This document is the first of seven volumes included in the Rachel Carson Project. The project attempts to introduce environmental education lessons and units into existing courses of study within a high school rather than to implement environmental education through the introduction of new courses. This volume focuses on English literature by emphasizing the environment through Edward Abbey's DESERT SOLITAIRE. The unit concludes with examples of student reactions to the thoughts presented that specifically relate to environmental ethics. The volume includes an introduction to the teacher; the DESERT SOLITAIRE unit; related poetry, essays, stories, contemporary music, and films; suggested appropriate field trips; an annotated bibliography of books about wildlife; and a summation by the teacher who tried the course. (MLB)
MAN AND NATURE - A LITERATURE COURSE

R. Thomas Tanner

Project Reports, Volume I
The Rachel Carson Project
USOE Project No. 1-0839
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R. Thomas Tanner, Director

September, 1972
The research reported herein was performed pursuant to a grant with the U.S. Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.
This volume is one of seven which constitute appendices to the "Operating Manual for Rachel Carson High," final report to the U.S. Office of Education, U.S.O.E. grant number OEG-0-71-4623. That report describes the Rachel Carson Project, which was supported by a grant from the Office of Environmental Education of the U.S.O.E. The Project was an attempt to pervade the existing curriculum of a high school with environmental education, with participation by faculty members representing many (ideally all) disciplines.

The project was based upon the philosophy that a positive environmental ethic should pervade our culture subtly but powerfully, just as - some people would say - materialism or pragmatism now do. Perhaps the best way to encourage the new ethic through formal education is to pervade the culture of the school, subtly but powerfully, rather than to establish a single new course such as "Man and Environment" or "The Environmental Ethic." (Note that the American public school does not offer courses in "Materialism" or "Pragmatism" - enculturation to these values, if indeed it occurs, is via more subtle means.)

This philosophy at work was exemplified by the present writer in an article entitled "A Day At Rachel Carson High," which appeared in the Phi Delta Kappan in March, 1970 (vol. 52, no. 7, pp. 399-401). The article follows a boy through one day at the fictitious Carson High. On this day: his chemistry class is dealing with the chemistry of the internal combustion engine and its emissions as they interact with biota; his English class is discussing the novel The Roots of Heaven, about one man's war against ivory hunters; his physical education class is examining various outdoor recreational activities and the degree to which they do or do not interfere with the activities of others; his American problems class is reviewing old American values such as freedom and equality before the law, and discussing the kind of physical environment in which they can best be popularly achieved.

On this particular day, classes are shortened so that teachers may have one of their regular planning meetings, the object of which is to facilitate the planning of their courses around such themes as:

1. Tomorrow's Technology and Today's License. (Rapaciousness toward natural resources is frequently excused with the rationale that tomorrow's as-yet-undeveloped technology can restore or offer satisfactory substitutes for those resources. This is a dangerous and irresponsible fallacy.)

2. Man in Nature, Man over Nature. (The belief that we can conquer nature has traditionally pervaded our culture - another dangerous fallacy.)*

*The reader may wish to refer to other themes and concepts underlying the project. Various of these have been elucidated by the present writer in articles in: The Science Teacher (April 1969, pp. 32-34; April 1972, pp. 12-14); Phi Delta Kappan (March 1970, pp. 353-356); Environmental Education (Summer 1971, pp. 34-37); AIBS Education Division News (August 1972). See also Hawkins, Mary E. (editor), Vital Views of the Environment, National Science Teachers Association, 1971, for an excellent selection of important concepts explained in brief articles by highly qualified authors. We have found this volume useful.
At the fictional Carson High, more or less standard course titles are retained, but each course includes lessons or units reflecting themes such as those above. During the 1971-72 school year, we attempted to implement this model at the new Crescent Valley High School in Corvallis, although some of our work was also done in Corvallis High School, for reasons discussed in the body of our final report.

Participation was sufficiently wide and diverse as to include classes in typing, modern foreign languages, home economics, industrial arts, "livers' training, English, the natural and social sciences, and mathematics, as well as so-called extra-curricular activities. As noted earlier, this volume is one of seven, largely teacher-written, which describe the lessons and units developed during our brief experiment in curriculum innovation.

We hope that the Rachel Carson idea and at least some of these materials will be found worthy of emulation elsewhere.

