

## "ANTS AND BATS AND THINGS LIKE THAT" (Ecology of the Spirit)

	Day 1	Day 2	Day 3	Day 4	Day 5
TITLE	"The Home of God"	"Niche Knowing"	"Figs and Wasps"	"Ants and Bats"	"Ecology of the Spirit"
KEY WORD	ECOSYSTEM	DIVERSITY	MUTUALISM	INCLUSIVITY	SPIRITUALITY
SENTENCE	The universe is the home of God and human and non-human organisms.	Diversity in an organism's characteristics, history, and profession is a gift of the Spirit.	Mutualism as a fruit of the Spirit is both cooperative and competitive.	Inclusivity is the art of retaining, celebrating, and benefiting from diversity.	Spirituality is the practice of the divine presence.
INTENTIONS ENVIRONMENTAL	Learn that: I. Ecology is the study of relationships  II. Ecology presupposes that the organisms of this world are interdependent.	Learn that: I. All organisms have their niche (profession).  II. In the human & non-human world there is diversity in: A. Characteristics/attributes B. History/culture C. Profession/talents	Learn that: I. Organisms live in mutual relationships.  II. Mutualism is: A. Cooperative B. Competitive (Predator/Prey)	Learn that: I. Humans belong to and introduce the "mind" into the ecosystem.  II. Given the human desire to simplify the environment and rid the world of pests (those that disgust) recognize that human responsibility is to maintain diversity as a precious resource.	Learn that: I. We live in a A. Geosphere (Land) B. Hydrosphere (Water) C. Atmosphere (Air) D. Biosphere (Life) E. Noosphere (Mind) F. Pneumasphere (Spirit)
THEOLOGICAL	III. Given that the word "Spirit" is the ecological word for God understand: A. God creating, redeeming, and nurturing in this world. B. God near/God at work. C. God's relation and interaction with this world D. The Spirit brings to this sphere the history of the Father and the Son	III. The Spirit is the source of the diversity of niches within the Church.	III. The Spirit works in the human world to empower mutualism. A. Cooperation - Fruit of the Spirit - Love, Joy, Peace, Patience, Kindness, Goodness, Self-control, etc. B. Sacrifice - (competition) C. Forgiveness 1. Acceptance 2. Restoring relationships 3. Mending systems	III. The Church is the community gathered by the Spirit and is the agent of inclusiveness in the world which is expressed in such metaphors as: Jesus and His Disciples, Spiritual House, Resurrection People, Sensitive Community, Husband and Wife, & Body of Christ.  IV. Baptism is incorporation into the Church and the world	II. Understand spirituality as living in relationship & intimacy with God and the world. A. Understanding "Faith" B. Living in time and eternity C. Holy Communion as an event that expresses the "spheres." D. Openness to conversion E. Spirituality - the ecological word for faith
MULTI-CULTURAL/ RACIAL	IV. The human world is composed of A. Many races, cultures, etc. B. Communities of different people.	IV. Each person has characteristics, history, and profession and should know and affirm them.	IV. Mutualism in the human world deals with: A. Self-esteem B. Trusting others C. Conflict resolution D. Communication skills	V. Developing the capacity to relate to people of/from other cultures.  VI. Dealing with shaped attitudes toward others (racism and sexism)	III. Practicing the commitment of life together.





# ANTS AND BATS AND THINGS LIKE THAT

## Ecology of the Spirit

John E. Swanson

### Introduction

Just south of Lutheran Outdoor Ministries Center is Castle Rock State Park. In the park State Highway 2 passes through a deep cut in the sandstone rock, an engineering achievement done years ago.

The cut is wide enough for two lanes of vehicular traffic with no space for a shoulder.

Thirty years ago the state speed limit was 65 miles per hour, and people would drive through the cut at whatever speed was comfortable. When Federal Law lowered the speed limit to 55, the traffic slowed a little. Then because of accidents in the cut, the posted speed limit was reduced to 45 mph.

This highway between Dixon and Rockford is very scenic. However, with the winding road comes the peril of accidents. Thus, the state has been trying to maintain the scenic nature of the drive and minimize the danger.

What are the options? Various portions of the road can be widened, but widening the road at the cut would be an expensive feat.

One solution given consideration was relocating the road and routing it through another portion of Castle Rock State Park. However, when studying potential routes it was discovered that the construction would disrupt areas that had unique varieties of plants. With the disruption of these habitats animal life would also be disrupted. This solution would also be expensive.

A third alternative was to lower the speed limit to 35 mph. The road would not need to be rerouted, money would be saved, peril would be reduced, and a natural habitat would be left undisturbed. The Governor of the State of Illinois signed the lower speed limit into law in the fall of 1989.

This action has prompted reactions. Folks want their conveniences added to, not deleted from. Altering one's personal behavior is the least preferred. In rather unique ways people ask: why should my convenience and comfort be denied at the expense of the survival of some plants and animals?

Is it possible that the destruction of a particular habitat would lead to the extinction of particular organisms? If organisms are on the brink of extinction, the preservation of one habitat will not guarantee survival.

Why bother slowing down to 35 mph except that it will save the tax payers expenses for a new road? We need to respect our world, though the actions may be miniscule, appear ludicrous, and be controversial. There are entities that live in various quantities of abundance and for varying periods of time in our ecosystems. New species enter the home, and old ones pass away. We do know that organisms interact with each other, but we do not know the implications of the relationships. We should not destroy our world out of ignorance. The habitat must be maintained. Decisions should take into account the diversity of



the world.

Humanity is contributing to the extinction of species that exceeds the normal rates. The introduction of humans on planet Earth contributes to a greater potential of extinction, but we can use our heads and test our values as we make better judgments for the welfare of the system.

What is at stake is not that a particular specie dies off. The problem is that the diversity of organisms is depleted.

Slowing traffic to a snail's pace of 35 mph may be an act that not only saves lives and money; it practices inclusivity, acknowledging that we live with the many facets of this world and are not indifferent to nor over against them. There is something to be celebrated about the whole living entity called the Earth, and we seek to treat everything with respect and reverence.

One can take a stand for economic, ecological, and/or risk avoidance reasons. These are honorable attitudes, and they should be nurtured.

A fourth reason emerges from the teachings of the Church. The Christian recognizes that God is a part of this system, too. The world is also the arena of the Spirit.

This resource is not a study of the theology of the Holy Spirit. It is a study of the ecology of the Spirit. How is the Spirit functioning in the system? The persona (person) of the Trinity called the "Holy Spirit" is a relational person.<sup>1</sup>

This resource addresses the three aspects of the ecosystem in which we live. The first is the natural world, the relationship of non-human organisms.

The second aspect of this study deals with the persona of the Holy Spirit who is the source of good works, faith, the Church, and leadership in the Church.

Aspect three of this resource treats the arena of the multi-cultural/racial features of our world, our Church, and the camp community.

Before entering into the details of this resource I would like you to explore a deep concern I have regarding religious education and its role in life and the Church.

A key word for me is "conversion." I realize that Lutherans shy away from this word because it smacks of putting feelings over faith, salvation based on experience and work righteousness, humanistic centrality over God-centeredness, and emotional manipulation, just to name a few.

I use "conversion" to describe eye-opening experiences that happen of their own accord and change people's lives. The word does not belong solely to the religious life. People have eye-opening and life-changing experiences in all walks of life. It affects our thoughts, feelings, and perceptions. It is not a once in a life-time experience. It can happen again and again.

Education is an agent of change. We discover new ways. We are being

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The Greek word persona means mask.



informed of the past and prepared for the present and the future. We learn to read history and then set out to write history.

Education and conversion are two ways to describe the same phenomena. The difference is that the one tends to be more head and the other more heart. The one prompts thought, and the other prompts action.

Teaching influences intellect, attitude, and action. We teach for change. We expect the learner to be different after the encounter. We teach for conversion.

For some, conversion may mean to come to a saving knowledge of Jesus Christ. This may be so. But even those who know Christ do not know all the nuances of God's work in the world and are not committed to them.

So, in the Church we teach for conversion, for eye-opening experiences, for life-changing insights, for amendment of behavior that people may know the depth and the riches of God and God's world.

How did the title of this resource come to be? In 1989 I spent over two weeks in Costa Rica wandering through two tropical rain forests. Among the learnings of this event was that bananas do not grow on trees and bats along with birds and insects are pollinators. A major and much discussed phenomena in the rain forest is the leaf cutter ant, carrying portions of leaves to the ant hill to put in a garden to grow fungi that becomes the ants' food.

The discovery of mutualism and interaction of species in various and unique ways caused me to think about mutualism between humans, humans and non-humans, and God and all creation. There is a benevolent relationship between God and the human world not only for the fulfillment of human life, but also for the benefit of God. This nature of God is called "Spirit."

The key words for this resource are popular in the vocabulary of the 90s: ecosystem, diversity, mutualism, inclusivity, and spirituality.

## Chapter 1

### THE HOME OF GOD

#### ECOSYSTEM

The word eco (oiko) in Greek means "home." Ecology is the study of the "home" and focuses on relationships in the system.

All of existence is interdependent. "There are no free lunches." Everything has a price. Impact on one aspect of the environment has impact on another.

Under study today is how the depletion of rain forests in South and Central American influences the weather of North America.

A new concept that is receiving more and more acceptance today is that the world itself is a living being. The Gaia hypothesis (the word is the name of the Greek goddess for Earth) holds that life acts as a self-regulating system by controlling the planet's atmosphere. This hypothesis put forth in the mid 1980s



by J. E. Lovelock challenges the conventional belief that living matter reacts passively in the face of threats to its existence and argues that earth's living matter - air, water, and land surfaces - forms a complex system which has the capacity to keep our planet a fit place to live.<sup>2</sup>

Since the environment has become a public issue, we have begun to realize that humans are not the only organism in existence. Other organisms also possess a history. In fact, a revolution similar to the Copernican revolution may be in the making. Remember that Copernicus, the Polish astronomer, proposed that the earth is not the center of the universe. It is the sun. The rebellion to that insight caused Copernicus to be excommunicated from the Church. (What probably upset the Church was not a change in the shape of the solar system. Rather, with the earth no longer at the center, what does one do with the location of Hell, which the Church conceived to be at the center of the universe?)<sup>3</sup>

The environmental revolution we confront today is that humanity is not the center of the ecosystem as it once was perceived and expressed. It is one of the organisms. What is revolutionary is that organisms have their say, and their value is not based on how humanity is served by them.

There are some thinkers who give the impression that ecosystems are better off without humanity. They perceive the natural order as pristine and good when a habitat is not disrupted by the presence of humans. When the human species is introduced to a natural setting there is a change, and the influence is determined abusive.

The reality is that the ecosystem is not limited to the interaction of species in the non-human world. The ecosystem includes the human species, too. All creation calls Earth "home."

We can consider the world a stage on which all the actors include the props and scenery. In addition Christians affirm that God is an actor on this same stage. We would dare call God the Star.

H. Paul Santmire in The Travail of Nature says that there are three "fundamental data of theological reflection: God, humanity, . . . and the world of nature."<sup>4</sup>

God lives relationally with the world. If we listen to our rhetoric, our word for God in relation with this world is "Spirit." We do not get carried away with detailing the doctrine of the Trinity. We may use Creator, Savior, Sanctifier, etc. interchangeably. Though a discussion of the Trinity may raise some questions about this notion, the clear division of each of the three persons is commingled when we use the word "Spirit."

When we affirm our faith in the words of the Apostles' Creed, the Third

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Lovelock, J. E., Gaia - a New Look at Life on Earth, (New York: Oxford University Press, 1987).

3

Ferris, Timothy, Coming of Age in the Milky Way, (New York: William Morrow, 1988), p. 67.

4

Santmire, H. Paul, The Travail of Nature, (Philadelphia: Fortress Press, 1985), p. 9.



Article speaks of God in the present as one who acts relationally. The First Article confesses God the Creator, and the Second, God the Redeemer. However, the Third Article confesses the Spirit in connection with:

the Christian Church, the communion of saints  
the forgiveness of sins  
the resurrection of the body, and  
life everlasting.

More than likely one is startled when Spirit is used in a multitude of dimensions. However, the concern of this resource is not theological but ecological. How does God relate to the world? God is Creator, Redeemer, and Sustainer. God is movement. God acts.

The world is God at work. God cannot be excluded from the process of life.

In the Nicene Creed the Holy Spirit is proclaimed as proceeding from the Father and the Son. The imagery of this statement is intriguing because it gives powerful substance to the concept of the Spirit. The Spirit is not the whimsical activity of God to do the bidding of whatever or whoever. The Spirit is the Creator creating, the Redeemer redeeming, etc.

Another way to analyze the concept of the Spirit is to see the Spirit as the one who makes temporal the events of creation and redemption.

One way to interpret the work of the Spirit is to understand the meaning of light years. Distances of stars from the earth are measured in light years. With light traveling 186,000 miles per second it is much easier to state a distance in years than in miles. As we look to the sky we see stars that are many light years away. The sun, for example, is about 8 minutes away from the earth. But other stars that can be seen are hundreds of years from the earth.

This method of measuring is telling us that we are seeing in the present an event that created light in the past. It is possible that we are able to see light today that came into existence at the time of Christ.

Using the above analogy we can say that the Spirit conveys to the world what happened several thousand years ago. The Spirit makes the past history of God present. The Spirit brings to our experience God's saving act in Jesus Christ.

Possibly the best way to say it is: "Spirit" is the ecological word for God.

When viewing our ecosystem and reflecting ecologically, it is imperative that we recognize that within the human world community there are many races and cultures.

The tendency is to perceive the world that is only within one's territory and experience. Anyone beyond this realm is only a number, possibly a non-person, maybe an alien.

In the natural world "endemic" is used to describe species that are isolated to a particular location, e.g. an island.

There may have been a day not many years ago when people could be isolated from each other, but that time has passed.



Isolation and barriers have broken down because of TV, transportation, and the mobility of people. Our world community comes to our door. We discover many people who call the same place "home."

## Chapter 11

### NICHE KNOWING

#### DIVERSITY

Everything that exists has a place in the ecosystem. Ecologists call this a "niche," meaning profession, occupation, business.

In the natural world an organism is described as a producer, consumer, or a decomposer. In many instances a specie's role is understood. However, the niche of some species, e.g. ticks, is unknown or maligned. How about ants and bats?

Unfortunately, in our anthropocentrism an entity's worth is often determined by its known usefulness. If an organism is not deemed useful to humans, then it is often considered worthless. This is arrogance on the part of human beings when one realizes that we do not know everything. Also, worth, at least for Christians, is something that is given by God before we learn an organism's niche or an organism's value to us.

We are learning that a specie's occupation at the least is its contribution to the diversity of its habitat.

There are three unique facets to a specie's diversity: characteristics, history, and profession. The profession, the niche, is what the organism does for the sake of its habitat and for its own survival. Characteristics are the external and internal features of the organism. The history of an organism is what has happened to shape 1) the entity itself and 2) the entity's function. As a specie interacts with the environment it adapts to be able to survive and procreate. In all instances a specie has developed to what it is today over the ages. Scientists call this adaptation or evolution.

We are told, for example, that beetles were the earliest pollinators of flowers. As we observe the process of pollination by various birds, insects, and mammals we see that flowers have adapted to allow certain species to pollinate them. Obviously, these are not beetles. Over millions of years of development species have taken over the profession once the domain of the beetles.

Diversity in the natural world is most clearly seen in the Tropics. In the Temperate Zone, the one in which we live, the variety of species is fewer and the population of any given organism tends to be more concentrated geographically. In the Tropics plant and animal species are more greatly distributed. Thus, there is a greater variety of species in a given space.

Let me illustrate. In the Temperate Zone trees of the same specie tend to grow in close proximity to one another. At Lutheran Outdoor Ministries Center our forest is oak and hickory. There are few maples, boxelders, hackberry, and walnuts mixed in. In the Tropics trees are spread over vast geographical areas. To scientists this explains why tropical trees tend to have more colorful flowers and fruit. Pollination is relatively easy when the same plants are close to one another. But when they are spread out over great distances the tree needs to



have an indicator so the appropriate pollinator can more successfully find the specific specie. The fruit is also more lush in appearance so that animals responsible for seed dispersal will be more interested in assisting the tree.

The greater the diversity of an area the more organisms spend energy to compete for their survival.

How did diversity in the non-human world get started? No one really knows. One hypothesis is that diversity is a way organisms avoid disease and become less vulnerable to pests.<sup>5</sup>

Paul Ehrlich says that diversity is the most precious nonrenewable resource of our planet. The greater the diversity in an ecosystem, the healthier that system is.<sup>6</sup>

When diversity is discussed biblically, it is in terms of one's profession. Paul says the profession of each person is a gift of the Spirit.

What is interesting is that Paul is more concerned with the diversity of gifts, talents, and professions than he is with the characteristics and histories of the people (1 Corinthians 12:14-31). In fact, he says specifically that in Christ there is no diversity, neither Jew nor Greek, slave nor free, male nor female. All are one in Christ (Galatians 3:25-29).

Within the Church and world communities diversity is affirmed as more than profession. There is diversity of characteristics and histories.

It seems to me that diversity in all three facets is a gift of the Spirit. One's profession, characteristics, and history are equally gifts of God.

When we reflect on the multi-cultural/racial nature of human existence, it is essential that all people see themselves and others as bringing into the situation something very special.

In this sense the human is organically different from other species.

A person's skin color, culture, history, and occupation may be related in some way, but they are not as integral for humans as they are in the non-human world.

In the non-human world a specie's history and characteristics zero in on that specie's niche. In the human world the contribution of each individual is made to the system in all three facets, each being important.

Human diversity is viewed as a problem, obstacle, and pest. There was a melting pot notion at one time in the United States. The diminishing of differences was the goal.

Diversity has been the cause for division and war. Lines are drawn that people of different races and cultures do not cross.

<sup>5</sup> Ehrlich, Paul, The Mechanics of Nature, (New York: Simon and Schuster, 1986), p. 234.

<sup>6</sup>

Ibid., p. 213.



Diversity is a cause of fear. When someone different arrives on the scene, there is need to cautiously proceed in developing relationships if one has not already run off. Often, the risk to relate to that person at all is minimized if one can exercise some type of power over the other.

The negative aspects of diversity in the human community are manifested in competition and the desire to be better and elite. Diversity has also been cause for lording one race or culture over another and treating humans as commodities.

The racial arena has been fomenting for many years. The religious arena has been fomenting much longer in world history.

How do we look at the diversity of people? Is diversity a gift of the Spirit or is it a mark of Cain? Is it something to be celebrated or negated? Is diversity an evil in its own right, a "necessary evil," or a gift of the Spirit of God?

