem and were at work on their major effort, the restoration of the Temple. The foundations of the new Temple were finished (vs. 9), and the rest of the building was under construction. These

were busy people. For all practical purposes, they were like pioneers settling a new land. They had to establish farms, set up businesses, and construct houses. With the time left in their busy schedules they were compelled to rebuild the Temple.

- C. Ask the participants why they think such a statement is necessary? (Could it be that as people got so busy with their tasks they forgot how to live with one another and ultimately what they were symbolizing in their building.)
 - D. Introduce the idea that peace means "the restoring of relationships.," not simply the absence of war.
 1. How does this definition apply to people situations?
 2. How does this apply to the way we treat our world?
 - E. Continue by expanding the meaning of Shalom. Focus on vs. 11. Help them see how Shalom is a part of God's hope for His people and Earth. Shalom includes an abundant Earth, an Earth that is able to provide for its inhabitants because it is "in balance".
 1. With older participants you can ask them to explore what makes for an Earth "in balance". Guide them to see that the components of a habitat and then the habitats in an ecosystem must balance in order for the sound continuation of that habitat or ecosystem - and all the living things within it, including people.
 2. Grade 7 - Adults can check Isaian 35 for another sample of creation
 - F. The imagery is one of sowing. (Do several activities.)
 1. Do a seed dispersal activity.
 2. Discuss what humans do to sow seeds.
 3. Pretend to be a seed and root fingers in the ground.
 - G. Can participants think of situations where they personally can sow peace?
 1. Name some opportunities
 2. What must be done to "cultivate" the situation?
 3. What does one do to sow peace?
 - H. Close with participants making a commitment to take one action.
5. Walking Humbly/Treading Softly
- I. Description: How to act respecting the environment
 - II. Appropriate for: Older Youth and Adults
 - III. Biblical Texts: Micah 4:1-4, 6:1-8
 - IV. Materials: Bible, newsprint, marker may help the leader
 - V. Process:
 - A. Introduce the setting for the above passage. There are many people in the Old Testament called "prophets", who spoke to the Jewish people on God's behalf to tell them what God expects of them. Research the historical setting of Micah to make this introduction more exciting.
 - B. Read Micah 4:1-4. Be aware that the temple stands in Jerusalem. Try to express the "feeling" of the passage's meaning.
 1. Vs. 1 - Have people had visions of one place on earth where people would gather to solve problems? Is there such a place that participants could imagine?
 2. Vs. 2 - Who decides the kind of "paths" (direction people go with their lives) people take today? How does God show us His path(s)?
 3. Vs. 3 - The imagery here is primitive. Wars were fought with swords and spears. What weapons are used today? Into what could these weapons be shaped?
 4. Vs. 4 - The imagery here again reflects the time of Micah - vineyards and fig trees. In our time what would the peaceful habitat look like? Would there be one kind or several types of peaceful habitats?
 5. If you have time and interest you can read all of Micah, but suffice it to say that Micah's wish of peace is a hope. The reality is that this goal is no where near being achieved or sought for. Sin prevails.
 - a. Ask the participants: "Does this mean give up?"

- b. "How are people to live?"
- C. Look at 6:8, but first read 6:1-7. Talk about what God expects of His people. (At some point use the words of the RSV, "... walk humbly with your God.") Consider the following issues/questions:
1. What is just? Justice? (Fairness for all. Human and nonhuman?)
 2. What is constant love? (Unconditional. No strings attached?)
 3. How do you "walk humbly"? (Respect/maintain a habitat/ecosystem)
 4. What is humility? (Lifting others up)
- D. Pick an activity that relates to the concepts such as "Playing Lightly on the Earth" or "What Did Your Lunch Cost Wildlife?" Then process the Christian perspective to that activity.
- E. Another activity would be to have each person find an object and make a weapon - something that would in fact inflict a wound, maim, or destroy. They should bring it back to the group and describe it and what it could do. Then ask them to reshape the weapon into something useful to communities of people or/and habitats. (Watch carefully: the reshaped weapon the participants make may only be something useful to satisfy a person's greed.)