We wish to thank all of those who participated in the project, and we especially wish to thank Dr. Clarence D. Kron, NCE Chairman of the Department of Education at the new University of Texas of the Permian Basin in Odessa. As Superintendent of Corvallis Schools, he offered the unflinching support which made the project possible. We are confident that vision and dedication will continue to characterize his performance at his new position, as was true here. We wish to thank also our new Superintendent, Dr. Thomas D. Wogashak, for continuing to provide an atmosphere congenial to our work during its final stages.

The titles of the report and the seven accompanying volumes are as follows:

Main Report: OPERATING MANUAL FOR RACHEL CARSON HIGH

Accompanying Volumes:

I. MAN AND NATURE - A LITERATURE COURSE
II. THE AMERICAN AND HIS ENVIRONMENT - A SOCIAL SCIENCES COURSE
III. ENVIRONMENTAL STUDIES IN THE PHYSICAL SCIENCES
IV. ENVIRONMENTAL STUDIES IN SEVERAL SCIENCE COURSES
V. CASE STUDIES OF CONSERVATION "BATTLES"
VI. ENVIRONMENTAL STUDIES IN NINE COURSES AT CRESCENT VALLEY HIGH
VII. ENVIRONMENTAL STUDIES: FIVE MISCELLANEOUS REPORTS

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Regarding the present volume: as explained in the body of the main report, it was necessary to divert somewhat from our proposed course of action in order to achieve the expected level of results in the English and social sciences areas. After a careful screening of an outstanding group of applicants, we hired Mrs. Joanne James to introduce two special courses during the last nine-weeks grading period of
the school year. One was a contemporary literature course emphasizing the environment, with Edward Abbey's *Desert Solitaire* as the primary vehicle, among other works which were used. The other was primarily a U.S. history course, using Stewart Udall's *The Quiet Crisis* as the principal vehicle. The course concluded with a study of participatory democracy in contemporary America, with specific conservation organizations as examples.

We would emphasize that the content and procedures of these two courses could be integrated into one-year courses in literature and U.S. history, in which the environment is a pervasive but not a conspicuous and all-dominating theme. This would be maximally consistent with the project philosophy. That the material of these first two volumes was concentrated in special courses was due to circumstances beyond our control. With this proviso, we commend them to the reader's attention.

R. Thomas Tanner, Director, Rachel Carson Project

Cispus Environmental Learning Center
Randle, Washington 98377
September 23, 1972
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"MAN AND NATURE"

(A Course in Contemporary Literature)

by

Joanne James

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Introduction: To the Teacher

The field of literature is almost limitless. It is as wide as the world and as long as the history of civilized man. It includes hundreds of years in the past and also the foreseeable future. However, it has been the writings of contemporary authors, poets, and lyricists that have served as the basis of study for this course. The matter of thematic continuity was also involved in the selection of literature in that the works chosen for study deal in some way with the man-nature relationship.

The major portion of this course centers on the book *Desert Solitaire*, written by Edward Abbey. This book is a celebration of the beauty of living in a harsh and hostile land. "The author is a rebel and an eloquent loner. His is a passionately felt, deeply poetic book. It has philosophy. It has humor. It has its share of nerve-tingling adventures...set down in a lean racing prose, in a close-knit style of power and beauty."1

My students found *Desert Solitaire* to be very lively reading. Abbey aroused their interest and nearly all responded with enthusiasm and emotion. The importance of student reaction should not be overlooked, for students learn best when there is interest and relevance. Students also learn best when they are stimulated emotionally as well as intellectually. Abbey's book lends itself most admirably to this type of learning climate.

The classroom activities outlined for this unit focus mainly on discussion, writing, and inquiry. Questioning and discussion lie at the heart of good teaching, for it is the job of the teacher to discover every possible method for arousing interest, encouraging inquiry, stimulating questions and promoting deep thinking. Again, *Desert Solitaire* lends itself most admirably to this style of teaching.