To focus on diversity in this resource is to help us:

1. See diversity of our characteristics, history, and occupation as a gift of the Spirit. As God has endowed people with talents and abilities to serve the Church and the world, so has God gifted us with our characteristics and our histories to benefit each other.
2. Accept diversity of people as crucial for the well-being of the human community as we see diversity in the non-human world as a nonrenewable resource.
3. Practice diversity within the human and non-human community.

When Luther explains the First Article of the Apostles' Creed he says, "I believe that God has created me and all that exists." What does "and" mean? Is it simply a way to include everything in some thoughtless way? Or does it have some implications with regard to equating all things?

The Church has struggled over the problem of elitism and inclusivity. Where do we draw the line?

I learned in Sociology 101 that cultures who were not as developed as ours in the United States were experiencing "cultural lag." I interpreted that to mean that we were far ahead of many types of people in this world.

Now I have learned that 1) "primitive" means "original" and 2) people we call "primitive" are further advanced in ways that we are not.

One can say that diversity levels everything in God's creation. Or one can say that diversity lifts everything up. Diversity has nothing to do with superiority and inferiority. Diversity is a gift of the Spirit in its own right and for the sake of the ecosystem.

When studying the conditions of land, a phrase getting more usage today is "site specification." This has to do with the reality that the nature of a given piece of real estate (an interesting notion) is different than others. In order to know what to do in and for the sake of a given space, one must treat it as unique. We must let the Earth speak. Thus, each location has its own specific



composition and nature. It is "site specific." Each piece is diverse. All creation is "site specific."

### Chapter III

#### FIGS AND WASPS

##### MUTUALISM

As scientists research the non-human world, there are new discoveries on how various species benefit one another. Susan Grant, author of a book entitled Beauty and the Beast, states that what we once thought were aggressive relationships between organisms are in reality mutually beneficial relationships.

The underlying theme in this portion of the resource is this: God creates a world in which species benefit one another. Each entity fulfills its niche by what is done for other species. This mutualism is realized between organisms in the non-human world, between the human and non-human world, within the human world, and between God and the human and non-human world.

I am using the word "mutualism" for two types of activity in the natural world: cooperation and competition. Let me explain.

First, when viewing the natural world it is important to remember that we are observing species and not individuals. Individuality is peculiar to the human world. Suggesting individuality in the non-human world introduces sentimentality and romanticism and smacks of Bambism.

Mutualism emphasizes that species interact with one another and react to one another. In some cases there is cooperation, sometimes antagonism.

It may seem absurd to refer to antagonism as a mutual relationship. Antagonism can be expressed two ways. One expression is an organism protecting another organism by fending off the enemy. The other expression is one organism as the source of energy for the sake of the other, i.e. food. It is this latter definition of antagonism that is being used to call antagonistic behavior mutual.

Cooperative mutualism can be illustrated with several dramatic examples. One is the relationship between figs and wasps.

Each of some 900 species of fig plant . . . is pollinated exclusively by its own species of fig wasp. The flowers of the fig plants are tiny and grow inside the roughly spherical fig that people eat (which is not strictly a fruit, but closer to an inside-out bouquet). The tiny female wasp enters the fig, deposits pollen on the flowers, lays eggs in the flowers, and then dies. The wasp larvae grow inside the flowers, which they largely consume, and form pupae. The wingless male fig wasps emerge before the females and march around inside the fig looking for flowers containing females. They use their telescoping abdomens to copulate with the females before the latter emerge from their pupae. The males then die without even leaving the fig. The winged females emerge, collect pollen from the remaining flowers, and leave that fig in search of another in the proper

"How to Heal the Land," Whole Earth Review, March, 1990, p. 72.



condition to begin the cycle again.

The figs (including the commercial varieties) and their wasps are utterly dependent upon one another. The fig sacrifices some of its tissue to the feeding wasps in return for being fertilized. The wasp cannot mature anywhere else. Thus if there were no figs, there would be no fig wasps and vice versa. Indeed, the first Smyrna figs that were grown in California could not produce a crop of mature figs until the appropriate species of fig wasp was introduced.<sup>8</sup>

(Each fig has its own special fig wasp.)

Another illustration is the relationship between certain trees and ants.

Thomas Belt, an English engineer and enthusiastic naturalist working in Central America (in the nineteenth century), noticed that the bull's-horn acacia tree harbored ants. This tree, common to the New World tropics, has fat hollow thorns near the bases of its feathery leaves. Ants live inside the thorns and in hollow twigs on the tree. At the tip of the leaflets, the acacias grow tiny pellets of nutritious material, now called Beltian bodies. The ants greedily devour the Beltian bodies. They eat no other part of the tree, though, and they attack any caterpillar or grazing mammal that tries to feed on a bull's horn acacia. Belt commented, "I think that these facts show that the ants are really kept by the Acacia as a standing army."

Later biologists were not so sure. It was suggested in the 1920s that the ants exploited the trees, sheltering in the hollow thorns but giving no real protection. One biologist quipped that the trees got "as much use from their ants as a dog from its fleas." Conclusive evidence on the question came in 1969 with experiments in the field. Insecticide sprays were used to deprive several acacias of their ant hordes. Other acacias were merely sprayed with water, and kept their ants. The results were spectacular. The deprived acacias were far more heavily damaged by herbivores. And, in an unexpected side-effect, they were last overrun by neighboring vines and trees. So the ants not only protect their acacias from animal attack, but may even help them out in competition with plant rivals.<sup>9</sup>

A third example of cooperative mutualism is the leaf cutter ant. These I observed in Costa Rica in January of 1980. Ants would parade from their hill to a plant several hundred yards away, cut leaves the size of a human thumb nail, and then carry their treasure back to the nest.

The ants have a garden in the nest which they feed with these leaves. The garden produces a fungi which is food for the ants.

The dependency between the fungi and the ants has become such that the fungi has no reproductive system. When a queen ant leaves the nest to establish a new

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Ehrlich, op. cit., p. 163.

9

Grant, Susan, Beauty and the Beast, ( New York: Charles Scribner's Sons, 1984) pp. 16-18.



community, the queen takes a portion of the garden with her.

Competitive mutualism is found within the food chain or predator/prey relationship. We need to investigate this relationship.

From a dispassionate perspective we understand the food pyramid. The base is herbs. Above that are various insects and other herbivores, then carnivores. We move up the pyramid until something is at the top. We know there are eagles, tigers, etc. which will not survive as herbivores and which are not the prey except for human aggression.

The food chain is recognized as the way of life.

Now to become a little more passionate about this relationship we call it predator/prey. Prey includes animals and plants.

This competitive relationship involves adaption of prey and the prey's determination to avoid the predator.

Prey, though necessary for the predator, do not make itself immediately and easily accesible to the predator. Prey need to survive and procreate. Thus, if the prey would not adapt, the predator would probably bring a particular specie to its demise.

When observing the mutualism in the predator/prey phenomena, one notes that the prey do not allow themselves to be the prey. Prey use many methods to avoid being captured. Animals develop speed and camouflage. Plants use chemical warfare, mast cropping, seed coating, and timing. (Mast cropping is when huge quantites or seeds are produced beyond what the predator can consume.) 11

As prey adapts predators also adapt. This process is very slow. However, it works out in the economy of life, that as we move up the food pyramid the number of species decreases.

It is a truism that the prey determines the destiny of the predator. As the prey adapts, so does the predator. Otherwise the latter will go hungry. At the same time as the prey is depleted because a habitat is disrupted, this depletion impacts entitles up the food pyramid.

In spite of the competitive aspects of the process the species in the food chain exist for the benefit of others. One gives itself up so the other can live. Life builds on life. The building process is death. Death is life-giving.

From a scientific perspective the way relationships have developed may best be described as accidental. The origins of entitles and how two entitles happened to encounter each other cannot be demonstrated scientifically. This may disturb some folks who want to see connections and have them proved so that their god is not disrupted, given no direct purposeful act. Unfortunately, connections cannot be demonstrated.

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More examples found in Appendix I.

11

Grant, op. cit. pp. 28-29.



The observance of mutualism in the environment is an exciting trip. Though we cannot identify the origins of things, we can see how things of the world interact. It is this interaction for the mutual benefit of others that is the intention of the God who creates and makes new.

When describing the work of God in the human world, we can see variety of ways that God gives power so that people can live in mutually beneficial relationships with each other.

Galatians 5 is a case in point.

In Galatians 5:22-23 Paul talks about styles of life in this way: "But the fruit of the Spirit is love, joy, peace, patience, kindness, goodness, faithfulness, gentleness, self-control; against such there is no law." (RSV) It is significant to note Paul's metaphorical use of fruit and Spirit.

In the natural world, in order for fruit to occur, a flower must be pollinated. There are two basic methods of pollination: animals (birds, mammals, and insects) and wind. Animals do most of the pollinating in the Tropics. As we get further away from the equator we see wind pollination more frequently.

Fruit, by the way, is not simply the type we eat. All seeds are fruit, some being more edible than others.

Just as fruit depends upon an outside source to be pollinated so we can talk about the Spirit or God as an outside source who touches us and causes good to be done through and by us.<sup>12</sup>

What are these fruits the Spirit creates?

HUMILITY/KINDNESS/JOY - Humility is not the putting down of the self, but the lifting up of the "other". It is not that one is lesser or considers oneself lesser. Humility is the capacity to make others great!

The context and tension within which humility is best discussed is that of human limitation and sin, on the one hand, and human potential, on the other. Humility as limitation drives us to depend upon the righteousness of Christ and the forgiveness of sins, and not to depend upon our own goodness. We are unworthy in the sense of sin. On the other hand, we are worthy as we are gifted by the Spirit to enable others.

Humility is the opposite of arrogance and pride which finds itself centered in the ego. The Greek words for "humility" are praus and praotes. These words are also translated as "gentle". When translating Galatians 5:22 the Revised Standard Version (RSV) of the Bible uses "gentle." The Today's English Version, i.e. Good News for Modern Man (TEV), uses "humble."

Additional words in Galatians 5 which can deepen our understanding of "humility" are "kindness" (the treatment of others as kin, brothers and sisters) and "joy" (a word in the Greek that has the same root as "love.")

If humility is the act of making others great, both human and non-human by

The words ruach (Hebrew) and pneuma (Greek) mean wind, breath, and Spirit.



the way, it means to treat "others" with celebration and gentleness, with the "sense of caresses," as William Barclay puts it.<sup>13</sup>

SELF-CONTROL - If there is one lifestyle of the Spirit that could be misinterpreted as a moralistic statement, it is this one. More than likely this is due to the fact that a person is often advised, "If you would have controlled yourself you would not have gotten yourself into this predicament," or words to that effect.

Self-control as a lifestyle of the Spirit must be understood as one being a steward of oneself.

This gift of the Spirit builds upon humility. In order to make others great we need to be someone. Self-care is not borne out of self-centeredness, but out of love of the neighbor. Personal choices are made regarding our own habits out of respect for the welfare of our sisters and brothers. (Note how Paul handles eating meat in I Corinthians 8:1-13.)

To practice self-control is to treat ourselves as God-created good, as worthy, not worthless. In addition, by Christ's alien righteousness, we are made good. We are to treat ourselves as we would treat all of creation, all that is redeemed, and all that hopes for redemption.

Self-control can be focused upon from three different perspectives: how we respond to others, how we deal with our "inner being," and how we deal with our bodies.

We respond to stimuli, both human and non-human, out of our own wills. We choose what the response will be. Psychologists may explain how we do this. It may even be helpful to know something about psychological systems. But the fact of the matter is that we have the ability to decide what the response will be.

Our "inner being" is another matter. Here we are in the area of the "secret" resources of ourselves which we sometimes do not understand ourselves. We sense those things that well up in us. They are not always discernible.

The care of our bodies is related to self-control. This subject is very popular today: fitness programs, wellness discussions, stress management, diet workshops, etc. The topic of chemical use, abuse, and misuse fits here, too.

There are many tapes, books, programs, clinics, and workshops available to deal with these areas of self-control. Anything you would like to change in your very being has an advisor of some type somewhere. What is the advice? The suggestions are usually that a change of heart (or attitude) is necessary.

Paul is helpful in another passage with regard to self-control and our bodies. In this case he identifies the body as the temple of the Holy Spirit, I Corinthians 6:19-20. As total beings we are instruments of the Holy Spirit (one of Luther's favorite metaphors), and the Holy Spirit is in our very physical beings. Earlier in I Corinthians 3:16-17 the body in which the Holy Spirit dwells is the Church.

13

Barclay, William, A New Testament Wordbook, (New York: Harper and Brothers,?) pp. 103-104.



A life that is to deal gently and humbly with others cannot at the same time be void of self-control, the management of self. In Romans 12 Paul lays on us his expectations of the Christian person. 'There is no way one can fulfill such expectations without being able to handle oneself'. The will to do this and the power to make this happen can only come from the Spirit of God.

PEACE/PATIENCE - There are conflicting views over what peace is and how peace is accomplished. Is peace a commodity achievable by the power of the sword or is it a condition achievable by the power of the cross of Christ? Is peace the end or the means to an end or both?

It is the understanding of the New Testament that peace is a result of the cross. From this historical event peace emerges, and toward the final days (the eschatological event) the Spirit directs peace.

What is peace? I prefer the Hebrew word "shalom." It means wholeness, health, restoration into community, and the presence of justice.

The Spirit's gift of peace is God leading us to restore that which is and has been alienated back into community.

Peace builds on the other gifts of the Spirit: humility, self-control, and patience. Peace seeks to make others great. Peace is something that evolves from within. Peace also benefits from patience. The Greek word for patience, "makrothumia," is translated by Chrysostom as the ability to take revenge against another, but utterly refusing to do so.<sup>14</sup>

Peace is not the opposite of war or the avoidance of conflict. Peace is involvement in bridging the gaps and mending breaches.

In addition to the fruits of the Spirit, another characteristic of the Christian life is the willingness to give oneself up for the sake of others. In the non-human world this is called the food chain. In the human world this is sacrifice. We are here for the mutual benefit of others.

In Ephesians we find these words:

"Therefore be imitators of God, as beloved children. And walk in love, as Christ loved us and gave himself up for us, a fragrant offering and sacrifice to God." (5:1-2)

The writer then proceeds to identify behaviors that do not contribute to mutuality: fornication, impurity, covetousness, filthiness, silly talk, and levity. The alternative is to walk as children of light "for the fruit of light is found in all that is good and right and true" (5:9). The admonition follows that Christians look carefully at how they walk, be filled with the Spirit, and always give thanks.

As in the food chain the prey determines the destiny of the predator, so with a sacrificial style of life one is not consumed and overwhelmed by the other. Rather, one affects the destiny of the other.<sup>15</sup>

<sup>14</sup>

ibid., p. 84.

<sup>15</sup>

Think what this means in terms of Holy Communion and Christ's presence.



Another aspect of mutualism is the spirit empowered act of forgiveness. First, forgiveness is the acceptance of another, not approval of the other's behavior. Implied in this is the expectation that behavior will change.

Second, forgiveness is restoring broken relationships, making friends out of enemies.

Third, forgiveness is the effort to make systems responsive to the organisms within them. The words we use here most often are justice and equity.

Fourth, forgiveness is openness to diversity. This will be addressed in the next chapter.

The spirit works in many ways to make it possible for relationships to be created and mended. There is recognition that the world is very diverse. But working at it is by conversation.

In the multi-cultural/racial world mutualism is a desired outcome, an ideal. For people of diverse backgrounds, cultures, and characteristics to live in harmony is an ultimate goal.

To accomplish this three things must happen:

- it must be desired.

- it must be a part of the corporate plan.

- there must be a process.

In the non-human world there are systems whereby mutualism occurs. From the perspective of the Christian community the Holy Spirit motivates mutualism. But what is inherent in the multi-cultural/racial world that can be identified as mutualism?

There are two things we can learn from the earlier discussion of mutualism. First, a person needs to have a sense of selfhood. One does not benefit another unless a person is somebody. Self-affirmation, self-respect, self-esteem, and self-worth are different words for the same thing.

Second, when a person encounters another, especially if they are different in any way, intimidation is a possible response. We can meet strength to strength, weakness to weakness, or strength to weakness. To be strong in oneself does not mean the other must be weak. This accomplishes nothing. If one is weak and permits the other to be strong this is intimidation. This is something we allow to happen to ourselves. Strength to strength is the winning role for each person.

Third, one does not deal with the two items above without conflict within oneself and conflict with another. Conflict is resolved when both or all parties are in a win/win posture.

Fourth, mutualism is achieved through communication, knowing how to share, being willing to share, and being open.

Since these four items are not built into everyone's nature, it is necessary to develop them as skills.

The nature of group life does not change because the colors and cultures of



the people involved are different. One can argue that the mechanics of group life are used most efficiently.

There are many studies that show that in a group decision making process the greater the diversity, the better the decisions. It is my feeling that the sooner we are able to practice diversity with all of its implications as a Church and as a world community the more effective and life fulfilling systems will be.

Diversity is the nonrenewable resource of the non-human world. The loss of diversity is crucial to the habitat and the whole ecology.

Diversity in the human world is a resource that can be renewed. What enables that to happen is the new chances provided on a regular basis by the "accidents" of history to practice mutualism and the gift of forgiveness.

Mutualism exists in three ways:

- One species benefiting the other.
- One species giving up itself for another's well-being.
- One species acting to restore relationships between organisms.

#### Chapter IV

#### ANTS AND BATS

#### INCLUSIVITY

Over the years of advancement in technology it has become apparent that humans accomplish many things. Although other animals have been able to manipulate their environments, humans have done this in great detail, with great eloquence, and unfortunately, with great indifference and destruction.

There is always the debate about what distinguishes humans from other animals. Reason was an early suggestion. But we have learned that other animals think, too. Then the thumb was suggested as something that can manipulate a tool. This, too, is not unique to humankind. Other creatures also fabricate tools.

I would like to suggest that the difference between humans and non-humans is the speed with which we can work and develop. While other creatures must adapt themselves to their environment, humans can adapt the environment to themselves. Adaptation in the non-human world is a slow process. The use of the mind in the human world enables adaptation of the environment to be a rapid process.

Can it be that the desire to do things rapidly and the ability to work quickly has contributed the most to the destruction of and indifference to the diversity of our world? A hurried style of life is not conducive to treating the human and non-human worlds with respect, responsibility, and reverence.

I appreciate the words of David Suzuki in the forward to a guidebook on outdoor education called Rediscovery - Ancient Pathways - New Directions. He states his case so clearly it is worth quoting fully here:

Like most of the people living in North America today, I am a non-native. My ancestors came to Canada from Japan at the turn of the



century. . . .