6. Marks of Commitment

- I. Description: A process to help the participants plan to do something for the good of others at home.
- II. Appropriate for: Grade 8 and older.
- III. Biblical Text: Psalm 72:1-8
- IV. Materials: Bibles, feather quill pens, ink for the pens, sheets of paper (good quality) for each person, paper, pencils, newsprint and marker (may be helpful for some leaders)
- V. Process:
- A. Review with the participants the reasons for them to do "Shalom-living" by recalling their discussions and activities during the event. Let them give their reasons why. Write down their ideas on newsprint. (For Grade 8 - Adult: Go a step further with this age bracket. Ask them to arrange these reasons into three categories: reasons which reflect our responses to God's love; reasons which bring benefit to others in the world; and reasons which will bring benefit to ourselves. Several of their ideas may fall into one category. If one category seems skimpy, work on it with special effort.)
1. Read Psalm 72:1-8.
 - a. vs. 1
 - + What is the Psalmist asking God to do?
 - + What is meant by God's justice and righteousness?
 - b. vs. 2
 - + For what is the king to use God's justice and righteousness?
 - c. vs. 3
 - + what are the mountains and hills to provide?
 - d. vs. 4
 - + What types of people are the concern of the King?
 - + What is he to do for them?
 - + What is it to do to the enemy?
 - e. vss. 6-8
 - + What is the Psalmist's wish for the earthly king? What do vss. 6-8 mean?
 2. Make note of the fact that the Psalmist wants the king to have some of the characteristics of God
 - a. Is it possible to think that we are like nobility and that the Psalmist is talking about us?
 - b. We too can be co-creators?
- B. What are we to do?
1. What does the Psalmist say?

2. Work on a list of very specific things the group can do at home that will reflect care for the Earth and its peoples. These things can include: natural resource conservation, caring about the equal distribution of God's earthly resources, and considering the poor. Begin by brainstorming. Then refine the list by focusing on actions and ideas which participants can realistically complete if they have the commitment. These might include:

- walking instead of driving
- turning off lights
- skipping useless snacks and donating the money to the hungry
- studying more on hunger and justice issues
- writing to governmental representatives
- planting a prairie on a vacant lot
- volunteering time in their nearby wildlife/forest preserve

- C. Write a Psalm of Commitment. Having developed a list of good actions make a commitment as a group of Christians to pursue that style of life at home.

1. Ask the group to write their commitment in the style of a psalm. Most people will need guidance with this style format.
2. Remember a Psalm form states a thought and then repeats (or contrasts) it in another statement, e.g.:

Make us aware of your justice, O Lord, $\frac{1}{4}$ first thought ϕ
And open our eyes to the world around us.

$\frac{1}{4}$ expansion of the thought ϕ

Let our baptismal waters nourish the parched ground

$\frac{1}{4}$ second thought ϕ

And our commitment to You fill our lives with concern.

$\frac{1}{4}$ expanded ϕ

Have the group write this on scrap paper until they come up with a common final draft.

3. Now have each participant make a final copy of their personal psalm with feather-quill pen. They can all sign each others' copy. Use the good quality paper.

- VI. Variations: The Psalms of Commitment that the participants write could be used for at a special festival.

7. Shalom-Affected Creation.

I. Description: A review of how God touches creation.

II. Appropriate for: All ages, Families (intergenerational), Adults, Seniors

III. Biblical Text: Psalm 104:24-32

IV. Materials: Bibles (same translation if possible), 20' of string for each two participants, hand lens for each two campers, 20 toothpicks for each two participants, scrap paper or journals, pencils

V. Process:

- A. Hopefully the participants will already be familiar with Psalm 104 from previous Bible studies.
- B. Hike to an area that is wooded and isolated from the commotion of the central part of camp.
- C. Ask the participants to read the passage and put in their own words what the Psalmist is saying about how God affects His Creation. Some possible ideas are:
 1. Creatures depend on God to feed them
 2. Creatures fear if God turns away
 3. He gives and takes away air
 4. He gives new life
 5. He looks at the Earth, and it shakes
 6. He touches the mountains, and they smoke.
- D. Discuss how these various things have been experienced during the week.

8. Creation Together

- I. Description: A vision of God's ultimate plan
- II. Appropriate for: Grades 9-12, Adults, Seniors
- III. Biblical Text: Ephesians 1:3-14 (RSV best)
- IV. Materials: Bibles
- V. Process:

- A. Ask the participants to identify in the passage all the things God has done for us. Some possible answers are:
 - 1. Blessed with every Spiritual blessing
 - 2. Chosen us to be His children before the world was made
 - 3. Chosen to be holy and blameless before Him
 - 4. In Christ He has set us free (sins are forgiven)
 - 5. Made known to us His secret plan
 - 6. We are chosen to be His people in unison with Christ
 - 7. God put His stamp of ownership on us by giving the Holy Spirit
- B. Introduce the two key points about this passage. Take only a minute or two to do so.
 - 1. Vss. 9 & 10 - God's secret plan? (To bring all Creation together.) How will this happen? (Noting from the earlier portion of the passage, it is done in Christ.)
 - 2. Vs. 4 - Where do people fit in? (God chooses us - Christians - to be in "union" with Christ and therefore work to restore all Creation to union with Christ.)
- C. Have the participants think out loud about this question: "If God's plan is to bring all Creation together and that we participate in this activity with Christ, what then are we to do?" They can talk about various concerns, especially the protection or restoration of habitats for the good of the world. Continue delving into this issue by having the participants give some examples of how can they (and why they should) be active in restoring habitats. Remember their ideas for use later.
- D. Once a list is generated ask the participants to look at vss. 13 & 14.
 - 1. What has happened to Christians that can give them the assurance they are on the right track?
 - 2. The answer is that Christians hear the word of truth and are sealed with the Holy Spirit.
- E. In order for people to have commitment to something, they must "trust" in it. Often that trust is so strong that people will risk what is commonly considered "safe" and hold to their ideals. This capacity is given to the Christian as a gift of the Holy Spirit. For example, we can "risk" a lifestyle of commitment to God (and from that, caring for the Earth and its habitats) because we will believe that God will care for us without earthly trinkets of fulfillment (see Matt. 6).

C. WORSHIP AND DEVOTIONAL EXPERIENCES

1. Miracle Stories from the Gospel of Mark. IV B

- I. Description: Jesus works within the created order to restore it.
- II. Appropriate for: All ages
- III. Biblical Texts: Mark 1:29-34, 1:40-45, 2:1-12, 4:35-41, 5:1-20, 6:30-44, 9:14-29
- IV. Materials: Bibles, scrap paper, song sheets (if needed), pencils, simple props and costumes (if desired)

V. Process:

- A. Have the participants select several of the miracle stories below to make skits or mimes. Let them use simple props and/or costumes. The stories are from Mark:

1:29-34	5:1-20
1:40-45	6:30-44
2:1-12	9:14-29
4:35-41	

- B. Help the participants prepare their skits in small groups making sure that everyone in the group has an active role.
- C. Choose a location that will best dramatize each skit.
- D. Present the skits.
- E. When the skits are completed, ask the participants: "What/who was ugly/sickly/strange/"crazy"? What did Jesus do when he came across such people or situations? Guide the participants in their responses to recognize that Jesus is in the business of restoring people and the Earth.
- F. Ask the group members to support restored things that need the healing and restoring power of Jesus.
- G. Include these in a prayer.
- H. Sing an appropriate song that deals with healing and restoration.
- I. Close with a benediction.

2. Being restorers use the above passages from Mark and relate contemporary stories of restoration that can motivate the participants. IV B

3. Service of Reconciliation IV B

- I. Description: After living together for a period of time the group may need to work on reconciliation.
- II. Appropriate for: All ages
- III. Biblical Text: Ephesians 4:25-32
- IV. Materials: Bible, paper, song sheets if needed, pencils
- V. Process:
- A. Bring the participants to a quiet, isolated area with no distractions.
- B. Begin with the Invocation.
- C. Sing a few songs, especially those that reflect the need for forgiveness among people because of God's forgiveness.
- D. Talk about what it is like to live closely together especially with people you live with for only a period of time. What are the joys? Sorrows? Good things? Bad things? Frustrations?
- E. Lift up examples of fun things, sad things, good and bad things, frustrations.
- F. Read Ephesians 4:25-32 and apply these verses to the situation.
- G. (At this point you may want to follow the structure below or allow more spontaneous replies. However, be sure to include the words of absolution.)
1. Use a common absolution from the LBW, write your own, or have the participants absolve each other in God's name.
 2. Close with singing "We Are One in the Spirit" or similar song.

III 3
4. "I.D." Devotions

- I. Description: Living in and as the image of God
- II. Appropriate for: All ages, Families, Adults, Seniors
- III. Biblical Text: Colossians 1:15-20
- IV. Materials: Musical instrument(s) if available, some paper, pencils, markers and/or crayons or banner supplies
- V. Process:
 - A. Either you or the participants prepare a song which lifts up the ideas below. (People remember ideas set to music.) It might be helpful to use a common melody.
 - B. Either you or the participants develop an antiphonal reading.
 - C. Have the participants design a symbol for the ideas below. These can be drawn on paper or made into a banner.
 - D. Begin the worship with an appropriate song and a processional with the design.
 - E. Do the antiphonal reading.
 - F. Sing the song they/you wrote.
 - G. Close with a benediction like: Move out into the world in the "Image of God."