Format for Unit Guide:

The *Desert Solitaire* unit has been organized in a somewhat unusual fashion. Traditional curriculum guides outline units of study in a series of prepared lessons. Each of these lessons is mechanically organized as to purpose of lesson, concept to be introduced, developed, extended and fixed, number of questions to be asked, and number of pages to be covered. I personally find such highly structured approaches to the study of literature quite unsatisfactory. Such strictly organized lessons do not promote teacher responsiveness to the interests and needs of students nor do they allow for the creativity of the individual instructor. One chapter in *Desert Solitaire*, for example, may serve as sufficient material for an entire week's discussion in one class. Another group of students may be ready to move on to a new chapter after only spending one class period on that same chapter. Therefore, I have designed this unit truly as a guide, not a

prescription. The course can be improved by you, the classroom teacher. Only the idea is important.

I have selected for your consideration what I feel to be significant quotes from Desert Solitaire. Each of these quotes is followed by discussion in which I have at times written some short essays in response to these passages from Abbey. Hopefully, these essay-type discussions will motivate your thinking and convey a new insight or two regarding Abbey's work. At other times, these quotes have been followed by suggestions for relating classroom activities which include questions for discussion as well as suggestions for written exercises. Also included are some listings of additional instructional materials that may be used to enhance the study of Desert Solitaire. These materials include a few films, essays, books and some poetry. At the end of the unit, I have included some of the papers which were written by my students. The work of these students was very gratifying to me. Hopefully, their words will in turn, inspire you and help lead you and your students to a new view of man and nature.

The remainder of the "Man and Nature" unit is organized into separate sections titled poetry, essays and stories, contemporary music, books about wildlife, and trips as educational enterprises. It is hoped that the teacher will add to these materials by starting his or her own collection of literature dealing with the 'man and nature' theme. And what is that one great theme which encompasses the man-nature relationship? It is, I believe, the interdependence of all living things with one another and their environment. Man, as a living thing, is, of course, a part of this grand scheme which governs life. Through the study of literature, we hope to enhance man's recognition of his interdependence with all of life and his environment.

Joanne James
July, 1972
I. Desert Solitaire Unit
Desert Solitaire - Edward Abbey

"The First Morning"

1. "This is the most beautiful place on earth, there are many such places. Every man, every woman, carries in heart and mind the image of the ideal place, the right place, the one true home, known or unknown, actual or visionary."

Discussion:

Most of us carry with us an image of the ideal place. The composite image of this place may not actually represent a real place we have know, but certainly the parts that make up the whole are drawn from our life's experiences. Several students were anxious to share their "ideal places." These places ranged from a rustic mountain cabin to a lush, flowering meadow, from the sandy beaches of the ocean shore to desert canyons and wild rivers. But all of these places had certain elements in common - the beauties of nature, an unhurried atmosphere, a place to renew the human spirit.

Today we face a steady one-way homogenizing of the environment. More and more people find themselves unable to escape the blenderized environment of the modern, commercial, urban center. They have grown up expecting a man-made world. We might therefore ask ourselves how these experiences in the artificial city environment might affect people's sensibilities as human beings. Will the young man who has only known the life of Manhattan, Chicago, and Los Angeles dream of an ideal place similar to those mentioned by my students? Or will he dream instead of an expensive penthouse apartment furnished with all the luxuries of his man-made world? What is natural to many people, whether we like it or not, is what they have grown up expecting, and in our man-made world, nature is increasingly unexpected. If people no longer dream of mountain streams and flowering meadows and desert canyons as well as other undiminished landscapes, how can we hope to preserve these places in reality? If for no other reason, we must stop this steady one-way homogenizing of our environment so that people may still experience and therefore dream of "natural" places that are necessary for the salvation not only of the human race, but also of the human spirit.

Questions:

1. Describe your ideal place. (The teacher should allow enough time for as many students as possible to share with one another their "ideal places.")
2. Have you drawn this image of your ideal place from other places you have known?
3. Do you think that people who have never escaped the man-made environment of the city will dream of an ideal place similar to yours? Why or why not?
4. Do you think that the dreams that people carry in their hearts and minds have any relation to their actions? If so, how might people's dreams of ideal places relate to the appearance of our environment?
2. "Standing there, gaping at this monstrous and inhuman spectacle of rock and cloud and sky and space, I feel a ridiculous greed and possessiveness come over me. I want to know it all, possess it all, embrace the entire scene intimately, deeply, totally, as a man desires a beautiful woman."