North America, to the native people living here, is more than simply a place, a piece of turf. Land embodies culture, history, and the remains of distant ancestors. Land is the source of all life and the basis of identity. Land is sacred. An overriding sense in aboriginal perceptions is that of gratitude for nature's bounty and beauty. Gratitude - and respect.

Land in modern North America is currently regarded as a commodity, to be purchased, exploited for its resources, and sold for profit. Land, for most people, does not embody cultural history. Land is profane. Indeed, to refrain from exploiting an opportunity to log, mine, farm, or otherwise develop is an obscenity, a waste.

Our modern land ethic is causing a cataclysmic upheaval on this planet. Species of plants and animals are becoming extinct thousands of times faster than has ever occurred before; their habitats destroyed by human beings. Global deforestation is causing vast changes in the patterns of water availability, weather, climate, and soils. Human-caused desertification is accelerating. Massive global pollution is putting not only other life forms but even our own children's health at risk.

Twenty percent of the world's population - the industrialized countries - are now utilizing over eighty percent of the planet's exploited resources, and they continue to demand even more, in growing consumption and profits.

From an ecological perspective, Homo sapiens is a species temporarily out of biological control. We are now the most numerous and ubiquitous large mammal in the world. But armed with the muscle power of science and technology, our impact on the planet is beyond anything ever experienced in the history of life on earth. We have initiated an "extinction spasm" that Harvard ecologist E. O. Wilson estimates now claims over seventeen thousand species a year. . . .

If our species' fecundity is not curbed, we will double our population within fifty years. . . .

Why are we destroying the very support systems for all life on Earth? Apart from our powerful urge for profit, it is our lack of sacred respect for the land and the other life forms sharing our habitat that exacerbates the problem. Today, over eighty percent of North Americans live in cities, man-made environments that have been created by us according to our ideas of beauty and utility. In the countryside, the fields, orchards, pastures, and even forest have been manicured and managed to meet human needs. This creates an illusion that we have the knowledge and the power to control nature. Indeed, in urban settings, "weeds," "pests," and "vermin" - animals and plants that defy human control - are seen as dangerous, dirty, and disgusting.

Essentially, nature has become alien, an enemy, and we live with a terrible delusion that somehow we are different, no longer subject to the same rules that govern all other life forms. We have lost all



sense of belonging in nature and have become intoxicated with the short-term benefits of science and technology that have bludgeoned nature into apparent submission.

But in spite of all our great achievements in science and technology, we remain incredibly ignorant about the natural world. We have only identified 1.4 million or perhaps 20 million species in the world, and of those we do know, we have little knowledge about their basic biology.

In order to stop our blind rush down the present pathway, we have to undergo a profound change in attitude and perception. . . . We are members of an ecosystem in which stability and continuity are possible only when we stay in balance with other living creatures.

Clearly, we also need a renewed sense of earth as home; belonging to the land, connected to all other living things.<sup>15</sup>

The human brings "mind" into the ecosystem, and it is my conjecture that the mind is intended to be that talent that humanity introduces into the world, not simply for the benefit of humans, but for the benefit of all species.

I have defined inclusivity as the art of retaining, celebrating, and benefiting from diversity. It is to this end that the "mind" needs to be applied.

Humans have used the mind to make the world simpler and more convenient. Watch the way things are marketed. The appeal is made to our ease. As the world becomes more convenient we are told we can do many more things. This convenience contributes to a more hurried pace.

Our technology has contributed more to the garbage heap. Look at what is in the landfills.

We also have created environments which are potentially pest free. It is uncomfortable to find a mouse or a bat or ants around the home. Thus, over the years we have developed chemicals to rid the house of various pests. When we do encounter them in the out-of-doors, we express fear and disgust and feel uneasy.

We need to examine how our attitudes have been shaped and how human creature-comforts have set the values by which we determine the survival of other creatures in this world.

We cannot dispose of the undesirable creatures. We need to assure their existence as much as we assure the existence of the human being. Though we will make judgments about what will survive, thrive, and be deprived, we need to keep at the forefront of our thinking that diversity is the key resource.

Recently, an agronomist was stating that because we have such effective pesticides, insecticides, and fungicides, we can produce some of the most luscious fruits in great quantities. At the same time these chemicals introduce poisons into the system that can have a destructive impact on the total ecosystem.

16

Thom Henley, Recovery - Ancient Pathways - New Directions (Vancouver: Western Canada Wilderness Committee, 1989) pp. 11-14.



The question the agronomist raised was whether the consumer would be willing to purchase blemished fruit at the supermarket. He opined that to change present consumer attitudes would take a major educational task and would more than likely be an unsuccessful revolution.

Have you noticed what fruits we avoid and throw away?

Inclusivity is the art of retaining diversity, a major change for life-styles.

Paul Ehrlich says several important things about the endangerment of the diversity of species:

First, the primary cause of the decay of organic diversity is not direct human exploitation or malevolence, but the habitat destruction that inevitably results from the expansion of human populations and human activities.

Second, many of the less cuddly, less spectacular organisms that Homo sapiens are wiping out, are more important to the human future than are most of the publicized endangered species. People need plants and insects more than they need leopards and whales (which is not to denigrate their value).

Third, other organisms have provided humanity with the very basis of civilization in the form of cars, domestic animals, a wide variety of industrial products, and many important medicines. None-the-less, the most important anthropocentric reason for preserving diversity is the role that microorganisms, plants, and animals play in providing free ecosystem services without which society in its present form could not exist.

Fourth, the loss of genetically distinct populations within species is, at the moment, at least as important a problem as the loss of an entire species. Once a specie is reduced to a remnant, its ability to benefit humanity ordinarily declines greatly, and its total extinction in the relatively near future becomes much more likely. By the time an organism is recognized as endangered it is often too late to save it.

Fifth, extrapolation of current trends in the reduction of diversity implies a denouement for civilization within the next 100 years comparable to a nuclear winter.

Sixth, arresting the loss of diversity will be extremely difficult. The traditional "just set aside a preserve" approach is almost certain to be inadequate because of factors such as runaway human population growth, acid rain, and climate change induced by human beings. A quasi-religious transformation leading to the appreciation of diversity for its own sake, apart from the obvious direct benefits to humanity, may be required to save other organisms and ourselves.<sup>18</sup>

Inclusivity is the art of celebrating diversity.

17

Definition: final disentanglement of intricacies.

18

Paul Ehrlich, "The Loss of Diversity," Biodiversity, Wilson, Ed. (National Academic Press, 1988).



How do we choose to use our minds? Is our intelligence a gift for all or just for anthropocentric accomplishment? Would we dare commit our minds to developing and implementing ways to benefit all creation? This is what it means to practice inclusivity.<sup>19</sup>

It is within this context that I believe we need to envision the Church.

The Church is to be an inclusive community in its own right. At the same time the Church is to be an agent of inclusiveness in the world.

The Church is a community of people brought together, Luther says, by the Holy Spirit who calls, gathers, enlightens, and sanctifies people. Unlike accidents in the natural world which is honed through the process of evolution, the Church is an intentional act of God honed by the Spirit of God.

However, the community of faith is not an exclusive community. It has a role in the whole ecosystem.<sup>20</sup>

On Pentecost, the birthday of the Church, the Spirit appeared as fire, and the people gathered together were speaking in many foreign languages. In these languages the people proclaimed the mighty works of God. (Acts 2:1-4)

When Paul describes the Church as the Body of Christ in 1 Corinthians 12 it is intended to show the necessity of various roles within the gathered community.

Ephesians 4 is a fascinating text because it addresses the community of faith as individual believers in relationship with each other and then turns the Church out to the world where lies are taught and truth is substituted for lies.

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19

Sin has not been mentioned. It belongs under several themes. But it fits appropriately here. In a way it is not difficult to mention humanity's behavior against the created order in terms of destruction and abuse. We can even tread a little heavily when we caution people about recreational activities where a person's fun is at the expense of the environment.

Do we dare discuss technology in the same breath as sin? We can, if one sees technology as contributing to human aggression upon itself. But when technology contributes to our well-being, our comfort, our ease, etc. is it possible for us to discuss sin in this context?

Luther said, "There are no sinless alternatives. . . . Sin boldly. But trust God's grace more boldly still."

One of the hard pills to swallow is human sinfulness. And probably the reason for it is that one of the symptoms of sin is human arrogance. By its very nature sin clouds our ability to see sin.

This is why it is so important that we realize that God is at work in our world relating to us and acting to overcome our own blind destructiveness. God has not abandoned us to our sinfulness. The Spirit of God prods and seeks to rescue.

20

In environmental studies the word "endemic" is used for species isolated to an enclosed system, e.g. an island.



Jesus calls His disciples. There is a reminder that though He will be absent from them, the Spirit will be sent to teach them and to bring to remembrance what they should know (John 14:15-31).

I Peter 2:1-10 and I Corinthians 3:16 identify the Church as the people of God in the world.

Romans 6:1-11 envisions the Church as the resurrected people who walk in the power of God in the world.

The metaphors of the Church only make sense in the context of an ecosystem. As disciples, people of God, resurrected persons, aware, relational, and the Body of Christ, the Church is another entity in the ecosystem. The peculiarity of the Church is that it recognizes the diversity, the complexity, and the conflict in this world.

As the human is one of many in the ecosystem and brings the special gift of "mind" to the system that can think through and contribute by maintaining diversity, so the Church is one of many systems which brings to the whole system the mind of God and the intentions of the Spirit.

The Church should be the entity in the ecosystem that embraces and affirms the world with all of its diverse characteristics, realizing the uniqueness of all.

The Gospel is to touch everyone. The response may not always be the same. If the Church neglects to minimize efforts to impact people on the one hand or to measure the effort in numbers of responses on the other, we have misinterpreted the mission of the Church and the power of the Word of God.

The Church's task is to be faithful in proclaiming the Gospel to the ends of the earth as it is empowered to speak as given utterance by the Spirit. The Church recognizes this role as unique and sometimes ambiguous.

The Church must move from seeing diversity as an enemy to diversity as a necessity.

How does the Church practice the art of retaining, celebrating, and benefiting from diversity of people, culture, and religious systems? The answer is not in watering down the Gospel nor putting down others. The answer is found in the sense of the Church's identity as the biblical report testifies. We are the disciples of Christ, the people of God, the Body of Christ, etc. We have integrity and at the conversation table of the world we dare to be our full persons as we recognize the gifts of all.

In the light of this, please read Romans 14:1-15:13 where Paul deals with handling diversity in the early Church. Note what makes people different. These differences may not be the same as they are today, but give attention to how Paul instructs us to handle the diversity. Refer to Romans 12:9-13, too.

Baptism is that event that brings us into this whole movement. It is the inclusive act. It is how a person enters the Church. By this act one also enters a special relationship with the world. Birth is how one enters the world's ecosystem. Baptism is entrance into the Church. However, as a member of the Church a person is incorporated in a unique way into the world. This uniqueness



is found in the love commandment of Christ to His Church. World-love is God's intention for the Church.

This love is best expressed in forgiveness. Mutual forgiveness was described in one way as openness to diversity. The gift of forgiveness allows others to be who they are. Forgiveness is not confined to mending broken relationships. It is behavior that draws people together with the right to be, accepting them with their characteristics, professions, and histories.

The unique aspect of the Church is that it is empowered and directed by the Spirit and has the capacity to keep current with what is unfolding in the world.

There are many issues when it comes to inclusivity, among them racism and sexism.

I have called the practice of inclusivity an "art." To my way of thinking, the ability and skill to be inclusive depends upon two things. First, we must lay aside our preconceived notions about others. We know we do this with stereotyping. A person is a person, unique and special. We each have a name, a birthdate, our own unique characteristics.

Secondly, we must recognize that our attitudes and behavior are shaped by a system, and the system itself is so designed to be exclusive and elitist. Racism and sexism have a grip on us and affect our thinking and acting, our deciding, and our providing. One feels almost powerless over the condition.

We would like to think we can be above it, unaffected by it, not twisted and dominated by it. But this is not true. We are by nature and culture (learned and educated) racists and sexists and unclear.

There are things with which we are uncomfortable and things which we despise. Ants and bats and things like that fall into this category for many people. However, such debilitating attitudes extend to people. There are people whose characteristics, features, cultures, histories, and/or professions we find objectionable.

There is a tendency in the Christian religious system for Christians to elicit biblical support for one's biases toward others. We know we are not to despise and reject others, but if we can find the remotest support in the Bible, we feel justified in our rejection and our right to render judgment.

The Gospel of Jesus makes the point very clearly in the familiar words of John 3:16-17, "For God so loved the world that he gave his only begotten Son that whosoever believes in him will not perish, but have everlasting life. For God sent not his Son into the world to condemn the world, but that the world through him might be saved." I am always impressed, honestly depressed, by Christians who can by divine right write off people and have no sense of the struggle of reconciling the world. They see their mission entirely different than how Jesus sees the mission of Jesus. It may be painful, but the Spirit of God calls and strengthens us to live in the agony of the cross of reconciliation.

Racism and sexism are not only in us, they are institutionalized in our systems. Examples of this are legion.

If diversity is to be retained, celebrated, and beneficial then inclusivity



needs to be a conscious effort of the mind in all we do.

## Chapter V

### ECOLOGY OF THE SPIRIT

#### SPIRITUALITY

"Spirituality" has such a wide spectrum of meanings. We use it in the Church to distinguish between the things of God (spiritual) and the things of the flesh (carnal). It is used in a philosophical sense in making a distinction between concrete reality (material) and unseen "reality" (spiritual).

Spirituality is a style of life that can be a talent or a skill that one develops with which a person acts in a sensitive, caring, and gentle manner with all of life. Many people who espouse non-Christian religious beliefs are often described as spiritual people because of their reverence for life.

It is important that we realize that in the Christian tradition the word "spiritual" is used for the faith relationship between God and human beings. *all of creation*

When reflecting on the ecosystem the Christian community recognizes the system's spiritual dimensions. Some expect the scientific community to do this. But this is the unique function of the Church. The world community has the task to name every creature (Genesis 3:9), but it is the unique task of the Church to name the work of God in the world.

It is the Christian who says, "God!" It is the Christian who identifies the activity of God. It is the Christian who utters the word Spirit. It is not based on any scientific capacity. It is contingent on an act of faith.

Thus, we look at our world as a geosphere, a hydrosphere, an atmosphere, a biosphere, a noosphere (sphere of the mind), and a pneumasphere (sphere of the Spirit).

You can read many writers in the area of ecology today and though they do not speak from a Christian perspective in most instances they do speak in terms of reverence for the world. Stephanie Mills says, "Work . . . to create a culture reverent enough to see harmony with nature." 21

This world is a divine sphere. This is the substance in many religious systems. Note particularly the Native Americans. We call this pantheism and animism.

The Psalmist views the world as a divine sphere (104:1-4):

"Bless the Lord, O my soul! O Lord my God, thou art very great!  
Though art clothed with honor and majesty,  
who coverest thyself with light as with a garment,  
who hast stretched out the heavens like a tent,  
who hast laid the beams of thy chambers on the waters,  
who makest the cloud thy chariot,

21

Mills, Stephanie, Whatever Happened to Ecology? (San Francisco: Sierra club Books, 1989) p. 2.



who rides on the wings of the wind,  
who makest the winds thy messengers,  
fire and flame thy ministers."

The world is God's sphere of action. Is the interaction only within the context of humans and only those humans that identify with a particular religious system?

We live in the sphere of the Spirit and must be as sensitive to it as we are to one another and to the non-human world.

Ecologists talk about listening to the Earth. Is the Earth also a voice of God?

From an ecological perspective one can say that reverence may be spiritual, and spirituality is the practice of the divine presence.

For Christians, spirituality is more than this. The heart of spirituality is faith.

Faith has four characteristics. They are not mutually exclusive. However, there is a tendency for people to emphasize one or two of these characteristics over against the others. These characteristics interact with each other though they may appear as building blocks as presented in this paper.

First, faith is intellectual assent. It is a way of thinking. It means that something cannot be proved, but we rely on it as fact.

When we say we believe in God or things about God, it is a "leap of faith," as Kierkegaard would say. It is an assent to something that is as true for you as the very chair, bed, table, or floor that holds you up right now. But we cannot prove it.

Faith as intellectual assent belongs to all the disciplines of learning and inquiry.

Faith as intellectual assent is often what people mean by faith. Faith in Jesus Christ is treating Jesus Christ as an object, as a thing, rather than a person.

Doubt belongs to this component of faith. It appears within a continuum of critical analysis at the one extent and skepticism of the source of information at the other end. Doubt is legitimate. We might call it the "struggle of ownership."

Second, faith is a word we use for a type of relationship, a relationship of trust and obedience between two or more entities. It is like the word "love." One has faith in another. We trust the other party to be competent, faithful, supportive, etc. When we turn our lives over to another, we entrust ourselves to that person.

A good example of this is the relationship we might have with medical doctors. We put our faith in them. We obey them. We trust that they diagnose and prognose, how they medicate, etc. is correct.



To have faith in Jesus Christ means to entrust ourselves to Him, to put our lives in His hands. "Take my life and let it be . . ."

When Scripture talks about faith it means trust in and obedience to God. "If you love me you will keep my commandments. And I will pray the Father, and he will give you another Counselor, to be with you for ever, even the Spirit of truth . . ." (14:15-17). (Note: In John, love (or faith), obedience, and then revelation occur in that order.)

Faith in Jesus Christ is not a natural response. How can one entrust oneself to another in this manner? "I believe I cannot by my own reason or strength believe in Jesus Christ or come to Him." Here is Luther again. Who makes this faith possible? Who motivates, empowers? The Holy Spirit, that's who!

Third, faith is a response to an encounter with Jesus Christ. Note the story of the Samaritan woman at the well of Jacob (John 4:7 ff). Through a chance and unlikely meeting with Jesus the woman believes.

In a way this definition of faith is similar to the first definition insofar as today we encounter Jesus Christ in the proclamation of the word because He is the word of God. In John 4 He says, "I am the living water," an eternal stream, a water for all time and timelessness.

By the way, Jesus meets the woman. She does not meet Him. Our encounter with Jesus Christ is at His initiative, not ours. Faith is a response to the person of Christ. It is His doing. He starts it. Luther again, "The Holy Spirit calls me . . ."

Fourth, faith is the very presence of the risen Christ in our lives. "Christ in you, the hope of glory" (Colossians 1:27). "If Christ is in you . . ." (Romans 8:10).

In Romans 8:10-11 Paul presents the idea that the risen Christ in our lives is the same as the Holy Spirit in our lives.

What is important to note is that faith is an embodiment of Christ in one's life. Paul even talks about the human body as being God's temple in which the Spirit dwells (1 Corinthians 6:19-20).