IV 3
5. Reflection on St. Francis

- I. Description: Being mirrors of Christ
- II. Appropriate for: All ages, Adults, Families, Seniors
- III. Biblical Texts: Philippians 3:17-21 and Ephesians 5:1-2
- IV. Materials: None
- V. Process:

- A. Open with a song
- B. Read "Francis of Assisi was a Mirror of Christ." (G. K. Chesterton)

Francis of Assisi was poor,
Frail in purse and body,
Slight in physique,
No surplus muscles or strength,
Meager possessions

Plain sandals, rude cloak, rough cowl.
Not much to look at, really.

But no one ever saw him when they looked.
They saw the one he reflected.
He was a Mirror of Christ.

P. S. When people look at me --
I wonder what they see?

- C. Read Philippians 3:17-21
- D. Use a series of mirrors to reflect the sun from one to the other.
- E. Talk about experience
- F. Close with song and prayer

IV 3
6. St. Francis' Prayer for Peace

- I. Description: A service focusing on peace
- II. Appropriate for: All ages
- III. Biblical Text: Luke 1:67-79, especially vs. 79
- IV. Materials: Copies of the Prayer (Lutheran Book of Worship, p. 48).
- V. Process:

Design a devotional experience that lifts up the three basic parts of the prayer:

1. Being instruments of peace -- in nation, community school, home, and out-of-doors (habitats & environment).
2. Acting for other's benefits first

3. Realizing personal fulfillment in serving others

7. St. Francis' "Heart of the Rule and Life of the Friars Minor"

- I. Description: A service based on the rule of the Franciscan Order.
II. Appropriate for: Grades 9-12; Adults; Seniors
III. Biblical Text: Ephesians 4:1-32
IV. Materials: Copy of Rule of St. Francis

This is the Rule and Life of the Friars Minor namely, to observe the Holy Gospel of our Lord Jesus Christ living in obedience, without property, and in chastity.

I warn all the friars and exhort them not to condemn or look down on people whom they see wearing soft or gaudy clothes and enjoying luxuries in food or drink; each one should rather condemn and despise himself.

And this is my advice, my counsel, and my earnest plea to my friars in our Lord Jesus Christ that, when they travel about the world, they should not be quarrelsome or take part in disputes with words or criticize others; but they should be gentle, peaceful, and unassuming, courteous and humble, speaking respectfully to everyone, as is expected of them.

Wherever the friars meet one another, they should show that they are members of the same family. And they should have no hesitation in making known their needs to one another. For if a mother loves and cares for her child in the flesh, a friar should certainly love and care for his spiritual brother all the more tenderly.

And they shall take care not to get angry or disturbed by the sins of others, for anger and trouble of spirit are hindrances to charity in themselves and in others.

With all my heart, I beg the friars in our Lord Jesus Christ to be on guard against pride, boasting, envy, and greed, against the cares and anxieties of this world, against detraction and complaining.

They should realize that the only thing they should desire is to have the spirit of God at work within them, while they pray to him unceasingly with a heart free from self-interest. They must be humble, too, and patient in persecution or illness.

Being always submissive and subject to the Holy Church, and firmly established in the Catholic faith, we may live always according to the poverty, and the humility, and the Gospel of our Lord Jesus Christ, as we have firmly promised.

--From the Rule of St. Francis

8. Group Prayer - Day 5

- I. Description: Group participation in prayer
II. Appropriate for: All ages, Families, Adults, Seniors
III. Process:

Let the Spirit guide the participants in prayer. Let the prayers flow freely from the group without prompting or any gimmicks. Be careful not to "overkill" the directions in getting this community prayer going.

1/3

Chosen by God to Bring Wholeness to the World

- I. Description: A worship that encourages participants to realize that God has chosen them to do something in this world.
- II. Appropriate for: whatever age group you are working with.
- III. Biblical Text: Isaiah 49:1-18
- IV. Materials: None
- V. Ideas for developing a worship based on God's call to Israel
 - A. Note that
 - 1. Israel is chosen from the womb (remember what else this word in Hebrew means?)
 - 2. Israel is to be a light to the nations so that salvation will reach the ends of the earth (does that mean all of creation?)
 - 3. God has not left Israel wanting.
 - B. For the Christian the experience has been a call that reaches into the past.
 - 1. It may be with your parents (for many this is so.)
 - 2. You may have been born into a Christian family.
 - 3. You were baptized.
 - 4. You have experienced God's communicating with you in worship - especially when you hear the proclamation of the Word.
 - 5. God has chosen you.
 - C. The Christian mission is to reach the ends of the earth with salvation. We are responsible for the wholeness, the justice of all living creatures and all creatures who will come to be in the future.
- 9. Design a worship experience that focuses on people being restorers of the world and co-creators with God.