**Discussion:**

Abbey has a very refreshing concept of "greed and possessiveness" in relation to his environment. He wants to possess this desert place by experiencing it as deeply as he can--by using all of his senses to "embrace the entire scene." We as Americans, traditionally have not held such a concept of possession in relation to our surroundings. Instead, we have coveted land and our thoughts of possession have only been in terms of deeds and titles. Today, conservationists struggle daily to preserve the few remaining wilderness areas from the encroachment of private developers who only have their eye to the present. The wonders of the wilderness must be preserved for the enjoyment of all people, now and in the future.

3. "I'd sooner exchange ideas with the birds on earth than learn to carry on intergalactic communications with some obscure race of humanoids on a satellite planet from the world of Betelgeuse."

**Discussion:**

This passage from Abbey was a favorite among my students. They felt that there is so much for us to learn about life here on earth that there isn't any need to venture into outer space in search of someone or something to communicate with. How much do we really know about the owl or the blue jay or the ruffed grouse? Are their behaviors instinctive or do they often think for themselves as we do?

You might ask your students who they would rather exchange ideas with.

"Solitaire"

4. "If I look at the small device strapped to my wrist the numbers, even the sweeping second hand, seem meaningless, almost ridiculous."

**Discussion:**

I asked my students to contemplate for a moment to what extent their liver were run by the eternal twenty-four hour clock. One girl mentioned that she envied Abbey because she could not recall any time in her life when there was "a sense of time, a continuous present." It seemed to her that she had become a slave to the clock and in so doing had retained very little control over her daily activities. She felt that society, as a whole, had become too structured--too dependent on the ticking of the second hand and that this dependency had blurred our sensitivity to nature's rhythms. Perhaps as man became increasingly dependent on schedules and bells and deadlines, he also became decreasingly aware that man and earth are one. As society became industrialized, it ceased to regulate its activities according to the
rising and setting of the sun or the changing of the seasons. As our lives became regulated by the clock, we lost our sense of dependence on Mother Earth. These things have alienated us from nature and have given us a feeling that we are not a part of nature, but rather that we are in control of it. Man must come to realize that he is an integral part of the ecological balance of nature. Without this realization, man can never hope to achieve an unspoiled environment.

5. "There's another disadvantage to the use of the flashlight: like many other mechanical gadgets it tends to separate a man from the world around him."

Discussion:

Question: What are some other "mechanical gadgets" that tend to separate a man from the world around him?

My students named several "mechanical gadgets" which they felt served as barriers between man and his natural environment. These included the automobile, the airplane, the air-conditioned, architectural monstrosities where we work and shop, the computer, and so on. All of these "gadgets" tend to alienate us from nature; they impair our sense of dependence on the land.

6. "Once inside the trailer my senses adjust to the new situation and soon enough, writing the letter, I lose awareness of the lights and the whine of the motor. But I have cut myself off completely from the greater world which surrounds the man-made shell. The desert and the night are pushed back - I can no longer participate in them or observe; I have exchanged a great and unbounded world for a small, comparatively meager one. By choice, certainly; the exchange is temporarily convenient and can be reversed whenever I wish."

Discussion:

The importance of the situation just described by Abbey can be summed up in three very important words: "I can choose!" Abbey has shown us the relationship between individual freedom and a maximally varied environment. Abbey states that his present choice of habitat is his own because he is free to place himself in whatever environment he chooses. As our environment becomes more homogenized, we begin to lose this freedom to place ourselves in the environment of our choice.

Therefore, we should strive to maintain a maximally varied environment which offers a spectrum of habitats ranging from metropolitan complexes through isolated villages to wilderness. In such an environment, the urban and the urbane have access to the cultural amenities of the city, but others are not denied the possibility of floating a wild river if they so desire. In such an environment, those preferring the atmosphere peculiar to small and isolated communities may find employment in such places and are not forced into urban migration. Generous samples of pastoral and agricultural habitats are available to those who wish to live near them. All species are preserved in their wild state along with the ecosystems necessary for this. As one chooses,
he may place himself shoulder-to-shoulder on Broadway or alone on a desert mountaintop. "'...place himself" are the key words; freedom of choice the ideal."1

Question:

Students and teacher may now wish to explore the following hypothesis: "from this point in time onward, freedom of choice will vary inversely with population."2

"The Serpents of Paradise"

7. "All men are brothers, we like to say, half-wishing it were not true. But perhaps it is true. And is the evolutionary line from protozoan to spinoza any less certain? That also may be true. We are obliged, therefore, to spread the news, painful and bitter though it may be for some to hear, that all living things on earth are kindred."