The power of God is in fact the power of Him who is both Creator and Redeemer of the world. It is this very power that empowers faith in us. We can also speak of faith as Christ Himself entering our very being.

With faith as a result of God's activity in our lives we realize that faith cannot be contained in our very beings. We become media, channels for the Holy Spirit. One of these channels is the expression of our love. As we say words and do deeds, as we speak and act in love, as we minister to the needs of the world with bread from earth and bread from heaven, as we are agents of restoration and healing, so the Spirit is shared.

The faithful are not the exclusive channels of the Holy Spirit. However, the faithful are a definite, intentional, and self-conscious channel.

At the heart of spirituality in the Christian Church is the understanding that we live in a faith relationship with God which is an intimate relationship



with Jesus Christ himself enabled by the Holy Spirit. From this we develop a larger sensitivity to all of life.

Spirituality is living in time and no time (the meaning of eternity). The God in whom we believe encompasses all of life. Our experiences occur in a linear fashion. But for God all that happens is. This is a philosophical notion, but it helps to remind us that spirituality is living in the mind of God.

Spirituality is an affirmation of the resurrection. We live as resurrected people. We are people with a promise. This simply means that the future is now. Look around you. The material has not vanished. You are not in another world. You are here. But we treat life and the objects of life with the sense of newness.

Spirituality is practiced in several ways: devotion, retreat, and simple and tender life styles. However practiced, spirituality celebrates and affirms the divine presence.

There is one set of spirituality that Christians practice and that commingles all the spheres. It celebrates the physical world, the dimensions of the mental world, and the depth of the spirit world. It is Holy Communion. We recognize the gifts, the gift of giving, the benefiting, and the sacrifice.

One way to define spirituality which I would like to try on the reader is this: openness to conversion. Conversions are eye opening experiences that clarify our understandings and direct our lives. They happen in many ways and for many reasons. And they occur as often as we are willing to risk them. (This is discussed in the introduction to this paper.)

I see this as a work of the Spirit.

When spirituality is practiced, the Spirit cannot be set in stone, one's feelings cannot be predetermined, nor can the impression be given that there is only one experience of the Spirit. The Spirit ruminates in our lives stirring up what is possible. The Spirit is unpredictable, moving and generating activity. As we live in this relationship with the Spirit, events do not fall into a pattern or system.

To risk conversion is to risk having our minds and life styles changed. A spiritual person, it would seem to me, is a God-trusting person who takes the chance of being made new for the situation one encounters in an unfolding world.

In the non-human world organisms interact with each other and adapt to one another. Is this true of the interaction between the Spirit and the human world? Do both the Spirit and humans benefit from each other?

As the word "Spirit" is the ecological word for God so "spirituality" is the ecological word for faith.

To practice spirituality is to live ecologically with all of life,  
to dare to live within a world we see and do not see  
to be engaged by the Spirit,  
to intentionally embrace and be embraced by the Spirit of God,  
to embrace the human and non-human world and be embraced by it,  
to live for the benefit of others.



## APPENDIX I

### Examples of Mutualism at LOMC

#### Cooperation

ANTS - For a long time ants have not been considered pollinators. Rather, they are seen as nectar thieves. However, the discovery has been made that they promote cross-pollination. The book of Proverbs (6:6-8) says, "Go to the ant, thou sluggard, consider her ways and be wise; Which having no guide, overseers or ruler, Provideth her meat in the summer, and gathereth her food in the harvest." Plants that depend on ants for seed dispersal, technically termed myrmecochorous ("ant-carried") plants, produce seeds with features well-suited to their tiny partners. First, the seeds are small. They are also usually white or very light in color, easy for the near-sighted ants to detect against a dark seed pod or the ground. Most have a mass of oil tissue, known as the elaiosome or oil body, that attracts the ants. The elaiosome contains a mixture of fatty foods and sometimes a little sugar or starch as well.

APHIDS - Kept by ants and milked.

ASTERS - Pollinated by bees.

BATS - Cactus and agave pollinated by bats.

BEES - They are almost reliant on flowers for their food. Bees can transport pollen because of the hairs all over the body and "honey" stomachs. They are attracted to flowers by a fragrant scent. Bees also secrete scents on rich food sources so flowers can be repeatedly visited by the bee and other hive mates. Bees also use dances to communicate to others the location of nectar.

BLACKBERRIES - Seed dispersal is the fruit eaten by animals and voided.

BLACK CHERRY TREES - Protected by ants. If the tree is close to an ant hill the defoliation of the black cherry by tent caterpillars is less likely.

BLUEBERRY BUSHES - Pollinated by bees.

BLOODROOT - Seeds are dispersed by ants. Since these plants set their seeds in the spring it is at the same time ants are coming out of dormancy and looking for food. The seed pods are close to the ground so they are accessible to the ants.

CINQUIFOLI - Pollinated by bees. There is a road map on the flower for the bee to find the pollen. The flower appears yellow to human eyes, but to bees it appears quite differently with dark streaks on the petal pointing to the center of the flower.

COLUMBINE - The swinging flower makes it difficult for birds to feed on them. Hummingbirds can hover in the air not needing a platform.

DANDELIONS - Seeds dispersed by wind.

ELDERBERRY - Beetle pollinated. The nature of flowers pollinated by beetles is that they are primitive: large, thick petals, many of them, and heavy fragrance. Beetles on flowers are like bulls in the china shop.



ELM - Seeds dispersed by wind.

EVENING PRIMROSE - The flower glimmers in the darkness and attracts moths which are its pollinators. The flowers usually offer their nectar in long thin spurs. suited to the long tongues of moths. The flower has no pedestal for the moths to light on. They must either scramble to hang on or hover in the front of the flower, rapidly beating their wings.

FUNGUS - An important group of underground-fruited fungi, the truffles and false truffles, disperse their spores via consumption by animals, very like fruit-bearing plants. Truffles and false truffles are the fruiting bodies of underground fungi that are important for the survival of most forest trees, especially pines, firs, and spruces. Filaments of these fungi grow on or in the roots of these trees, and assist them in extracting moisture and minerals from the soil. In some cases the fungi actually create fertilizing compounds for the tree roots. Such associations between fungi and roots are called mycorrhizae or "fungus-coated-roots." For most of the year the fungi live and grow as a thin webbing of pale threads among the roots, but when weather conditions are just right - warm and moist - the fungi rapidly produce fruiting bodies loaded with spores. Many of these push up through the soil to emerge as our familiar woodland puffballs and mushrooms. The wind disperses spores from these. But the truffles and the false truffles form fruiting bodies that stay underground. It is easy enough to see how the above-ground or epigeal fungi travel far and wide. Underground fungi have an aroma and taste that attract wild animals who desire them for food. Voles feed on this food. The forest benefits from the fungi, the animals benefit as well.

GOLDENROD - Pollinated by bees.

HEPATICA - See ant seed dispersal under bloodroot.

HUMMINGBIRDS - The flowers they pollinate are odorless, bright colored (reddish orange and red), and rich in nectar. Landing platforms are absent.

JEWELWEED - Explosive mechanism catapults seeds out of pods.

MAPLE - Seeds dispersed by wind.

MILKWEED - The flowers have a peculiar pollination relationship with bumblebees. Milkweed flowers produce pollen in two bundles or pollinia connected by a little bridge, the corpusculum. When a bee steps on the flower, the pollinia cling to its feet. Field research shows that in many cases milkweed pollinia are so busy that they make the bees stumble over their heavy feet and fall off the flowers. Most of the bees then fly some distance away before they settle on another milkweed. This promotes outbreeding, because milkweed plants send out underground stems that produce nearby clones of the central plant. The pollinia sometimes get the bees tangled up in the milkweed flowers, and in disentangling themselves they may tear off claws, feet, or even their lower legs. This heavy pollinia also demand that the bees spend more energy when they carry them just to stay aflight. It seems, in fact, as if bumblebees are in for nothing but trouble if they visit milkweed flowers. Why do they keep doing it? The secret lies in the high pay scale of this hazardous job. Milkweed flowers produce copious amounts of rich nectar. Although the risks of working a milkweed flower are high, the rewards compensate for it, like the situation with human workers who



help build skyscrapers.

MONARCH BUTTERFLIES -(Cocoon) developed on milkweed plant giving the monarch a bad taste to birds.

PINE TREES - See Fungus.

SUNFLOWERS - Flower protected by ants to discourage other insects laying eggs on the flower.

RASPBERRIES - Seed dispersal by animals eating berries and voiding.

TURTLES - This animal is responsible for dispersing the seeds of wild strawberries. They are eaten and voided.

VIOLETS - Exploding mechanism catapults seeds out of pods. The seeds are dispersed by ants. See bloodroot.

WILD GINGER - See ant seed dispersal under bloodroot.

WILD STRAWBERRIES - See Turtles.

YUCCA - There is one plant at LOMC. Its desert relative has an interesting pollination process. These plants are pollinated by a small female moth that lays her eggs, a few at a time, in the depths of the flowers. When the eggs hatch the tiny caterpillars start to devour the flower ovules which should become the plant's offspring. If this infanticide were complete the Yucca would long since have become extinct. But the flower produces enough ovules to feed their hungry guests and still have some left over (called mast cropping). Each caterpillar needs to consume about 20 ovules to reach maturity. On the average six caterpillars live in each flower. The yucca flower produces 200 ovules on the average. The plant can afford to sacrifice some of its young and still have enough to perpetuate itself.

#### Competition

CANADIAN THISTLE - The purple flowered plant often stands alone when other plants have been devoured around it. Usually seen in pastures. Because of its defiant strength it is an emblem of Scotland.

CEDAR, RED - The familiar odor that repels clothes moths is called azadirachtin.

CICADA - The 17 year cicada is an example of mast cropping in the animal world. Cicadas are in such abundance that when they emerge there is more than what the cicadas' enemy can devour. Thus, sufficient quantities of cicadas survive for the next crop.

MILKWEED - This plant must be cooked to be rendered harmless otherwise it can cause a similar reaction as wild parsnip.

NETTLE, STINGING - This plant has tiny hairs, called "trichomes," which are swollen tips that release droplets of irritating fluid when touched. Geranium leaves have a similar "trichome."



OAKS - This tree develops a chemical defense in response to the invasion of insects on the leaves like the Gypsy Moth. Other defensive chemicals found in plants are recognized by humans as hallucinogens, cyanide, nicotine, and gums and resins.

PARSNIPS - The plants have a compound known as psoralens which can cause gene mutation, promote the occurrence of cancer in laboratory animals, and in humans they can cause a peculiar sensitivity of the skin to sunlight. Properly cooked the root is edible.

SOYBEANS - This plant must be cooked, otherwise it will have the same affect as parsnip.

WALNUT, AMERICAN BLACK - Seed has a tough shell, almost impossible to break with a nutcracker.

#### Seed Dispersal by Animals

EPIZOOCHORY - "Seed on animals." Seed clings to fur of animals because the seeds are light and spiny. Burdock.

SYNZOOCHORY - "Seeds with animals." Seeds are collected in caches. Squirrels.

ENDOZOOCHORY - "Seeds inside animals." Called the Jonah Syndrome.

file: APP1



## APPENDIX II

### BAT FACTS

Bats are mammals, but such unique ones that scientists have placed them in a group of their own, the Chiroptera, which means hand-wing. Chirinox - Greek word for one who is master of one's hands. There are two major groups: the Microchiroptera and the Megachiroptera. Flying foxes belong to the latter group. Nycteris - Greek word for bats.

Bats are the most widely distributed mammals, surpassed only by rodents and people.

Bat fossils have been found that date back approximately 50 million years, but, surprisingly, the bats of that ancient period very closely resembled those we know today.

Linnaeus, the father of modern taxonomy, was so impressed by the similarities between bats and primates (lemurs, monkeys, apes, and humans) that he originally put them into the same taxonomic group. Today's scientists generally agree that primates and bats share a common shrewlike ancestor, but belong to separate groups. Bats are not related to rodents.

Like humans, bats give birth to poorly developed young and nurse them from a pair of pectoral breasts.

Bats are, for their size, the slowest reproducing animals on earth. On average, mother bats rear only one young per year, and some do not give birth until they are two or more years old. Exceptionally long-lived, a few may survive for more than 30 years.

Typically, bats are very loyal to their birthplaces and hibernating sites, but how they find their way over the long distances that often exist between their hibernating and feeding areas remains largely a mystery.

When bats are reared they are segregated into bachelor colonies.

#### Wings

Some bats use wings to capture insects in flight. Wing acts much like a tennis racket deflecting insects toward the mouth.

Another function of the wings is associated with rich vascular network in terms of gas exchange. Carbon dioxide is dissipated through the wings as well as the lungs.

Two types of flight exertion - cruise and sprint.

#### Predator/Prey/Food

Bats consume one fourth to one half their body weight in insects each day. Many insects consumed are human pests, like mosquitoes and flies.

Prey rarely outwit the bats.

70 percent of the bats eat insects. There are some that feed on fruit and nectar. There are a few carnivorous bats.



Worldwide, bats are the major predators of night-flying insects, a category that includes mosquitoes and numerous crop pests. A North American bat can catch up to 600 mosquitoes in an hour.

A colony of 500 bats, when feeding on mosquitoes, can easily catch a quarter of a million or more in a single hour.

#### Ecolocation

Like dolphins, most bats communicate and navigate with high-frequency sounds. It is called ecolocation.

Several groups of moths have developed highly specialized auditory devices (ears) for detecting high frequencies of echolocation.

#### Pollination

Flowers pollinated by bats are usually white, creamy, or greenish in color and generally have strong musk and sour scents. Flowers usually contain large quantities of nectar.

300 plant species in the Old World tropics alone rely on the pollinating and seed dispersal services of bats.

#### Housing

Information about how to find obscure sites, such as small cave entrances, apparently is passed on from generation to generation.

#### Prey

Bats not prey of any one other mammal. If discovered it is more by accident. Animals that prey on bats: opossums, skunks, and long-tailed weasels. Owls, hawks, and falcons are avian predators of bats. Snakes are frequent predators.

#### Wintering

In temperate regions, cold winters force bats to migrate and hibernate.

#### Contributions

Guano is source of saltpetre (sodium nitrate). It is used in the production of gun powder and other explosives.

Wide varieties of many of the world's most economically valuable crop plants also rely on bats for survival: bananas, breadfruit, avocado, dates, figs, peaches, mangoes, cloves, cashews, carob, balsa wood, and tequila.

In the tropics bats are considered a "keystone" specie because they are crucial to the lives of plants in an entire ecosystem.

Bats are important indicators of a healthy environment, and they should be a welcome part of our neighborhoods. Like canaries in a mine, they serve as early warning systems for dangerously high pesticide and pollution levels.

Bats are valuable in the reforestation in the tropics.

Studies of bats have contributed to the development of navigational aids for the blind, birth control and artificial insemination techniques, vaccine production, and drug testing, as well as to a better understanding of low-



# GREEN IMMIGRANTS

WHAT	ORIGIN	FROM
Apple	Western Asia	Grown from seeds brought from England in the 1600's.
African Violet	Central Africa	Grown from seeds brought from Europe in 1926.
Asparagus	Anywhere from Siberia to the Cape of Good Hope.	Brought over by the Puritans.
Banana	Malaysia or India around 600 B.C.	Yellow banana used in Jamaica in 1836, then came to America in 1875.
Begonia	West Indies	1690, Michel Begon made the discovery of the Begonia.
Bleeding Heart	China, discovered on the island of Chusan in 1846.	Brought from Europe 20 years after the civil war.
Butter & Eggs	Europe, specifically England.	Brought over during colonization of the new world.
Clover	Mediterranean & Red Sea areas	The Romans brought it to England, and then it was brought to the English colonies in 1750.
Coffee	Ethiopia	Brought from Ethiopia to Europe and then to the colonies, specifically Virginia.
Crab Grass	Prehistoric - 2700 B.C. China, Africa	The U.S. Patent Office had the grass planted in 1849 to give livestock a food supply.
Cucumber	India & Egypt - ancient times	Brought to Europe by Alexander the Great, then to Haiti in 1494, and then to Jamestown in 1610.
Dandelion	Asia Minor - all over world before written history.	Brought over by the Puritans.
Geranium	Southern Africa	Brought from London to America in 1760.
Lettuce	Believed to come from Egypt and/or Greece approximately 500 B.C.	Columbus brought lettuce to the West Indies
Marigold	India and eastern Asia, also Brazil	Brought by Puritans to Massachusetts.
Olive	Asia Minor	Brought from Spain to the West Indies.
Orange	Indochina - 3000 B.C.	Brought by Columbus in 1493.
Peach	China - 2000 B.C.	Planted by Spaniards in Mexico and Brazil. Also planted by French in New Orleans & Jamestown.
Peanut	Native to tropical America	Conquistadors in South America.
Pineapple	Amazon regions	Brought to Guadeloupe and eventually Hawaii.
Potato	Andes mountains in South America	Brought to Florida in 1565. Brought to Virginia in 1621.
Wheat	Nile valley - 5000 B.C. (?)	Brought by Columbus in 1493.



1. The first of the two is the "C" group, which is the most common and is found in all parts of the world. It is the most common and is found in all parts of the world. It is the most common and is found in all parts of the world.

2. The second is the "B" group, which is found in the tropics and subtropics. It is the second most common and is found in the tropics and subtropics. It is the second most common and is found in the tropics and subtropics.

3. The third is the "A" group, which is found in the temperate regions. It is the third most common and is found in the temperate regions. It is the third most common and is found in the temperate regions.

4. The fourth is the "D" group, which is found in the high latitudes. It is the fourth most common and is found in the high latitudes. It is the fourth most common and is found in the high latitudes.

5. The fifth is the "E" group, which is found in the high latitudes. It is the fifth most common and is found in the high latitudes. It is the fifth most common and is found in the high latitudes.

6. The sixth is the "F" group, which is found in the high latitudes. It is the sixth most common and is found in the high latitudes. It is the sixth most common and is found in the high latitudes.

7. The seventh is the "G" group, which is found in the high latitudes. It is the seventh most common and is found in the high latitudes. It is the seventh most common and is found in the high latitudes.

8. The eighth is the "H" group, which is found in the high latitudes. It is the eighth most common and is found in the high latitudes. It is the eighth most common and is found in the high latitudes.

9. The ninth is the "I" group, which is found in the high latitudes. It is the ninth most common and is found in the high latitudes. It is the ninth most common and is found in the high latitudes.

10. The tenth is the "J" group, which is found in the high latitudes. It is the tenth most common and is found in the high latitudes. It is the tenth most common and is found in the high latitudes.



A. INTRODUCTION

TITLE: "The Home of God"

KEY WORD: Ecosystem

SENTENCE DESCRIPTION: The Earth is the home of God and human and non-human organisms.