E. ENVIRONMENTAL LEARNING EXPERIENCES

1. Ants

- I. Description: Find out how ants respond to different situations.
- II. Appropriate for: Youth
- III. Source: OBIS

2. Enviro-Ethics

- I. Description: This experience is useful in helping the participants develop their own ethical code for treating the environment. IV E
- II. Appropriate for: Grades 7-12; Adults
- III. Source: Project WILD - Elementary, p. 227; Project WILD - Secondary, p. 41.

G. GAME & SPORT LEARNING EXPERIENCES

1. Diminishing Load

- I. Description: Cooperation Exercise
- II. Appropriate for: Grades 6-12, Families with all-aged children
- III. Materials: None
- IV. Process:
- A. The leader explains the problem. The problem to be solved by the group is to move all members across the field, about 100 yards long, as quickly as possible. To cross the open area, a member must be carried, including the carrier. The only member allowed to walk across the open area is the last member. Those members being carried may not touch the ground.
- B. The leader begins the game and observes what the group does without providing any assistance of any sort. If the participants are really stumped as to how to accomplish this activity, provide them with some hints so that they can have a successful experience.
- V. Source: Initiative Games, p. 19.

2. The Stalker

- I. Description: Predator/Prey Game
- II. Appropriate for: All ages
- III. Materials: Blindfolds for half the group, small stones for half the group, flashlights if variation done
- IV. Process:
- A. Half the group is given blindfolds to wear. These players are placed in scatter formation within the boundaries of the playing area. A stone is placed between their feet but not touching them.
- B. The other half of the group (the ones that can see!) begin to stalk the blindfolded players in an effort to obtain the stone from between their feet. In an attempt to pinpoint a stalker, the blindfolded players may point to a sound. If a stalker is there, the two players switch positions.
- C. Stalkers try to collect as many stones as possible without stealing from other stalkers or physically blocking others.
- V. Variations: Evening - The players protecting the stone between their feet, are given flashlights. When they think they know the location of a stalker, instead of pointing to him/her, they flash the light in the direction from where they hear the noise. Each player is given three separate "flashes" of light before losing his/her stone to the nearest stalker.
- VI. Source: Clouds on the Clothesline, p. 18.

3. Feast

- I. Description: One person feeds another
- II. Appropriate for: Grades 7-12, Adults
- III. Source: Initiative Games, p. 22.

4. Tug of Peace

- I. Description: Cooperation Exercise
- II. Appropriate for: Grades 6-12, Families (intergenerational), Adults - minimum of 8 people.
- III. Materials: "Tug-of-war" rope, open area
- IV. Process:
- A. The leader lays the rope on the ground in a large circle.
- B. The participants sit on the ground with their feet toward the center of the circle and the rope crossing their thighs. They hold onto the rope with their hands.

C. On the leader's cue, the participants stand up without putting their hands on the ground. Do this several times until they can stand up smoothly.

V. Source: Cooperative Sports & Games Book, p. 71.

IV. Process

1. The leader explains the problem to the group. The problem is to stand up without putting their hands on the ground. Do this several times until they can stand up smoothly.
2. The leader divides the group into pairs. Each pair is given a ball. The leader explains that the ball is to be used as a support for the hands. The leader explains that the ball is to be used as a support for the hands. The leader explains that the ball is to be used as a support for the hands.
3. The leader begins the game and observes each pair. The leader explains that the ball is to be used as a support for the hands. The leader explains that the ball is to be used as a support for the hands.
4. The leader provides some hints to the group. The leader explains that the ball is to be used as a support for the hands. The leader explains that the ball is to be used as a support for the hands.

III. Materials

1. Balls
2. Balls
3. Balls

II. Objectives

1. To stand up without putting their hands on the ground.
2. To use the ball as a support for the hands.
3. To work together in pairs.

I. Introduction

The leader explains the problem to the group. The problem is to stand up without putting their hands on the ground. Do this several times until they can stand up smoothly.