"We are kindred all of us, killer and victim, predator and prey, me and the sly coyote, the soaring buzzard, the elegant gopher snake, the trembling cottontail, the foul worms that feed on our entrails, all of them, all of us. Long live diversity, long live the earth."

Discussion:

Man has traditionally viewed himself as conqueror of the natural world. Abbey, on the other hand, views man as a member of a larger community of interdependent parts. Seen in this light, man is no longer the conqueror of the natural world, but rather a member and citizen of it. This concept implies respect for all other members of the natural community and a sense of kinship among all living things.

"Cliffrose and Bayonets"

8. "...Unfortunately, most of the pinyon pines in the area are dead or dying, victims of another kind of pine - the porcupine. This situation came about through the conscientious efforts of a federal agency known formerly as the Wildlife Service, which keeps its people busy in trapping, shooting and poisoning wildlife, particularly coyotes and mountain lions. Having nearly exterminated their natural enemies, the wildlife experts made it possible for the porcupines to multiply so fast and so far that they - the porcupines - have taken to gnawing the bark from pinyon pines in order to survive."

"Like the porcupine the deer too become victims of human meddling with the natural scheme of things - not enough coyotes around and the mountain lions close to extinction, the deer have multiplied like rabbits and are eating themselves out of house and home, which means that many each year are condemned to a slow death by starvation."1 & 2. Source: "Freedom and a Varied Environment" by R. Thomas Tanner from the Science Teacher, Vol. 36, No. 4, April 1969, p. 32-34. Copyright 1968 by the National Science Teachers Association, 1201 Sixteenth Street, N.W., Washington, D.C.
Discussion:

Such ecological messes involving the predators are the result of man's so-called "right to dominate over nature," at all costs. Man has failed to appreciate the delicate relationship of all things on earth. By focusing on one part of the earth system to the exclusion of the other parts, (as in the case of the predatory animal), man has condemned himself to failure. He must learn to take account of all components of the earth system in his decision-making, lest he destroy the balance of nature and suffer the consequences of his meddling.

Looking at the history of predatory animal control in this country, we find numerous examples of man's ignorance of the interrelationships of the ecological community. In the period between 1860 and 1885, strychnine was applied to the carcasses of buffalo, antelope, deer, elk and birds in vast areas of central United States. The resulting animal deaths were devastating not only on the predatory animal populations but also on the entire wildlife community.

If we look at the predatory animal as an important and vital factor within the total scheme of nature then I believe we will have more respect for nature - as a whole. However, if we fail to understand or fail to "try" to understand these delicate checks and balances of nature then we will be short-changing ourselves.

Understanding these things will help us to further understand our role in this total space we call our home, Earth.

Question:

The teacher might ask his or her students if they can name other examples of "human meddling with the natural scheme of things"?

One of my students recalled the case of the Portland pigeons. It seems that many people considered the pigeon to be a feathered Public Enemy No. 1. So war was declared on the Portland pigeon. Poison again was used to eliminate the pigeon from downtown Portland. It eliminated pigeons, all right. However, it also eliminated songbirds, pheasants, and the ever-decreasing band-tailed pigeon. Nearby residents complained of the mass of dying birds in their yards.

The poem which appears on the following page is about one of the predatory animals - the coyote. "The Coyote" was written by Doreen Kees, age 12.
"The Coyote"

We found him, my friend and I,
Cold, lifeless, and commanding.
His eyes those of a proud, stalwart leader,
Even though he lay still.
We watched him.
He had such power that had he been alive,
He would have overpowered us
With one small push of his giant, menacing paw.
The wound was there,
Like a glistening ruby amidst a mass of cold fur.
He was dead.
His vicious image compelling us to run.
To run far over the green, fertile hills,
Past the dark, threatening ocean,
Through the soft tingling sand,
And into the dense, deep, dreaded gray mist.
But we didn't,
We stayed and silently said a prayer.

Doreen Kees
Age 12

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"The Coyote" - Doreen Kees
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9. "To my am. ,ement the stone flies true (as it guided by a Higher Power) and knocks the cottontail head over tincups, clear out from under the budding blackbush. He crumples, there's the usual gushing of blood, etc., a brief spasm, and then no more. The wicked rabbit is dead."