INTENTIONS: Learn that:

(Environmental)

I. Ecology is the study of relationships.

II. Ecology presupposes that the organisms of this world are interdependent.

(Theological)

III. Given that the word "Spirit" is the ecological word for God understanding:

A. God creating, redeeming, and nurturing in this world.

B. God-near and God-at-work.

C. God's relation and interaction with this world.

D. The Spirit brings to this sphere the history of the Father and the Son.

(Multi-Cultural/Racial)

IV. The human world is composed of:

A. Many races, cultures, etc.

B. Communities of different people.

BIBLE PASSAGES:

Genesis 28:10-17

Luke 11:1-4

Acts 2:1-13

Psalms 104

John 14:15-31

Acts 7

Isaiah 44:23-45:19

John 16:4b-15

Ezekiel 37:1-14

COMMENTARY:

This day deals with "deep ecology." Remember, the word "ecology" means the study of relationships. An in-depth study of this means we see beyond the surface. We penetrate the casually observed to recognize the processes at work and to celebrate God at work. The word for God in this context is "Spirit."

Day 2 deals with looking at details of the diverse world in which we live. Today, we look at the broad strokes within which we see various natural processes we call energy flow, cycle, and population.

"Who Calls Earth Home" is easily adapted for age groups. In some instances the reading material may need to be read to the younger participants. They do have listening skills. The key in this Bible study is that participants get the big picture.

One side bar to this theme: What is the opposite of ecosystem? (The answer is - ecosystem - self-centeredness.)







B. WORSHIP AND DEVOTIONAL EXPERIENCES1. Introduce the Hymn, "Creator Spirit"

Description: The lyrics of the hymn help explain the Holy Spirit *I*

Materials: Lutheran Book of Worship, Hymn # 164

2. Sharing Time

Description: A process to reflect on the activities for the day. *I*

Appropriate for: Grades 4-8 and families

Process:

- I. Ask them, "What have you liked about the day?" Ask everyone to be ready with one word and to take turns. Those who don't have a word can pass.
- II. Ask them to share any concerns they have in a sentence. Give them time to think. Go around the group, more slowly this time, sharing a sentence such as "I'm concerned about . . . ."
- III. Ask them to share a special care they still carry over from home. It's okay for the participants to pass on this one, too.
- IV. As a leader share a story of your own about a good or meaningful camp experience you have had. Ask if anyone has such a story.
- V. Invite short sentence prayers: "I am thankful for . . ."

3. Prayers of a Small Group Community

Description: To help participants develop freedom to pray openly. *I*

Bible Passage: Luke 11:1-4

Materials: Pen and paper for the first two days.

Process:

- I. Use Luke 11:1-4 as an introduction to the activity of prayer.
- II. Day I - Participants suggest concerns and ideas for prayers. The group leader offers them up in prayer out loud (called a collect).
- III. Day II - Participants write their own prayers and read them out loud.
- IV. Day III - Participants offer sentence prayers.
- V. Day IV - Participants listen to ideas of others and prepare the prayer.
- VI. Day V - Pray out loud.

4. "Promises, Promises"*Paraclete*

Description: This service can be used as a part of the contracting process. The service has several parts. They may be mixed as the leader finds most appropriate and effective. This service could be made more interesting by moving from one location to another. Songs and prayers can be interspersed throughout. *I*

Bible Texts: John 16:4b-15 and Acts 7

Materials: Paper and pens/markers for the "contract."

Process:

- I. Possible songs include "Spirit of God" (Medical Missionary Sisters) and "O Jesus, I Have Promised."
- II. Ask participants to define promise. If they can't give a definition, ask for an illustration. If necessary, suggest a few promises.
- III. Promises are very important in life. Men and women make them in marriage. Boss and employee make mutual promises, as does the electric company and electric user. When we read the Bible we find many promises that God makes (they are often called covenants).
- IV. Talk briefly about the promises to Noah, to Abraham and to the people of Israel. Use Acts 7 as an outline of promises God has made.
- V. Promises are made before leaving home. Have the participants tell any promises made by them or to them before they left home. Did anyone promise



1132-

to be good while away from home? Did anyone promise to do the participant's chores while they are away from home? Did anyone promise to write home while at camp?

- VI. Retell the biblical situation and paraphrase Jesus' words to explain John 16:4b-15. Jesus here informs His disciples that He will be leaving them. They wonder what is going to happen to Him. But with His departure, God promises to send a helper or counselor or advocate, one who speaks on Jesus' behalf. It reminds us of what Jesus says at the close of Matthew, ". . . And lo, I am with you always, to the close of the age" (Matthew 28:20).
- VII. If this worship experience is for the entire camp community, break up into small groups or cabin groups. Each group is to work on its own contract in the context of promises. Each person in the small group will make promises as to how they will behave during the camp session. The leader records the promises on newsprint so that they can be posted for review by the group from time to time. Promises that can be made might include:
- A. How I will take care of others.
  - B. How I will treat my environment.
  - C. How I will take responsibility for myself.
  - D. How I will show the love of God.
  - E. The worship closes with the leader reminding the participants that God keeps His promises, even though we do not always keep ours. However, God's Spirit can assist the participants in keeping their promises. A second point to be emphasized is that to believe in the promises of God is to believe in the Holy Spirit (note Acts 7:51).

I 5. "Gathering and Greeting" - I

Description: A call to worship.

Materials: Copies for responsive readings.

Process:

Leader: Come, Spirit of the living God:

People: Open our lives to be filled with love and power.

Leader: Come, Spirit of wisdom and understanding, Spirit of counsel and might;

People: Teach us to trust the new life you have given us.

Leader: Come, Spirit of matchless love:

People: Gather and nurture us as one family: empower us to serve you in all that we do.

II 6. "Gather and Greeting" - II

Description: A call to worship.

Materials: Copies for responsive reading.

Process:

Leader: A mighty wind has blown

People: And tongues of fire have danced.

Leader: The presence of the Spirit is with us

People: Just as Jesus has promised

Leader: The Spirit moves

All: And gathers us into community; nurturing and challenging one another, celebrating and witnessing to the power of God.

II 7. "Spirit of the Living God"

Use hymn's words of "melt," "mold," "fill," and "use" as God's action in shaping/interacting with the world to design a devotion.



## II 8. "An Indian Prayer"

Description: This prayer helps define the Holy Spirit while helping participants to pray for the power of the Spirit. May be prayed by the leader, in unison, or as a responsive reading. III

Materials: Copies of the prayer

Process:

*Center Spirit*

O Great Spirit,  
Whose voice I hear in the winds,  
and whose breath gives life to all the world,  
hear me! I am small and weak, I need your  
strength and wisdom.  
Let me walk in beauty, and make my eyes  
ever behold the red and purple sunset.  
Make my hands respect the things you have  
made and my ears sharp to hear your voice.  
Make me wise so that I may understand the  
things you have taught my people.  
Let me learn that lesson you have hidden  
in every leaf and rock.  
I seek strength; not to be greater than my  
brother, but to fight my greatest enemy--myself.  
Make me always ready to come to you with  
clean hands and straight eyes,  
so when life fades, as the fading sunset,  
my spirit may come to you  
without shame.

## I 9. "Spirit Spot" (See Rediscovery, pp. 74-75.)

Description: Each person selects a sacred spot to spend time each day for reflection I

## I 10. "Prayer Tree"

Begin a prayer tree. Find a fairly large dead, sturdy branch with many smaller branches. Secure it in the ground or in a stand, such as a potted can filled with sand. Place it where it will be undisturbed in a place you can gather regularly. Prayers will be added to this tree every day. Each participant may write his or her own prayer, or it may be a prayer composed by the group. Hang the prayers on the tree branches with a piece of yarn or a bent paper clip. Use them during your worship time. Focus today on the theme, "The Home of God." I

## I 11. "This Is the House of God"

Design a worship based on Genesis 28:17. Consider Earth the House of God. Use Genesis 28:10-17 as a suggestion for the liturgy and the setting. I

## II 12. "The Language of the Spirit"

Create a worship based on Acts 2:1-13. Consider the languages we know today. Include as many nationalities as possible. Also, consider the language of the non-human world. I







C. BIBLE STUDIES1. "WHO CALLS EARTH HOME?"

Description: This study explores: the meaning of the word "ecology," characteristics of relationships in the natural world (1. energy flow, 2. cycles, and 3. populations), the world as God's home, the variety of people and cultures who call Earth home, and the word "Spirit" as the ecological word for God.

Bible Texts: Genesis 28:10-17, Psalm 104, Isaiah 44:23-45:19, Ezekiel 37:1-14

## Process:

## I. The home where you live (a Get Acquainted activity)

A. Participants tell about the homes from which they come using stories or drawings. Prompt with a few questions like:

1. What is the neighborhood like?
2. Who lives in your home?
3. How do people feel about each other in your home?
4. What does each person in your home do for: Work? Fun?
5. Who provides: Food? Money? Comfort? Pleasure?
6. Name some of the pass-times in your home?
7. Do you have any animals in your home? Pets? Ants and bats?

B. Ask participants to pair up and share information with each other.

C. Each person tell the group what they heard from their partner.

D. Note to the leader:

1. Listen carefully for examples of the three characteristics of an ecosystem: 1) energy flow, 2) cycles, and 3) populations.
2. When the stories are completed give a mini-lecture about organisms that live in relationships with one another demonstrating the above three characteristics in the stories of the participants.

E. An optional activity: Study what types of plants and animals consider a particular area "home." (See "Erik's Ecocentre," I E 2)

F. Ask participants:

1. Give a one sentence definition of a home. (E.g. A home is a group of beings in relationship with one another living with certain routines and structures and depending upon various forms of energy and functions.)
2. When you imagine a home is it a place, a relationship, both, other?

## II. Ask: Have participants heard the word "eco" as in ecosystem, ecology, etc?

A. What does the word mean?

B. Comes from the Greek word oiko - home.

## III. Take a hike - an environmental trek.

(There are two parts to the hike. First, experience the three characteristics of the environment using various stopping stations. Second, apply these characteristics to a particular community.)

A. Environmental Walk. Use the ideas in I E 3 as examples of what to do.

B. Create several experiences along the route (at least one for each characteristic).

1. Population (See I E 5)
2. Energy Flow (See I E 6)
3. Cycles (See I E 7)

C. Locate a vista and ask participants to describe what they "see."

1. Instructions

- a. This activity follows several exercises above.
- b. Find a specific location.
- c. To help participants, use "Camera Kids" (See I G 1).

2. Participants describe what they see by drawing or writing.

Camera Kids



3. Participants share pictures.
  - a. Ask group members to note examples in these reports of population, energy flow, and cycles.
  - b. Note to the leader: If someone mentions the word "God" in their report make a mental note of it for use later. Do not comment at this time.

#### IV. Spirit - the ecological word for God

- A. Optional activity to introduce this section.
  1. Ask participants if they have noticed the role of wind in the vista.
  2. Use a wind activity (I E 8, 9, 10)
  3. Discuss how air is essential.
- B. Ask the participants to list all the names that are used for God.
  1. Write the list on paper.
  2. If someone says, "Trinity," ask the participants to connect the words on the list with each of the persons of the Trinity.
  3. Then ask: What word for God describes God living in relationship with the world? (Spirit)
- C. Read Ezekiel 37:1-14 out loud and ask participants if they can notice three words that are closely associated.
  1. Can they guess what they are? (wind, breath, Spirit)
  2. Mini-lecture: Explain to the participants that both the Hebrew and the Greek words in the Bible connect Spirit, wind, and breath: Ruach - Hebrew and Pneuma - Greek
- D. Read Psalm 104
  1. Subgroup according to these passages asking each group to identify the different organisms mentioned. (Were any of the items seen in the vistas?)
 

a. Vss. 1-4	d. Vss. 14-23
b. Vss. 5-9	e. Vss. 24-26
c. Vss. 10-13	
  2. Read vss. 27-30 together
    - a. What does the Spirit do? (Creates and makes new)
    - b. Did the participants "see" God in their vista study? What was God doing? (Remind people if anyone brought "God" up earlier.)
- E. Optional: Read Isaiah 44:23-45:19 and notice the various interactions between God and the world mentioned in the text.
- F. Mini-lecture:
  1. When the Church uses the word "Spirit" for God the Church is describing God-near and God-at-work.
  2. We can say the word "Spirit" is the ecological (study of relationships) word for God.
  3. God creates and makes things new now.
- G. Optional: The Home/the House of God.
  1. Ask participants if they are familiar with the story of Jacob's ladder (Genesis 28:10-17).
  2. Leader: Relate the story for memory.
    - a. It tells of a place where Jacob met God.
    - b. Note that he calls the place the House of God and the Gate of Heaven.
  3. Is such an encounter with God limited to just one place? Can the world be called Bethel (House of God)? Can we say Home of God?

#### V. Who else calls Earth "home?"

- A. Do "Earth - the Apple of Our Eye" (See I E 12)
- B. Participants tell their own stories describing their race, nationality, culture, and religion.
- C. Participants list the races, nationalities, cultures, and religions with



which they are familiar.

D. Create puppets and have them talk with one another (See I G 2)

VI. Summarize: Who/what calls Earth "home?" (God, all the human world, all the non-human world)

## II 2. "THE SPIRIT AND THE SPEED OF LIGHT"

Description: Using the speed of light and light years as a visual experience this study intends to help participants understand Jesus' promise to send His Spirit to bring to us the truth of God. This study can precede or follow "The Third Person of the Trinity" (See I C 4).

Appropriate for: Use during or after a Night Hike.

Bible Texts: John 14:15-31 & 16:4b-15

Process:

- I. Do "Take a Look at Light Years" (See I E 12 (D))
- II. Study the speed of light.
  - A. How fast does light travel? (186,000 miles per second)
  - B. What is light? The absence of darkness? Something else?
- III. Identify distances of various stars and planets in the night sky.
  - A. Give some specific years when the light began that can be seen at the moment one is looking.
  - B. Are any of these years of historical significance?
  - C. Is there a light seen now that began at the time of Christ?
- IV. Read John 14:15-31 (note 14:26) and 16:4b-15
  - A. What does Jesus promise? Why?
  - B. What will the Spirit do?
  - C. Note what Jesus promises to continue to make available in the future.
  - D. Compare the Holy Spirit bringing Christ to the world today just as light brings an event that happened years ago on a star or planet.

## III 3. "WIND/BREATH/SPIRIT"

Description: Introduce the Hebrew and Greek words for wind, breath, and Spirit and show how they give life.

Bible Texts: Various

Process:

- I. Introduce with one or several of these activities:
  - A. Wind studies (I E 8, 9, 10)
  - B. Use of the wind (I G 3, 4, 5, 6)
- II. Discuss -
  - A. How wind belongs to the creation plan.
    1. Is it necessary for the natural world to have wind?
    2. What is good about it? What is bad? (Might get into the subject of tornadoes and hurricanes. Be ready to say something about their necessity.)
  - B. The role of breathing in human physiology.
  - C. List on a piece of paper all the creative characteristics of air/wind/breath.
    1. Do these words also describe God?
    2. Select from the list.
- III. Biblical Insights
  - A. Teach participants the words for spirit in Hebrew (ruach) and Greek (pneuma). These words also mean wind and breath. You can see these words used in Genesis 1:2, 6-17, 8:1, John 3:8 and II Thessalonians 2:8.
  - B. How does the Bible talk about Spirit?
    1. Numbers 24:1-3a Power for the prophet to Speak
    2. Psalm 139 God's constant presence



3. Isaiah 32:1-20 (Esp. vs.15) Anoints Messiah
4. Isaiah 63:10-14 Gives comfort
5. Matthew 1:18 Conceived by the Holy Spirit
6. Matthew 3:16 Baptism
7. Matthew 12:22-32 Power of Christ
8. John 14:26 & 16:4b-15 Promised by Jesus
9. II Corinthians 3:17 Spirit is Jesus Christ
- C. Can the participants put into several simple phrases a definition or understanding of the Holy Spirit?

IV. Show the participants the phrase in the Nicene Creed which describes the Spirit proceeding from "the Father and the Son." Briefly state that the Spirit embodies the work of God the Creator and the works of God the Redeemer. Thus, the Spirit is the all powerful, loving, redeeming God at work in our midst.

- V. If you wish, have the time, and/or are working with a Confirmation group look at the story of Pentecost, the birthday of the Church in Acts 2. The Church has the presence of the Spirit.

#### 4. "THE THIRD PERSON OF THE TRINITY" or "The Improvisational God"

Description: A quick review of the concept of the Trinity using the word persona (mask) to illustrate the point.

Bible Texts: John 14:15-27, 16:7-15

Process:

##### I. Put on your mask.

- A. Each person list three distinctive roles they play (e.g. child, student, team member).

1. Discuss: Do they act differently in each role?
2. Do they talk differently in each role?

- B. Each person make a mask of one of the roles each plays in one's life.

##### II. Create a drama

- A. Suggest several themes.

- B. Ask the participants to wear their masks and act and sound like the role and play a part in the drama.

##### III. Masks and persons - A mini-lecture

- A. In the Greek theater the use of masks (in Greek the word is persona) made it possible for one person to play a variety of roles. It was always the same actor, but the actor behaved differently and the audience perceived the actor differently.

- B. When the Church talks about the "persons" of the Trinity, the word comes from persona. There are many ways God acts and God is perceived as acting. The early Church organized these actions into three persons: Father, Son, and Holy Spirit (Creator, Redeemer, Sanctifier).

##### IV. A study of the Third Person of the Trinity

- A. Read John 14:15-27 and 16:7-15. Explain that the setting of this passage was the Last Supper of Jesus with His disciples. He was soon to be betrayed and turned over to His enemies. The disciples would be alone from that point on. Ask them to answer the following questions:

1. What prompted Jesus to say what he did?
2. What did Jesus warn against?
3. What promise did he give?
4. Jesus used two different words for the Holy Spirit--what are they?

- B. List the three things Jesus said the Holy Spirit would do.

1. What does this passage tell us about God?
2. How do you think the disciples reacted to these words?

- C. Conclude: What do you believe the Holy Spirit is saying to you.



D. GROUP LIFE ACTIVITIES1. MULTI-CULTURAL/RACIAL INFORMATION

(This process is used to achieve the end of mutualism and inclusivity.)