I. PERFORMING ARTS

1. Chief Blackhawk and Those Who Didn't Care
 - I. Description: People causing trouble for people
 - II. Appropriate for: All ages, Families, Adults, Seniors
 - III. Materials: None
 - IV. Process:

I G

A. Tell Story

The entire area for many miles around is steeped with local history regarding the stories of the American pioneers and settlers and the Native Americans. One such story is concerned with the great chief, Blackhawk of the Sac. Blackhawk was the chief of a great number of Indians of the tribe commonly called the Sac. To the best of my knowledge, Sac is a derivative of the Sauk Tribe. During the war of 1812, Blackhawk sided with the British. He was very incensed at the push and shove of the American pioneers and settlers during the westward expansion, thinking that if he were to side with the British there was a possibility that his people might be free of the oppression from the American westward expansion. Following the War of 1812 Blackhawk remained angry about the way his people were being shoved off their traditional lands that they had lived and hunted on for many, many years. Along about the time of all the many and various treaties that the U.S. government was making with Native Americans to acquire their lands, some very unfair and unethical practices were employed to induce the Indians into signing those treaties. One of the more "effective" methods if the Indians refused to sign, was to get the chiefs drunk, and then while they were incoherent, have them sign the treaties. Many of the tribes affiliated with Blackhawk allowed themselves to be pushed into reservations, new "homes" for the Indians that were usually on unwanted or untillable lands that were far from their traditional homelands. In the year of 1832 Blackhawk was camped near Stillman's Run, near the present town of Stillman Valley, just 9 miles from LOMC. According to sources Blackhawk was not hostile to the settlers in the area. The Illinois Militia also happened to be camped in the same general vicinity. When the Indians discovered that the soldiers were camped nearby, they sent a small party down to the soldiers with a flag of truce. This was to turn into the first battle of the famous Blackhawk War. But this very significant bit of history is often overlooked at this point: the particular condition of the Militia at the time of the peaceful visit of the Indians. According to the records, the Militia had in their possession a quantity of strong drink. Possibly this drink was to have been used to get an Indian chief drunk so that he would sign a treaty. Combine the drunkenness of the militia with their intense desire to go out and kill Indians, and you have the first battle of the Blackhawk War. The soldiers, in a drunken state, started firing on the Indians as soon as they were seen, without waiting for orders. Soon all twelve of the soldiers in the party were killed. Today there is a park near where the battle took place. Funny thing how we commemorate a park to a battle and war that might have been avoided if only people had cared enough to be sensitive to others.

- B. Comment: This story can be used to exemplify how people cause a lot of trouble to both themselves and others over a period of time just because they don't care in the first place.

2. Sacred Arrows

- I. Description: A Story of Restoration
- II. Appropriate for: Grades 7-12, Families, Adults
- III. Materials: None

I G

IV. Process:

"Before the Power Gave us our Medicine, Men Kept their Hearts and the things of their Hearts to Themselves." It was White Wolf who was doing the speaking. Night Bear, his mother, and some of his cousins and aunts were taking a sweat bath. They were in total darkness. The water White Bear placed on the rocks in the lodge hissed, and the old man's voice went on. "They sat in Darkness as we Do Now, Unable to See Each Other. And in those Days, there was Killing and Shame. Man Carried a Rock in his Hand that was Heavy with his Law. The Rock Kept Down the Skin Upon his Lodge and he could see out only in one direction. Then Sweet Medicine Came to the People. He Brought the Sacred Arrows, which were Touching. They were Truth. And the First Shields were Built. People Began to Seek their Medicines. As they Sought their own Names, they also Found their Brothers and Sisters." (The old man's voice stopped for a while as if he was letting the darkness around him overcome him. But then he spoke again.) "Man accepts war and its killing. He accepts suffering, lies, deceit, and greed. But I, White Wolf, tell you that these are the things that are unreal. ... Night Bear wishes to return his great Gift to the Medicine and has asked me to teach him in the ways of the Medicine Painting. And he is ready to visit all the People. And he will teach the Way of the Shield to all who listen. Little Star will walk with him."

V. Source: Seven Arrows, by Hyemeyohsts Storm, pp. 152-153.

3. The Lorax, by Dr. Seuss

- I. Description: A story of depletion of resources and hope
- II. Appropriate for: All ages
- III. Materials: Copy of The Lorax
- IV. Process:
 - A. Read the Story
 - B. Dramatize it