Discussion:

This incident of the killing of the rabbit brought about a variety of reactions among my students. Some thought this killing to be a senseless act, completely out of character with the Abbey they were beginning to know and admire. Other students experienced a reaction very similair to Abbey's - initial shock by the deed, followed by a sense of "becoming," of being part of the family of all living things on earth, "killer and victim, predator and prey...all of them, all of us." To these students, Abbey had pursued the rabbit as early man had hunted his game. With only a rock, (a weapon that nature had provided him), Abbey was able to outwit the rabbit. Abbey had operated within the ethics of sportsmanship. None of the students, by the way, said they could have accepted the killing of the rabbit if Abbey had shot him with a high-powered rifle. This would not have represented sportsman-like behavior. Also, they felt that Abbey would have excluded from "becoming" part of the world around him had he separated himself from his prey by a modern gadget of "civilized" society.

The teacher may wish to ask the following questions:

a. What was your reaction to Abbey killing the rabbit?
b. (To those students who were able to accept Abbey's deed:) Would you have felt the same way if Abbey had shot the rabbit with a high-powered rifle? Why or why not?

10. "If Delicate Arch has any significance it lies, I will venture, in the power of the odd and unexpected to startle the senses and surprise the mind out of their rut of habit, to compel us into a reawakened awareness of the wonderful - that which is full of wonder."

Discussion:

This statement by Abbey represents a unique and eloquent plea for preservation of wilderness areas.

"Polemic: Industrial Tourism and the National Parks"

11. "There may be some among the readers of this book, like the earnest engineer, who believe without question that any and all forms of construction and development are intrinsic goods, in the national parks as well as anywhere else, who virtually identify quantity with quality and therefore assume that the greater the quantity of traffic, the higher the value received."

Discussion Questions:

"...the greater the quantity of traffic, the higher the value received."
Questions:
   a. What is your opinion of the above statement?
   b. Abbey points out that many people hold this philosophy in relation to our national park system. Can you think of other areas in our society where people display a similar "logic," namely "...the greater the quantity of traffic, the higher the value received"?

12. "...wilderness is a necessary part of civilization and...it is the primary responsibility of the national park system to preserve intact and undiminished what little still remains."

Discussion:
This represents a simple yet unequivocal statement as to the necessity of wilderness areas and how they should be preserved for all time.

13. "What does accessibility mean?"

Discussion Questions:
   a. What is the "Developer's" definition of accessibility?
   b. How does this differ from the "Preserver's" definition of accessibility?
   c. What does accessibility mean to you?

Note: The teacher should help the students discover what effects these various definitions of accessibility may have on the appearance of our national parks and the purpose for which they would serve.

14. Questions: What is Industrial Tourism?
   Describe the "Wheelchair Explorer"?
   Why is Industrial Tourism a threat to the national parks?

Discussion:
Abbey's commentary on the Industrial Tourist will no doubt spark interest and enthusiasm among your students. Most of my students were anxious to share their vacation experiences with one another and to describe various "Wheelchair Explorers" they had known. Some expressed feelings of guilt having realized that they, too, had often been unwilling to crawl out of their cars in order to experience the difficult, the original, the real Mother Earth.

15. "...a constantly increasing population makes resistance and conservation a hopeless battle. ...Unless a way is found to stabilize the nation's population, the parks cannot be saved. Or anything else worth a damn."

Discussion:
Many scientists find themselves involved in the "numbers racket."
They debate, they experiment, they collect data, they feed the computer-
all in hope of discovering that magic number: optimum population for survival! Some say 5 billion, others say 7 billion, but all seek that magic number from the same perspective—how many people can we maintain, albeit inadequately, on this planet? It is my contention that we have become too oriented toward a "survival ethic." What we seem to have forgotten is that behind the "fact" of life is the problem of its meaning. What kind of "progress" will man have made if he can figure out how to put 10 billion people on this earth when they all live identical lives in identical surroundings, stacked up to the sky in sardine cans, eating their one synthetic food tablet a day, and teaching their children about nature by showing them colored slides of flowers and trees and birds that used to be? Why doesn't somebody start yelling, "I don't want to survive, I want to live!" Can't anyone understand that even though men may possibly live through the slaughter of the environment, life will not be worth living? We're playing this numbers game from the wrong perspective. We should not be asking how many people we can maintain on this earth merely from the point of survival, but rather how many people this earth support in a life of meaningful existence.