<u>Steps</u>	<u>Activity Type</u>	<u>Daily Themes</u>	<u>Outcomes</u>
1. Get Acquainted	Names Presentation of Self Affirmation of Cultural Heritage	Day 1 - Ecosystem <i>The other</i>	Understanding Diversity Knowledge of One's Ethnic Diversity Dealing with Intimidation
2. Acknowledging Differences	Unique Self - a. Opinions b. Behavior Unique Others a. Positive Awareness of others b. Going beyond entertainment value c. Sensitivity to - Language Feelings	Day 2 - Diversity <i>Cycles + Shame</i>	Understanding Diversity Living within Community
3. Resolving Differences	Affirming Similarities Be positive	Day 3 - Mutualism <i>Cooperation</i>	Coping with Other Cultures Prejudice
4. Cooperation and Trust	Community Building	Day 4 - Inclusivity <i>Respect for the common</i>	

2. "FIRST DAY AT CAMP"

There are several important steps that must be followed on the first day. If participants cannot create a sense of confidence in themselves and in the group, group life will not be successful.

The three essential steps are: Get Acquainted  
Community Building (today called "bonding")  
Contracting

I. Get AcquaintedA. "Cinnamon Roll" (See Rediscovery, pp. 51-52)

Description: Activity enabling people to touch.

B. "Group Picnic" (See Rediscovery, p. 56)

Description: Name Game

C. "The Squeeze" (See We Are a Chosen People of God, Games 4)

Description: A touching activity.

D. "I've Got Your Number" (See We Are a Chosen People of God, Games 2)

Description: An activity to learn more about each person in group.



## E. "Name Swat"

One person stands in the middle of the circle with a rolled up newspaper in hand. The object of the game is for the people to call out the name of a person in the circle after their name is called and before the person in the middle can swat them with the paper. Hitting should be below the waist. If a person is hit before saying another person's name they are the person in the middle.

F. Name Games (See We Are a Chosen People of God, Bible Studies: Senior High 3)

Description: Four games for Senior High youth.

## G. "Mingle Game" Participants group according to specific criteria.

## H. "Shouting Names"

Begin with everyone standing. On the signal to begin, everyone sits and shouts his/her first name. On a second signal, everyone sits and shouts his last name. Repeat several times, each time with more volume.

## II. Building Community

A. "Trust Fall/Lift Turn" (See Rediscovery, p. 53)

Description: A group confidence builder

B. "Ha, Ha, Ha" (See Rediscovery, p. 55)

Description: A fun(ny) group building activity

C. "Pass a Clap" (See Rediscovery, p. 56)

Description: Team work

D. "Secret Friend" (See Rediscovery, p. 66)

Description: Personal contact with one other person

E. "Sardines" (See We Are a Chosen People of God, Games 3)

Description: Hide and Seek game with a twist.

## III. Contracting Process

A. Ask participants to share expectations of their time together.

B. Leader describe the schedule in whatever detail is necessary.

C. Make any particular plans or decisions that affect the schedule or the activities for the session.

D. Ask participants to share some rules by which they feel they should live during the event.

E. Remind the participants of rules of the camp.

F. Discuss several major problems in terms of agreements:

1. How should discipline be handled?

2. When does silence begin in order to sleep?

3. "Talking Feather" (See Rediscovery, pp. 60-61)

Description: Object designating speaker.

## 4. "Puppet World" (See I G 2)

Look at a world map and try to identify as many races, cultures, and nationalities of the world. Generate a list. Make many puppets representing many people as time and interest will allow.



Create a puppet show

- a. What do the puppets talk about?
- b. How do they talk?
- c. What must be done so they can understand each other?

## I. Cooperative Get-Acquainted Activities

There are some good cooperative games that can be played with small groups in The New Games Book (TNGB), More New Games (MNG), and Playfair (PF). These books are in the LOMC Resource Center.

1. "Aura", TNGB, p. 57
2. "Catch the Dragon's Tail", TNGB, p. 47
3. "Stand-Up", TNGB, p. 65
4. "Knots", TNGB, p. 69
5. "Hug Tag", MNG, p. 115
6. "Amoeba Race", MNG, p. 159
7. "Pile Up", MNG, p. 65
8. "Lemonade", MNG, p. 127
9. "Introductions", PF, p. 64
10. "Moving Name Game", PF, p. 65
11. "Singing Name Game", PF, p. 67
12. "Animals", PF, p. 69
13. "Hum-Dinger", PF, p. 70
14. "Human Treasure Hunt", p. 73

## I. b. "Stress Challenge Activities" (See Cowstall and Cobras 11)

- A. Bottoms Up, p. 59
- B. Python Pentathlon, p. 43
- C. The Balance Broom, p. 44
- D. Two Person Trust Fall, p. 51
- E. Willow in the Wind, p. 52
- F. Levitation, p. 53
- G. Gauntlet, p. 53
- H. Speed Rabbit, p. 65
- I. Hustle Handle, p. 66
- J. Impulse, p. 69
- K. Impulse II, p. 69
- L. Yurt Circle, p. 73
- M. Initiative Run, pp. 89-93
- N. Commando Crawl, p. 97
- O. Mohawk Walk, pp. 101-102
- P. Nitro Crossing, pp. 104-105

## II. Cooperation Games (See The Cooperative Sports and Games Book, Orlick)

### I. Ages 5-7

- A. This Is My Friend, pp. 10-12
- B. Gesture Name Game, p. 12
- C. Big Turtle, p. 14
- D. Little People's Big Sack, pp. 16-18
- E. Choo-Choo Train, p. 17
- F. Beach Ball Balance, pp. 17-18
- G. Wagon Wheels, p. 19
- H. Double Bubble, p. 19
- I. Sticky Popcorn, p. 20
- J. Grasshopper, p. 23
- K. Barnyard, p. 26

### II. Ages 8-12

- A. Frozen Tag, p. 38
- B. Hug Tag, pp. 38-39
- C. Log Roll, p. 40

### III. Cooperation Games from Other Cultures, pp. 75-83

## II. 8. Cooperation Games (See Second Cooperative Sports and Games Book, Orlick)

### I. Ages 5-7

- A. Circle Ball Pass, p. 43
- B. Silly Bones, p. 43
- C. Toesie Roll with Control, p. 41
- D. More Sticky Popcorn, p. 44
- E. Raindrops, p. 44
- F. Blanket Options, p. 46
- G. Three Legged Ventures, p. 46

### II. Ages 8-12

- A. Imaginary Ball Toss, p. 59
- B. Touch Blue, p. 61
- C. Circle of Friends, p. 61
- D. Hugger, p. 62
- E. Taketack Tie, p. 64
- F. Rump Bump, p. 64
- G. Partner Pull-up, p. 64
- H. Partner Stand-up, p. 64
- I. Jiggle and Swiggle, p. 65
- J. Group Pull-up, p. 69
- K. Tug of Peace, p. 71
- L. Magic Number 11, p. 71
- M. Incorporations, p. 73



III. Teenage and Older

A. Connecting Eyes, p. 87

C. Kanga Ball, p. 88

B. Good Vibes Circle, p. 87

IV. Cooperation Games from Other Cultures, pp. 107-166

I 9. "Mask Passing"

Description: Good for freeing up the group.

Process: A theater warmup exercise which helps people feel comfortable doing pantomimes and skits. It is fun for all ages, but young people especially enjoy it. Form a circle and demonstrate an unusual expression on your face. "Pass" that expression to the person next to you, who tries to imitate the expression and transform it into a new one. That person passes the new expression to the next one, continuing until everyone in the circle has had a turn. Some groups may be uncomfortable with this exercise, particularly older children and adults.

I 10. "Herman-Hermania"

Description: Good for freeing up the group. A good follow-up to Mask Passing since it also uses a large circle and is a more complicated and pantomime game.

Process: Pull "Herman" or "Hermania," an imaginary lump of clay, from your pocket, and mold an object by means of pantomime. The identity of the object should be simple and clear, so that people understand the game and it gets underway quickly. There is no need to instruct children to guess what each person is making from the clay; their natural curiosity will cause them to guess. Introducing Herman and Hermania silently and treating them with respect heightens the sense of magic surrounding them, creating a make-believe world which children especially love. Though children may want a second or third turn, it is best to end the game after one go-round.

IV 11. "Pantomime This Object"

Description: Good for freeing up the group. Young children like this game.

Process: Choose a real object, such as a broom, and use it to pantomime something else; a guitar, a horse, a violin, etc. Then pass the object around the circle and have children pantomime something with it. Children come up with endless variations. The game affirms the one taking a turn.

I 12. "Pass the Sound"

Description: Good for freeing up the group.

Process: Similar to Masking Passing. One person makes a sound and passes it to the next person, who imitates the sound, gradually transforms it and passes it on. The process continues until everyone in the circle has had a turn. This game is personally affirming.



## E. ENVIRONMENTAL LEARNING EXPERIENCES

### I 1. "Flow Learning" (See Sharing the Joy of Nature, pp. 18-47)

This is a process for leading environmental activities. There are four stages:

- Stage 1 - Awaken Enthusiasm
- Stage 2 - Focus Attention
- Stage 3 - Direct Experience
- Stage 4 - Share Inspiration

### II 2. "Erik's Ecocentre" (See Eco-Acts, pp. 73 ff)

Description: Observe a natural community and understand why some plants call it "home."

### II 3. Environmental Walks (Outlined in Acclimatizing by Steve Van Matre)

- A. A Quiet Walk, pp. 59 ff
- B. An Environmental Study Station, pp. 75 ff
- C. An Environmental Study Trail, pp. 101 ff
- D. Crusoe Camp, pp. 131 ff
- E. Muir Trail, pp. 159 ff
- F. Seton Journey, pp. 181 ff

### II 4. Food Chain Activities

- A. "Food Chains" (See We Are a Chosen People of God, Environmental Activities 3)  
Description: Groups select an animal and trace the natural food chain.
- B. "How Are Living Things Dependent on Each Other?" (See Notebook)  
Description: Game illustrating food chain and its disruption.
- C. "Food Chain Game" (See Eco-Acts, pp. 198-207)  
Description: Using a card game develop an awareness of natural relationships among elements of the environment.
- D. "Predator/Prey" (See Eco-Acts, pp. 101-103)  
Description: Presentation on food chain and sun as source of energy.
- E. "Food Chain Game" (See OBIS)  
Description: Popcorn for prey

### II 5. Population Studies

- A. "Timber Cruising" (See Eco-Acts, pp. 119-120)  
Description: Systematically count trees.
- B. "Pyramid of Numbers" (See Eco-Acts, p. 108)  
Description: Understanding population and census.
- C. "Population Count" (See Ranger Rick's Nature Scope, "Incredible Insects," pp. 39-41)  
Description: Sample of insects and census.
- D. "Counting Populations" (See The Nature Specialist, p. 40)  
Description: Determining census of animals in an area.
- E. "Bean Bugs" (See OBIS)  
Description: Estimate number of individuals too numerous to count.
- F. "Hopper Herding" (See OBIS)  
Description: Find number of hopping insects.
- G. "Population Game" (See OBIS)  
Description: How many deer can survive in an area.
- H. "Shake It!" (See OBIS)  
Description: Find a community that matches the mystery community.
- J. "How Many Organisms Live Here?" (See OBIS)



Description: Pond study.

I K. "Animals in a Grassland" (See OBIS)

Description: Find different kinds of animals in the lawn.

L. Ant Study

M. Bat Study

II 6. Energy Flow Activities

A. "Energy Pyramids" (See Rediscovery, pp. 163-167)

Description: A demonstration on how energy flows through a complex food web or ecosystem.

B. Food Chain Activities (See I E 4)

II 7. Cycle Activities

A. "Cradles to Coffins" (See Eco-Acts, pp. 220-221)

Description: How building materials of life are used over and over.

B. "Mr. Sun's Restaurant" (See Eco-Acts, pp. 222-223)

Description: Understand how the sun's energy follows certain paths.

C. "Study of a Rotting Log" (See Eco-Acts, pp. 111-113 and The Nature Specialist, p. 58)

Description: A life cycle. Everything is going somewhere, and everything is becoming something else.

D. "Sun's Bucket Brigade" (See Eco-Acts, pp. 79-80)

Description: Picture a water cycle.

E. "Death and Decay" (See Nature for the Very Young, pp. 22-29)

Description: Study of cycles

Appropriate for: Day Camp

F. "Caterpillar Capers" (See Ranger Rick's Nature Scope, "Incredible Insects," p. 21)

Description: Cycle Study

G. "Logs to Soil" (See OBIS)

Description: Unravel mystery of logs becoming soil.

H. "Pigment Puzzles" (See OBIS)

Description: Solve the plant pigment puzzle.

I. "Moisture Makers" (See OBIS)

Description: Study of moisture release.

J. "Birth and Death of a Star" (See Ranger Rick's Nature Scope, "Astronomy Adventures", pp. 7-9)

Description: A study of star cycles.

K. Fern Study (See The Biology of a Partnership, Barth)

L. "Frogs and Toads" (See Nature for the Very Young, pp. 143-154)

Description: Locate animals in a setting

Appropriate for: Day Camp

III 8. "Gauging Wind Speed" (See Eco-Acts, p. 255)

Description: Learn to judge the approximate speed of the wind.

II 9. "Learning about the Wind" (See Notebook)

Description: Look for evidence of the wind.

II 10. "Fly a Leaf" (See OBIS)

Description: Study interaction between wind and leaves.

II 11. "Earth - The Apple of Our Eye" (See Notebook)

Description: A dramatic look at the land resources.



## II 12. Study of Astronomy

- A. A Look at the Universe, pp. 3-6
- B. An Intergalactic Invitation, p. 7
- D. Take a Look at Light Years, pp. 11-12
- E. A Time Line through Space, pp. 12-13

## 13. "Missing Links" (See Rediscovery, p. 55)

Description: The ol' Lap Sit Game

## 14. "Night Hike" (See Eco-Acts, p. 11)

Description: Sounds, temperatures, and animals at night.

## 15. "Gulliver's Travels" (See Eco-Acts, pp. 33-34)

Description: A micro-trail event with various micro-stations.

## 16. "Take an Ant to Lunch" (See Eco-Acts, p. 183)

Description: Become aware of an ant community.

## 17. "Ant's Eye Field Trip" (See Eco-Acts, p. 196)

Description: Investigate a community from the perspective of an ant.

## 18. "Classification Game" (See Nature for the Very Young, pp. 17-19)

Description: Locate animals in a setting

Appropriate for: Day Camp

## 19. OBIS

### A. "Ants"

Description: How ants respond to different situations.

### B. "Bugs, Worms, and Others"

Description: Create a population of animals or plants and place them where they can live.

### C. "Tree Tally"

Description: Find most common tree in the forest.

### D. "What Lives Here?"

Description: An aquatic study.

## 20. "Lost Planet" (See Rediscovery, p. 139)

Description: Close examination of rock faces adorned with mosses and lichens.

## 21. "Time Travelers" (See Rediscovery, pp. 181-186)

Description: Understanding earth history looking at sequences of evolutionary events.

## 22. "Nosting" (See We Are a Chosen People of God, Environmental Activities 2)

Description: Observing and making bird nests.

## 23. "Water House" (See We Are a Chosen People of God, Environmental Activities 2)

Description: Study of organisms in the water.

## 24. "Mud Pies" (See We Are a Chosen People of God, Environmental Activities 7)

Description: Find life in a mud hole.

## 25. "Cotton Clouds" (See We Are a Chosen People of God, Environmental Activities, 7)

Description: Weather Study



19. OBIS

A. "Ants"

Description: How ants respond to different situations.

B. "Bugs, Worms, and Others"

Description: Create a population of animals or plants and place them where they can live.

C. "Tree Tally"

Description: Find most common tree in the forest.

D. "What Lives Here?"

Description: An aquatic study.

20. "Lost Planet" (See Rediscovery, p. 139)

Description: An activity ideal for close examination of rock faces adorned with mosses and lichens.

21. "Time Travelers" (See Rediscovery, pp. 181-186)

Description: An understanding of earth history looking at sequences of evolutionary events.

22. "Nesting" (See We Are a Chosen People of God, Environmental Activities 2)

Description: Observing and making bird nests.

23. "Water House" (See We Are a Chosen People of God, Environmental Activities 2)

Description: Study of organisms in the water.

24. "Mud Pies" (See We Are a Chosen People of God, Environmental Activities 7)

Description: Find life in a mud hole.

25. "Cotton Clouds" (See We Are a Chosen People of God, Environmental Activities, 7)

Description: Weather Study



## F. SPORTS AND GAMES

### 1. "Dox-en-eye"

Description: A Haida game

Process:

The game begins with two equal-sized teams sitting and facing each other about five to ten meters apart. One member from each team comes forward to compete for the Dox-en-eye stick, a straight stick one meter long. Decide who has first turn by using the old hand-over-hand (baseball-bat) method with the stick. The winner of the Dox-en-eye stick then returns to his or her team, sits down, and begins pounding the ground with the stick, shouting, "Dox-en-eye, Dox-en-eye, send us Shirley." The person named on the opposite team must immediately turn stone-faced, get up and slowly cross the clearing to take the stick away from the opposing team, and return to their seated position without smiling. The opposing team can do everything and anything short of actually touching the person to make them lose their composure. If the person called smiles or laughs, they immediately become a member of the team that called them. Another person is then called by the same team. If the person called gets the Dox-en-eye stick successfully back to the team from which they came, that team then does the calling. The game continues until everyone is on one team.

### 2. "Rope Walk"

Description: A cooperation and sensory experience

Materials: Long rope, blindfolds for everyone

Process:

- I. Line up the participants on a long rope, about 6 feet apart from each other. Blindfold and then take a long walk. Instruct the participants not to talk, and to turn on their senses.
- II. When the walk is completed move the group into a circle. Once the circle is made the participants sit down and remove their blindfolds. Allow the participants to talk freely and then guide them in sharing their reactions with the entire group.
- III. Discuss:
  - A. Various experiences.
  - B. High points/low points
  - C. Serenity/fear
  - D. Frustration and anger/fulfilment and love
  - E. Upon whom was each person dependent? (The person immediately in front of them.)
  - F. What does it mean to live in an interdependent world? Can participants think of any examples?
  - G. How does God fit into the dependency one organism has upon another?

### 3. "Sound and Movement Relay"

Description: A very active game for a large open area.

Process:

- I. Ask the group to spread out so that they can move around without bumping into each other. Then, take a couple of minutes to come up with a sound and movement combination that can be easily repeated, expressing happiness. Do the same things with anger and sadness.
- II. When everyone has practiced their sound and movement, divide the group into two lines. The first participant in each line runs to the end boundary (about 100 feet away) and tags the next person in line. The game continues until everyone has gone three times, doing the sound and movement for



happiness, anger, and sadness. The first team to finish wins.

III 4. "Dirty Sock"

Description: Toss a sock filled with tennis ball.

Process:

Divide the group into two equal lines facing each other. Each participant throws the sock by the tail to his or her partner and then steps back. See which pair of participants can move the farthest apart without missing the sock. The object is to catch the flapping tail of the sock, not the weighted toe.

5. "Word Scramble" (See We Are the Chosen People of God, Games 10)

Description: Can be used throughout session. Especially good for imaginary readers or complicated readings.

I 6. "Leaf Relay"

Description: An active relay race using leaves

Materials: Leaves from trees and a list of trees for each team with one tree for each member of the team

Process:

- I. Predetermine a relay route with stations marked by trees.
- II. Divide the group into teams of 3-6 people.
- III. The first one in line runs to get leaf of the first tree on the list, returns, and gives the list to the second in line. The second person then reads the second kind of tree and runs to get the second leaf. This process continues for each member of the team.
- IV. The first team finished "wins."

I 7. "Hashing Course"

Description: Hashing is both fun and challenging. It's special purpose is to help the participants memorize a Bible passage or idea.

Materials: Surveyor's tape, plastic bags, and note cards with messages

Process:

- I. Course Lay-Out  
Markers of color A are placed so that when a person is at one marker, one can see the marker in front and behind. Occasionally there will be a marker of color B where a message is hidden within 10'. The distance and terrain covered by the course depends on the maturity and ability of the participants. The parameters of the course need to be clear in the event a team gets off the course.
- II. The leader gathers the group at the beginning of the course, explains the instructions, and describes the parameter of the course and safety hazards.
- III. A group of 2-4 people follow markers in the forest. When they come to a differently colored marker, they look for a message in a plastic bag hidden within 10' of that marker.
- IV. They memorize the message and return it to its spot.
- V. They continue with this process until the end of the course, stopping for each message and memorizing it.
- VI. At the end of the course, the leader asks the group to recite for memory the completed message



## G. ARTS AND CRAFTS

- II 1. "Camera Kids" (See Rediscovery, pp. 136-138 and Sharing the Joy of Nature, pp. 105-107)

Description: Participants work in pairs. Pictures becoming drawings.

- II 2. "Puppets"

Make single puppets that represent the various races and cultures.

- II 3. "Make Kites"

- II 4. "Sailboats"

Using well-rinsed quart or half-gallon milk cartons, cut them along one long corner and diagonally across the top and bottom. Fold open the carton along the hinged side to form a catamaran. Cut a slot in the hinged side, cutting halfway down into both thicknesses of the cardboard. The slot should be one-third of the way back from the front of the boat, which is the pouring end of the carton. Insert a paper plate into this slot for a sail. NOTE: Angle your slot to accommodate the edge of the plate. The plate should stand vertically upright. Use these for races and water sports.

- II 5. "Origami Pinwheels"

I. Make origami pinwheels. Use light paper, suitably colored for origami. Each requires a 6" square of paper.

II. Place paper color-side up. Fold towards you in quarters, to establish center lines. Open the paper flat. Fold top and bottom corners toward you to the center front. Fold side corners away from you to the center back.

III. You now have a smaller, thicker square. Again, fold two opposite corners toward you to the center front, and turn opposite corners away from you to the center back.

IV. Pull out points A & B to the dotted lines.

V. Turn pinwheel over. Pull out point C & D to the dotted lines.

VI. Attach finished pinwheel to dowel or stick by hammering a pin through center. Use a bead between wheel and stick for spacer.

- II 6. "Devices for Measuring Speed and Determining Direction of Wind"

I. Make a device for measuring wind speed and direction.

A. Start by making four cones from 3" by 5" cards. Put each card before you horizontally. Fold the corner down along the vertical center line, as in making a pirate hat.

B. Put transparent tape along the seam. Then draw an arc from the apex to the end of the seam and cut along this line. When opened up, a cone is formed.

C. Then cut a 6" by 6" square of cardboard. You can find the center by drawing two diagonal lines and poking a hole where the lines intersect. Into this hole, insert a 6" length of plastic soda straw. Then cut slots in each corner of the square.

D. Insert a cone into each slot, so that all cones face the same direction, either clockwise or counter-clockwise. Mark one cone, to aid in counting revolutions.

E. Make a base by gluing together three 10" X 10" squares of corrugated cardboard. Put a 16d nail through the straw, into the base. A small washer on the bottom will help.

F. This anemometer measures wind speed by relative RPM's. In a brisk wind,



it may exceed 100 RPM's.

II. Make a wind direction vane.

- A. Glue a 15" by 2" strip of aluminum foil onto the top of a 6" piece of plastic straw. The foil is folded in half so it extends from one side of the straw. Glue the two sides of the foil together near the straw but flare out the foil behind the glued segment.
- B. Make a base as above and mount the vane by inserting a 16d nail through the straw.
- C. Orient the vane with a compass. Wind direction is measured by the direction from which the wind comes. The vane points away from the wind direction.

7. "Make Masks"

8. "Belief Scroll" (See We Are a Chosen People of God, Creative Activities 8)  
Description: Help people identify the influence of others in their faith journeys.

9. "Minature Log Raft" (See We Are a Chosen People of God, Creative Activities 9)  
Description: An activity to be done the night before so it can be used in this session.

10. "Nesting" (See I E 22)

11. "Totems" (See We Are a Chosen People of God, Environmental Activities 5)

12. "Create a Camp Quilt"  
Individuals or groups make a patches to be sewn together and then used at some celebration.

13. "Develop Story Telling Skills" (See Sharing the Joy of Nature, pp. 109-112.)

14. "Cinquain Poetry" (See Eco-Acts, p. 62)  
Description: A writing experience.

15. "Snag Cinquain" (See Eco-Acts, p. 66)  
Description: Observation skills put to poetry.

16. "Diamante" (See Eco-Acts, p. 67)  
Description: Poetry in a diamond shape.

17. "Building a Wind Gauge" (See Eco-Acts, p. 243)

18. "Wind Direction Finder" (See Eco-Acts, p. 246)

19. "Corn Husk Dolls" (See The Nature Specialist, pp. 38-39)

20. "Make Your Own Paper" (See Project Learning Tree (K-6), p. 36)

21. Suggested Readings



A. INTRODUCTION

TITLE: "Niche Knowing"

KEY WORD: Diversity

SENTENCE: Diversity in an organism's characteristics, history, and profession is a gift of the Spirit.

INTENTIONS: Learn that:

(Environmental)

I. All organisms have their niche (profession).

II. In the human and non-human world there is diversity in:

- A. Characteristics/attributes
- B. History/culture
- C. Profession/talents

(Theological)

III. The Spirit is source of the diversity of niches within the Church.

(Multi-Cultural/Racial)

IV. Each person has characteristics, history, and profession and should know and affirm them.

BIBLE PASSAGES:

Exodus 2:23-4:17  
Jeremiah 1:1-10

Matthew 25:14-30  
Luke 1:26-56  
Luke 2:16-21

I Corinthians 12:1-31a  
Galatians 3:26-29  
Ephesians 4:25-32  
Ephesians 6:10-18  
I Peter 4:7-11

COMMENTARY:

Gifts of the Spirit are more than talents and skills. As total persons we are gifts of God. These gifts can be defined as characteristics, history, and profession.

In the non-human world these three facets of diversity are closely allied. In fact the one serves the other. The characteristic of the organism is usually the means by which that organism acts out the organism's profession. The organism's history is the long adaptive process that has made possible the role that organisms play in the ecosystem today.

In the human world these three facets of diversity can complement each other, impact each other negatively, or be exclusive from each other. In a world where we make judgments on people and on ourselves on the basis of the color of skin, culture, and abilities we need to recognize that these contribute to the mix, the diversity, and are seen as gifts of the Spirit.

These gifts can be abused, misdirected, and stifled by the individual or by the society in which the individual lives. This does not minimize the fact that we bring something good to the situation, the moment, the present community.

Each individual is unique, and we affirm the individual and the gifts the Spirit has given.







B. WORSHIP AND DEVOTIONAL EXPERIENCES

- I 1. "Prayer Tree"  
 Add to the prayer tree. Include prayers thanking God for the gifts you have been given and for the wisdom and opportunity to use them.
- I 2. "Similarities/Differences" (See We Are a Chosen People of God, Worship Ideas 4) IV  
 Description: Prepare a prayer based on the group's similarities and differences.
- I 3. "Managing God's Gifts" (See We Are a Chosen People of God, Worship Ideas 5)  
 Description: Discuss how a person manages special gifts from God.  
 Bible Text: I Peter 4:7-11.
- I 4. "Using Your Talents" (See We Are a Chosen People of God, Worship Idea 5) IV  
 Description: Perform the parable.  
 Bible Text: Matthew 25:14-30
- I 5. "You Are a Gift" (See We Are a Chosen People of God, Worship Idea 5) IV  
 Description: Participants consider people who have been gifts and people to whom they have been gifts.
- III 6. "Swapping Stories" (See We Are a Chosen People of God, Worship Idea 6)  
 Description: Share something special that has happened along the faith journey.
- I 7. "A Thong of Love" IV  
 Participants stand in a circle. Use colored string or leather thongs for bracelets or specially made bracelets (like the friendship bracelet.) The leader invites participants into the center of the circle and ties on the thong while saying words like, "(Name), God has gifted you with (name several things). These are signs of God's love. Wear this thong and remember God's gifts of love to you."
8. "GIFTS OF THE SPIRIT" (See Notebook) IV  
 Description: This service can serve two purposes: give the participants an experience with which they are familiar and give them a better understanding of the liturgy. Give an interpretation of what is happening as a transition between each step.
- I 9. "CELEBRATING MANY THINGS" (See I'm in Charge of Celebrations by Byrd Baylor) III  
 Description: With a group create celebrations, a special day, some special activities. First, find something to celebrate. It can be an event, a person, a natural object, etc. The more special it is to the group the better. Second, design the celebration. Then, do it! Encourage members of the group to go home and celebrate this each year with their family and friends.
- I 10. "I AM A GIFT OF THE SPIRIT" IV  
 Create a worship structure in which the following is celebrated before God:  
 Confession - What have I done wrong?  
 Affirmation - What gifts has God given to me?  
 Empowerment - How can I use these gifts for others?  
 Thanksgiving - How do I show my appreciation for the gifts?  
 Commitment - How can God use me?







## C. BIBLE STUDIES

### I. "GIFTS OF THE SPIRIT"

Description: A study of diversity as a gift of God. Diversity has three facets: characteristics, history, and profession. IV

Bible Texts: Exodus 2:23-4:17, Jeremiah 1:1-10, Luke 1:26-56, I Corinthians 12:4-31a, Galatians 3:26-29

#### Process:

- I. Introduce the idea of diversity.
  - A. Play games that introduce the idea.
    1. "This Is You" (See II F 1)
    2. "Two Person Mirroring" (See II D 1 (E))
  - B. Generate a list of what makes things different.
    1. Read People (See II D 5 (C))
    2. Make a list of the things that make people different.
    3. Ask the members of the group to show on the list all the things that make them different from each other.
  - C. Using the list in B above show examples of the three facets of diversity: characteristics, history, and profession.
- II. Focus on each of the facets of diversity by using at least three of the activities below.
  - A. General Activities to Discover Diversity (See II E 6)
  - B. Activities for Facet 1 - Characteristics (See II E 7)
  - C. Activities for Facet 2 - History (See II E 8)
  - D. Activities for Facet 3 - Profession (See II E 9)
- III. What is a Niche?
  - A. Discuss the meaning of "niche."
    1. Location
    2. Profession
  - B. Profession is more than occupation - vocation.
    1. Review the various roles participants play, e.g. child, student, friend, etc.
    2. Review what a person offers to a group.
      - a. Replay some of the activities the group has done up to this time or introduce an activity now to be replayed.
      - b. Ask the group to identify how each person was involved in the group activity.
      - c. Use "What to Look for in Groups" (See II D 2 (B))
  - C. Summarize - Diversity is characteristic, history, and profession.
    1. One observation to make is how the three facets of diversity for a plant and animal relate to each other.
    2. The characteristics of an organism adapt so that the organism can carry out its profession.
    3. It is the story of this adaptation that is the organism's history.
- IV. Diversity - the gift of the Spirit
  - A. Open this portion with, "Diversity is a gift of the Spirit. All that makes up someone or something is made possible by God."
  - B. Read I Corinthians 12:4-31a and then make the following observations:
    1. Note the the types of professions Paul mentions (vss. 4-11, 27-30).
    2. Next note the various parts of the body mentioned (vss. 14-24a).
    3. What is Paul illustrating with the body talk? (Vss. 12-13)
    4. How do the various parts of the body function together? (Vss. 24b-26)
  - C. On paper organize the various professions and body parts using the three facets of diversity - characteristic, history, and profession.



1. The leader notes that the gifts Paul mentions all fall under profession.
2. Optional: The leader may want to look at Galatians 3:26-29.
  - a. How do we understand this passage? (No diversity)
  - b. Is this passage repudiated when a person's characteristics and history are considered gifts of the Spirit?
  - c. Paul is more interested in the unity of people found in Christ in this passage.
  - d. This is also indicative of the fact that diversity is a recent discussion in the Church. The issue grows out of a different concern.
- D. Is it fair to say that gifts of the Spirit are not limited to what we can do, our profession?
  1. Discuss: Is a human's characteristic (appearance, etc.) a gift of the Spirit?
    - a. What are the different things that make up our characteristics? Personality? Appearance? Physical features?
    - b. Does God make this all possible? Or is it just a genetic accident?
  2. Discuss: Is a human's history a gift of the Spirit?
    - a. Is a person's story from God? *gift*
    - b. Or is a person's story a result of interaction between one's genetic make up and the environment?
- E. Several issues we face:
  1. What happens if a person's characteristics and history can be described as unfortunate or evil?
  2. What if a person's profession contributes to the destruction of life?
- F. When diversity in all its aspects is seen as a gift of the Spirit we are able to affirm ourselves and the positive contributions we make to our world.
- G. Optional: Apply the facets of diversity to people in the Bible. Here are several possibilities:
  1. Moses - Exodus 2:23-4:17
  2. Jeremiah - Jeremiah 1:1-10
  3. Mary, the Mother of Jesus - Luke 1:26-56
- V. Affirmation
  - A. Affirm a non-human entity.
    1. Each participant select a plant or an animal to celebrate by using one or a combination of the following:
      - a. Animal Poetry (See II G 17)
      - b. Other forms of poetry: Cinquain, Haiku
      - c. A cartoon characterization
      - d. A nature object replication
    2. Read Celebrating Many Things (See II B 10) and follow suggestions for creating a celebration for the objects.
  - B. Affirm others in the group using one of the affirmation exercises in II D 4.
  - C. Optional: Affirming myself
 

Is there any connection between the non-human entity the participant described and the participant?
  - D. Conclude with a worship experience based on "I Am a Gift of the Spirit" (See II B 10).



**I** 2. "WHAT IS IMPORTANT?" (See We Are a Chosen People of God, Creative Activity 10)  
 Description: A prioritizing activity to help participants focus on roles/professions in the Church. IV  
 Bible Text: I Corinthians 12

**I** 3. "Blessed with Gifts" (See We Are a Chosen People of God) IV  
 Bible Texts: Ephesians 6:10-18 and Luke 2:16-21  
 A. Biblical Interpretation pp. 1-3  
 B. Upper Elementary pp. 10-11  
 C. Junior High pp. 10-12  
 D. Senior High pp. 11-14  
 E. Intergenerational pp. 7-11

**V** 4. "The Body of Christ"  
 Description: This study concentrates on the gifts of the Spirit. IV  
 Bible Text: I Corinthians 12:11-31a  
 Process:

- I. Begin with activities that summon the idea of group cooperation and sharing. Choose from these suggestions or devise your own.
  - A. Study an ant community.
  - B. Observe an ant trail.
  - C. Stress/Challenge Activities (See I D 6)
  - D. Cooperation Games (See I D 7, 8)
- II. After the preliminary activities, ask participants to sit down and read I Corinthians 12:12-31a. Make any comments necessary to clarify the passage. Would participants add more parts of the body for a more complete image?
  - A. Ask participants to define what parts of the body they would use to symbolize various activities within the life of the Church. Mention and explain some of these functions: greeters; visitors; teachers; preachers; missionaries; decision makers; planners; leaders; lectors; liturgists; and so on. Whatever association they make between parts of the body and functions of the Church is up to them. There is no absolute answer.
  - B. The participants may use the following Bible passages for some biblical associations for various parts of the body. This list may be copied and distributed.
    1. Feet - Ephesians 6:15; Romans 10:15
    2. Hands - Acts 20:32-35; Galatians 2:9
    3. Eyes - Matthew 6:22-23; 13:16-17; 20:29-34
    4. Ears - Matthew 11:15; James 1:22-25
    5. Head - Ephesians 5:23
    6. Nose - Genesis 2:7
    7. Heart - Matthew 15:19; Romans 8:27; Ephesians 6:6
    8. Mind - I Corinthians 2:16; Colossians 3:1-4
- III. Now that the group has developed some ability to grasp and use the Biblical images of human functions both within the Church and within the body, ask them to think of themselves as part of Christ's body either the Church or its microcosmic version in the group. Ask them to think of the gifts and talents God has given them. How does their use of their gifts fit into the whole?
  - A. After some time for reflection, ask them to imagine what part of the body they would choose to symbolize their unique gifts, talents, and contributions.
  - B. Make an outline of a full-sized body on the ground with string. Ask each participant to place a personal or natural object in that part of



the body which they have chosen to represent themselves. When all objects are in place gather in a circle. Let each person share his or her reasons for selecting a particular part of the body. After each person speaks, let the others say why they think another place would also be appropriate.

IV. Close with prayers of thanks for various gifts, for God's variety, and for the Holy Spirit who makes all this work together for God's purposes.



D. GROUP LIFE1. Get Acquainted Activities

- A. "Red Shoe, Blue Shoe, My Shoe" (See Rediscovery, p. 54)

Description: Walking in another's shoes/

- B. "Two Truths and a Lie" (See Rediscovery, p. 58f)

Description: Learn details about another person.

- C. "Similarities/Differences" (See II B 3)

- D. "Family Tree"

Each person create a family tree as best they can. The relationships should be identified.

- E. "Two Person Mirroring" (See Cowstails and Cobras II, p. 51)

2. Community Building Activities

- A. "Totem" (See I G 11)

- B. "What to Look for in Groups" (See Notebook)

3. Communication Skills Activities

- A. "Telling Your History" Using a Learning Web (See II G 2)

Description: Tell a story that illumines others in the group about one's background.

- B. "Personal Growth Rings" (See We Are a Chosen People of God, Environmental Activities 7)

Description: Using rings of a tree participants tell their own story (history).

4. Affirmation Activities

- A. "Center Circle" (See Rediscovery, p. 71)

Description: Compliments

- B. "Paper Bag Pinata" (See We Are a Chosen People of God, Creative Activities 5)

- C. "You Are a Gift" (See II B 5)

- D. "What Type of Tree Are You?"