Abbey says that life on this earth won't be "worth a damn" unless we can stabilize the population. Perhaps there are too many people on this earth already. Nonetheless, we must now turn our thoughts from mere survival to the quality of human life on this planet!

16. Discussion Questions:
   a. What are Abbey's proposals "for the salvation of both parks and people?"
   b. What is your reaction to these proposals?
   c. Do you think the majority of Americans would be willing to reform their "wheelchair" approach to the out-of-doors having once discovered the adventure and the challenge of the bicycle, the saddle horse, and the footpath?
   d. Even if the majority of Americans still preferred the familiar luxury of their automobiles, would this warrant the gradual destruction of our national parks?

"Rocks"

17. "Coming unexpectedly upon such a trove a man is sometimes overcome by greed; by the mad desire to possess it all, to load his pockets, his knapsack, his truck with these hard lustrous treasures and somehow transport them all from the wilderness to the shop, garage, and backyard. An understandable mania; packrats hoarding string, tinfoil, old shoes and plastic spoons, suffer from the same instinct. So that over the surface of the earth a general redistribution of all that is loose, not nailed or bolted down, takes place, hastening the processes of geology, and continents sag at the edges. Silly perhaps but not in the long run harmful; nothing is really lost except that epiphenomenon known as human delight. This too will be replaced."
Discussion:

"...nothing is really lost except that epiphenomenon known as human delight."

This quote from Abbey can serve as a good basis for discussion. The teacher might simply ask the class: "What is Abbey saying?" "What does this statement mean to you?"

18. "In all those years of feverish struggle, buying and selling, cheating and swindling, isolation, loneliness, hardship, danger, sudden fortune and sudden disaster there is one question about this search for the radiant treasure - the hidden splendor - which nobody ever asked."

Discussion:

What is that "one question"..."which nobody ever asked?" I think that it is worthwhile for each student to attempt to discover what that "one question" might be. The teacher, however, should not expect an immediate response by merely posing the question. I found that my students needed time to think this one through. Therefore, I would recommend that the teacher give notice a day or two in advance that this question will be discussed in class. Or, this paragraph could also serve as an excellent basis for a writing exercise. But in either case, the students should be given adequate time to put their thoughts together.

"Cowboys and Indians"

Note to teacher:

This chapter contains numerous references to Abbey's thoughts on death and dying. I asked my students to write on these thoughts in their paper on Desert Solitaire. The teacher should be careful to note Abbey's comments on death, but whether he or she would want to discuss these matters in class in addition to their inclusion on an exam or paper would be, of course, up to the individual teacher.

19. "Inadvertently when drunk he expresses the wistful desire to somehow disappear and merge into the pale-faced millions who own and operate America."

"Useless to try and reassure him that he has more to lose than gain by such assimilation;..."

Discussion:

The above quote refers to Viviano Jacquez, the hired hand of a Utah cattleman.

Questions:

a. Why do you think Abbey feels that Viviano has more to lose than gain by assimilating into the main-stream of American
society? (Make reference to what may be "gained" and what may be "lost" by such assimilation.)

b. Do you agree or disagree with Abbey's statement? Explain.

"Cowboys and Indians - Part II"

20. "Every time I drop a couple of ice cubes into a glass I think with favor of all the iron and coal miners, bargemen, railroaders, steel-workers, technicians, designers, factory assemblers, wholesalers, truckdrivers and retailers who have combined their labors (often quite taxing) to provide me with this simple but pleasant convenience, without which the highball or the Cuba libre would be poor things indeed.

Once the drink is mixed, however, I always go outside, out in the light and the air and the space and the breeze, to enjoy it. Making the best of both worlds, that's the thing."

Discussion:

"Making the best of both worlds, that's the thing." This is truly the main theme of Desert Solitaire. In order to make the best of both worlds, we must first set out to secure the existence of two separate worlds for all time. "Let me hear the wit and wisdom of the subway crowds, the cold river's shrewd aphorisms, the genial chuckle of a Jersey city cop, the happy laughter of Greater New York's one million illegitimate children." Here Abbey is saying, let me enter this world when I choose - let this world exist. But also let me sit in peace under the sunlight and stars, wind and sky and golden sand, listening to the music of a distant bird, viewing a landscape that is open and spacious and untouched by the human hand. Yes, let me also enter this world when I choose--let this world exist.