Description: Each person selects a tree and tells why the selection is made. Precede this with a tree study that exposes participants to the various trees on the site. (See II E 5).

- E. "Pantomime One Thing You Like to Do"

Each participant selects something special to them and then acts it out.

5. Multi-Cultural/Racial

- A. "Reversing History" (See Rediscovery, pp. 98-101)

Description: A light-hearted theatrical presentation that conveys the impact of one culture upon another.

- B. "Swapping Stories" (See II B 6)

- C. "People"

Read People by Peter Spier with the group and discuss all the facets of diversity among people.

- D. Learn words in foreign languages.

- E. Learn Table Graces in many languages.







## E. ENVIRONMENTAL LEARNING EXPERIENCES

### 1. Guessing Games

- A. "The Conundrum Hunt" (See Rediscovery, pp. 140-143)

Description: Riddles about various plant names and characteristics.  
"Conundrum" means "puzzle."

- B. "Mystery Guess" (See Rediscovery, pp. 190-193)

Description: Introduce participants to characteristics of species.

- C. "Insect Questions" (See Ranger Rick's Nature Scope, "Incredible Insects," p. 60)

- D. "Bird Questions" (See Ranger Rick's Nature Scope, "Birds, Birds, Birds," p. 61)

- E. "What Is It?" (See Eco-Acts, p. 44)

- F. "What Animal Am I?" (See Sharing Nature with Children, p. 69)

- G. "Animal Clue Game" (See Sharing the Joy of Nature, pp. 52-59)

- H. "Animals, Animals!" (See Sharing the Joy of Nature, pp. 81-84)

- I. "Mystery Animal" (See Sharing the Joy of Nature, pp. 85-89)

- J. "Tree Questions" (See Ranger Rick's Nature Scope, "Trees Are Terrific," p. 73)

### 2. Information

- A. "Insect Glossary" (See Ranger Rick's Nature Scope, "Incredible Insects," p. 61)

- B. "Bird Glossary" (See Ranger Rick's Nature Scope, "Birds, Birds, Birds," p. 62)

- C. "Tree Glossary" (See Ranger Rick's Nature Scope, "Trees Are Terrific," p. 74)

### 3. Insect Studies

- A. "What Makes an Insect" (See Ranger Rick's Nature Scope, "Incredible Insects," pp. 4-17)

Description: This material provides information and learning activities that help classify insects.

1. "Insect Dance-Along" (Activity for Facet 1 - Characteristics)

2. "Little Kid's Scavenger Hunt"

3. "Turn-on Tots"

4. "Build a Grasshopper" (Activity for Facet 1 - Characteristics)

5. "Mystery Creatures" (Activity for Facet 1 - Characteristics)

6. "Observe an Insect" (Activity for Facet 1 - Characteristics)

7. "Eight Legs or Six" (Activity for Facet 1 - Characteristics)

8. "Insect Tree"

- B. "Growing Up" (See Ranger Rick's Nature Scope, "Incredible Insects," pp. 18-25)

Description: Information and activities regarding insects' stages of life.

1. "Caterpillar Finger Play"

2. "There's a Beetle in My Flour"

3. "A Bucketful of Mosquitoes" (Activity for Facet 2 - History)

- C. "Finding a Place to Live" (See Ranger Rick's Nature Scope, "Incredible Insects," pp. 26-34)

Description: Information about what insects need to survive and what a habitat provides. Also, activities.

1. "Amazing Insect Mouth" (Activity for Facet 1 - Characteristics)

2. "Insect Bingo"

3. "Who Lives Here?"



4. "Invent an Insect" (Activity for Facet 2 - History)  
5. "Dipping for Aquatic Insects" (Activity for Facet 2 - History)

*Facet 1* D. "Beetles, Not Bugs" (See We Are a Chosen People of God, EA p. 4)  
Description: Beetle study

*Facet 2* E. "Yuk a Bug!" (See We Are a Chosen People of God, EA p. 9)  
Description: Bug attitudes

*Facet 3* F. From Ranger Rick's Discovery Pac - Nature Scope, "Incredible Insects"

1. "Insect Discovery Stations" pp. 3-5

2. "Moths and Butterflies" p. 6

3. "Hopppin' Hoppers" pp. 7-8 (Activity for Facet 1 - Characteristics)

4. "Short and Sweet" p. 9 (Activity for Facet 1 - Characteristics)

*III*  
*Facet 4*  
4. Bird Information

A. "What Makes a Bird a Bird" (See Ranger Rick's Nature Scope, "Birds, Birds, Birds," pp. 4-17)

Description: Information and activities about the characteristics of birds.

1. "Flappers" (Activity for Facet 1 - Characteristics)

2. "Super Birds" (Activity for Facet 1 - Characteristics)

3. "Flight of Fancy" (Activity for Facet 1 - Characteristics)

4. "Prime Party" (Activity for Facet 2 - History)

5. "Pass the Part" (Activity for Facet 1 - Characteristics)

B. "Family Life" (See Ranger Rick's Nature Scope, "Birds, Birds, Birds," pp. 18-25)

Description: Information and activities focusing on bird family life.

1. "Bird Talk"

2. "A Family Bird Album"

3. "House Hunting"

4. "The Incredible Egg"

C. "Finding a Place to Live" (See Ranger Rick's Nature Scope, "Birds, Birds, Birds," pp. 26-40)

Description: Information and activities about bird adaptation and habitats.

1. "Feet Are Neat" (Activity for Facet 2 - History)

2. "Fill the Bill" (Activity for Facet 2 - History)

3. "Fantasy Island" (Activity for Facet 2 - History)

4. "Migration Models" (Activity for Facet 2 - History)

5. "Housing in a Habitat" (Activity for Facet 2 - History)

*4*  
5. Tree Information

A. "What Makes a Tree a Tree" (See Ranger Rick's Nature Scope, "Trees Are Terrific," pp. 4-24)

Description: Information and activities about trees.

1. "Leaf It to Us" (Activity for Facet 1 - Characteristics)

2. "Tree Tots" (Activity for Facet 1 - Characteristics)

3. "Build a Tree" (Activity for Facet 1 - Characteristics)

4. "Eat a Leaf" (Activity for Facet 1 - Characteristics)

5. "Hidden Colors" (Activity for Facet 1 - Characteristics)

6. "Keying Out Trees" (Activity for Facet 1 - Characteristics)

7. "Tell-Tale Transpiration" (Activity for Facet 3 - Profession)

8. "Reading the Rings" (Activity for Facet 2 - History)

B. "Growing Up a Tree" (See Ranger Rick's Nature Scope, "Trees Are Terrific," pp. 25-33)

Description: Information and activities about how trees grow.

1. "Grow a Sprout"



2. "Twig Detectives" (Activity for Facet 1 - Characteristics)
3. "Trees around the World" (Activity for Facet 2 - History)
4. "Get to Know a Tree" (Activity for Facet 2 - History)
5. "Maple Seed Mix-up" (Activity for Facet 2 - History)
- C. "The Forest Community" (See Ranger Rick's Nature Scope, "Trees Are Terrific," pp. 34-47)

Description: Information and activities about interactions between and among trees.

1. "Tree Top Traffic" (Activity for Facet 2 - History)
2. "A Walk in the Woods" (Activity for Facet 3 - Profession)
3. "Under Cover!" (Activity for Facet 3 - Profession)
4. "A Rottin' Place to Live" (Activity for Facet 3 - Profession)

## I 6. General activities to discover diversity.

- A. "Big Foot" (See Rediscovery, pp. 146-149)

Description: A study of a small area the shape of a big foot.

- B. "Night Safari" (See Rediscovery, pp. 150-152)

Description: A night hike to discover various animals that move around only at night.

- C. "Be a Tree" (See Rediscovery, pp. 215-216)

Description: Experience being a different organism.

- D. "Variety Hunt" (See We Are a Chosen People of God, EA p. 10)

Description: Scavenger hunt.

- E. "What's in a Cubic Foot of Soil" (See Notebook)

Description: Use a Berlese funnel

- F. Guessing Games (See II E 1)

- G. "Plant Hunt" (See OBIS)

Description: Find many different plants

- H. "Envirolopes" (See OBIS)

Description: Examples of varieties of plants and insects

- I. "Animal Diversity" (See OBIS)

Description: Find animals in a lawn area and weedy area.

- J. OBIS Pond Study (See OBIS)

Description: Characteristics of pond animals.

- K. OBIS Lawn Study (See OBIS)

Description: Characteristics of lawn animals

## I 7. Activities for Facet 1 - Characteristics

- A. "Graph-animal" (See Project Wild (Elementary), pp. 81-82)

Description: Identify characteristics

- B. "Soil Investigation" (See The Nature Specialist, p. 62)

Description: Note characteristics of soil.

- C. "Touch-Me-Not/Jewelweed" (See The Nature Specialist, p. 68)

Description: How seeds are dispersed.

- D. "Wolf Howl/Bear Growl" (See Rediscovery, pp. 194-196)

Description: Sounds and movements for communication.

- E. "Skull Keying" (See The Nature Specialist, p. 61)

Description: Identify animals from skulls and look at characteristics of animals.

- F. "Country Safari" (See Eco-Acts, pp. 13-14)

Description: Mimic animal characteristics.

- G. "Find Your Mate" (See The Nature Specialist, pp. 45)

Description: Role play animals

- H. "Flower Dissection" (See The Nature Specialist, pp. 45-46)

Description: Examine a flower. See Nature for the Very Young, p. 217,



for details about a flower.

I. "Peanuts" (See The Nature Specialist, p. 53)

Description: Distinguish one peanut from all others. Possibly use other types of seeds.

J. "Water Striders" (See OBIS)

Description: Behavior of water striders

K. "Animal Movement in Water" (See OBIS)

Description: How some aquatic animals move through water.

L. "A Better Fly Trap" (See OBIS)

Description: Make a device that attracts and traps flies.

M. "Isopods" (See OBIS)

Description: Investigate body structures and behaviors of isopods.

N. "Hopper Circus" (See OBIS)

Description: Investigate hopper behavior.

O. "Follow the Scent" (See OBIS)

Description: Create territory using scent.

P. "Lichen Looking" (See OBIS)

Description: Investigate sizes, shapes, colors, and numbers of lichen.

Q. "Litter Critters" (See OBIS)

Description: Become familiar with body parts

R. "Silent Stalking" (See OBIS)

Description: Predator/Prey activity

S. "Studying and Preserving Plants and Fungi" (See A Practical Guide for the Amateur Naturalist, Durrell, pp. 248-257)

T. "Owls: They Are What They Eat" (See Notebook)

Description: A study of owl pellets.

8. Activities for Facet 2 - History

A. "The Thicket Game" (See Project Wild (Elementary), pp. 95-96)

Description: Adaptation

B. "What Bear Goes Where?" (See Project Wild (Elementary), pp. 79-80)

Description: Animal adaptation

C. "Seeing Is Believing . . ." (See Project Wild (Elementary), pp. 99-100)

Description: Adaptation in vision

D. "Eagles and Ravens" (See Rediscovery, pp. 193-194)

Description: A team game to test knowledge of natural history.

E. "Dot Adaptation Game" (See The Nature Specialist, p. 41)

Description: A study of protective coloration, natural selection.

F. "Picture Adaptation" (See The Nature Specialist, p. 53)

Description: Examine how plants and animals adapt.

G. "Attention" (See OBIS)

Description: Create a design which will attract attention.

H. "Invent a Plant" (See OBIS)

Description: Create a plant adapted to a particular habitat.

I. "Invent an Animal" (See OBIS)

Description: Invent an animal camouflaged from its enemies.

J. "Food Grab" (See OBIS)

Description: Invent devices that can capture prey or plants.

K. "Sawing Away" (See OBIS)

Description: Investigate patterns of trees

L. "Story Told by a Fallen Redwood" (See Notebook)

Description: Natural history of a tree.

M. "Adaptation - Predator - Prey" (See OBIS)

Description: Create predator devices



9. Activities for Facet 3 - Profession

A. "Wanted Dead or Alive" (See Rediscovery, pp. 167-169)

Description: A study of decomposition

B. "Eco-Location" (See Rediscovery, pp. 196-198)

Description: Using sonar to locate prey. This activity can be used for bats looking for prey. In the case of bats the prey are mosquitoes and moths. The rest of the group can be trees. All objects respond with what they are when the bat says, "Bat."

C. "Take an Ant to Lunch" (I E 16)

D. "Which Niche?" (See Project Wild (Secondary), pp. 151-152)

Description: Learning professions of organisms.

E. "I Like Insects Because . . ." (See Ranger Rick's Nature Scope, "Incredible Insects," p. 47)

G. "Web Weavers" (See OBIS)

Description: How spiders build a web

H. "Web It" (See OBIS)

Description: How spiders trap foods

I. "Eco-Enrichers" (See Project Wild (Elementary), pp. 69-70)

Description: Contribution of animals to soil.

10. Other Activities

A. "Prey Pictures" (See II G 2)

B. "On the Edge" (See We Are a Chosen People of God, EA p. 2)

Description: Experience an ecotone.

C. Astronomy Studies (See Ranger Rick's Nature Scope, "Astronomy Adventures")

1. "Creature Features" pp. 22-23

2. "A Matter of Gravity" pp. 29-30

3. "Sundial Watches" p. 57

D. "Bats" (See Ranger Rick's Nature Scope, "Amazing Mammals," Part II, pp. 33-34)

Description: Information and activities regarding bats.

E. "Once You've Seen One - You've Seen Them All - Haven't You" (See Eco-Acts, p. 46)

Description: Demonstrate that no two things are identical.

F. "Who Lives Here?" (See Eco-Acts, pp. 161-163)

Description: Plants and animals in a lake or pond.

G. "Sound Map" (See Sharing the Joy of Nature, pp. 74-75)

H. "Study of a Rotting Log" (See I E 7 (C))

I. "Ants on a Twig" (See Project Wild (Secondary), pp. 49-50)

Description: Identify similarities and differences in ant and human needs.

J. "Grasshopper Gravity" (See Project Wild (Secondary), pp. 59-61 and (Elementary), pp. 15-17)

Description: The characteristics of a grasshopper.

K. "Wildwork" (See Project Wild (Elementary), pp. 129-130)

Description: Describe wildlife occupations.

L. "Forest Layer" (See Nature for the Very Young, pp. 20-25)

Description: Study the layers of the forest.

Appropriate for: Day Camp

M. "Insects" (See Nature for the Very Young, pp. 101-109)

Description: Characteristics of insects.

Appropriate for: Day Camp



- ~~14~~ N. "Butterflies and Moths" (See Nature for the Very Young, pp. 161-168)  
Description: Cycles and characteristics  
Appropriate for: Day Camp
- ~~15~~ O. "Ants" (See Nature for the Very Young, pp. 169-174)  
Description: Information on ants.  
Appropriate for: Day Camp
- P. "Violets and Seeds" (See Nature for the Very Young, pp. 175-191)  
Description: Seed dispersal  
Appropriate for: Day Camp
- Q. "Oaks and Trees" (See Nature for the Very Young, pp. 195-200)  
Description: Tree study  
Appropriate for: Day Camp
- R. "These Precious Few" (See Notebook)  
Description: Endangered and threatened species in Illinois
11. "Green Immigrants" (See Paper)  
Description: A brief history of various plants at LOMC.



F. SPORTS AND GAMES

- I  
II  
I
1. "This Is for You" (See Rediscovery p. 117 f)  
Description: A guessing game
  2. Develop Various Instruments
  3. Smaug's Jewels
  4. "A Funny Story" (See We Are a Chosen People of God, Games 5)
  5. "Bible Spell" (See We Are a Chosen People of God, Games 9)







G. ARTS AND CRAFTS

1. "Story Stick" (See Rediscovery, p. 67)
2. "Prey Pictures"  
Using paper and pencil or charcoal draw various types of prey that live in a specific area, especially a water area. These can be used in the "Prey on Prey" activity in the next session, III E.
3. Insect Projects (See Ranger Rick's Nature Scope, "Incredible Insects," pp. 55-57)
  - A. "Punched Out Insects"
  - B. "Bottle Top Bugs"
  - C. "Marvelous Insect Model"
  - D. "Insect Sculptures"
4. Insect Traps, Nets, and Cages (See Ranger Rick's Nature Scope, "Incredible Insects," pp. 58-59)
  - A. Can Trap
  - B. Box Trap
  - C. Sugarine
  - D. The Sheet Trick
  - E. Making an Insect Net
  - F. Flowerpot Cage
  - G. Building a Berlese Funnel
5. "Arm Yourself" (See We Are a Chosen People of God, Creative Activities 4)  
Description: Make pieces of armor based on Ephesians 6:10-18.
6. "Paper Bag Pinata" (See II D 4 (B))
7. "Earth Prints" (See We Are a Chosen People of God, Creative Activities 5)  
Description: Natural object transfers for cloth.
8. "Learning Web" (See We Are a Chosen People of God, Creative Activities 6)  
Description: Boards, nails, and string become a means of expression for people to tell their history.
9. "Scrimshaw" (See We Are a Chosen People of God, Creative Activities 10)  
Description: Fake scrimshaw makes unique media.
10. Friendship Bracelets (See II B Thong of Love)
11. Bird Crafts (See Ranger Rick's Nature Scope, "Birds, Birds, Birds," pp. 59-60)
  - A. "Avian Roly-Poly"
  - B. "Parrot Puppets"
12. Tree Crafts (See Ranger Rick's Nature Scope, "Trees Are Terrific," pp. 71-72)
  - A. "3 D Trees"
  - B. "Tree Creatures"
13. "Make a Sundial" (See Ranger Rick's Nature Scope, "Astronomy Adventures," p. 57)



14. "Bat Poetry" (See Ranger Rick's Nature Scope, "Amazing Mammals," Part II, pp. 38-43)
15. "Baby Food Bottle Collage"  
Fill baby food bottles with various items: coins, paper clips, nylons, seeds, etc. Use many colors and objects. Fasten lids to a board and then screw bottles to the caps. Arrange in any way that makes sense. This demonstrates diversity.
16. "Leaf Rubbings" (See Eco-Acts, p. 58)  
Description: Notice leaf similarities and differences.
17. "Animal Poetry" (See Project Wild (Elementary), p. 63)  
Description: Experience inspirational value of wildlife.
18. "Plant Dyes" (See Project Learning Tree, K-6, pp. 27-28.)
19. "Colors from Nature" (See Project Learning Tree, K-6, p. 29)
20. "How to Make a Flying Dragon" (See Ranger Rick's Nature Scope, "Trees Are Terrific," p. 37)
21. "Web Weaver" (See II E 9 (F))