We cannot stay the onward march of progress nor would we wish to. We do, however, raise the question as to how this progress is to be measured. Progress does not mean that we cover all of God's green earth with subdivisions and concrete highways. Progress does not mean the obliteration of nature. For it is human greed, the hope of "turning a fast buck"--not progress--that causes man to set out to rearrange every acre of land on this earth. We have wisely set aside national parks for permanent preservation of wilderness. Then let us strive to make the most of this world and not desecrate it by locating luxury-type motels within park boundaries with modern hard-surfaced highways leading into them. Let our wilderness areas remain true wilderness areas.

"We are learning increasingly nowadays from psychology and biology that man is a part of nature. His roots are in the natural world, and he separates himself from it at his peril. The unnatural environment of our cities and the pace of modern life have accelerated the "civilised" diseases so familiar to us all. Physicians increasingly urge patients caught up in the urban "rat race" to get more relaxation. (A recent report from a Kefauver Congressional Committee states that we are spending $280 million annually in this country for tranquilizers.) For many people the best kind of refreshment and renewal comes among trees and fields, along uncrowded seashores or high on mountain
streams. We have in many respects become a nation of vacation seekers in search of temporary surcease from the abnormal strains of a fast-moving society. Above all, modern man, perplexed and beleaguered in mind and body, needs the wholesomeness and serenity that come from leisurely association with natural surroundings, particularly with nature in its pure, unadulterated state—true wilderness."

(Above quote from an address by Secretary of the Interior Stewart L. Udall at the Eighth Biennial Wilderness Conference in San Francisco, March 1962.)

A majority of my students had always admired Edward Abbey. They agreed with his philosophy and really liked his "gutsy" way of writing. However, there were a few students who had found Abbey to be violently prejudiced, even frankly antisocial in his point of view, and had occasionally referred to him as a "wilderness freak." These students had visualized an Abbey who would like to see all automobiles, all (gas stations, all motels—perhaps even all cities erased from the face of this continent. They had pictured Abbey as a recluse, a lover of all animals and a hater of all men.

But then Abbey writes, "Making the best of both worlds, that's the thing," With this one statement, Abbey had turned the tide of thought that had formerly referred to him as a "wilderness freak." Abbey wasn't against the automobile after all, but rather he was against the automobile in the wrong places. "We have agreed not to drive our automobiles into cathedrals, concert halls, art museums, legislative assemblies, private bedrooms and the other sanctums of our culture; "we should treat our forests and mountains and desert canyons with the same deference. Abbey wasn't against the glittering world of super markets and chrome store fronts and prefab housing developments, either, rather, he was against these things in the wrong places. Let's not diminish our holy places, Abbey was saying, by contaminating them with the products of our increasingly automated, plasticized, cosmetic society. And Abbey wasn't against science and technology. After all, applied science has released us from drudgery, has given us power over the blind vagaries of nature. Abbey was, however, against a blind faith in technology, an insenste lust for aggrandizement and technological—mercantile conquest which causes man to rearrange every acre on this earth in hope of a dollar's profit.

With these realizations, Abbey had suddenly become more palatable to the reluctant enthusiasts. "Gee he's saying I can keep my motorcycle after all— I'm just supposed to keep the damned contraption where it belongs!"

21. Discussion:

The chapter "Cowboys and Indians, Part II" contains a section in which Abbey speaks of the plight of the American Indian. These pages easily lend themselves to a variety of discussion topics, some of which may include the following:
a. Abbey speaks of the recent population explosion among the Navajo. The increase is the indirect result of the white man's medical science which lowers the death rate while simultaneously not having intervened to lower the birth rate. This raises various questions as:

1. Have we really done the Indians a favor by giving them the benefits of our medical technology?
2. Students may be asked to note the analogy between the population explosion among the Navajo and similar population booms in other areas of the world. When methods become available for saving people from disease and starvation, they are adopted quickly because they conform to existing beliefs; by contrast, lowering the birth rate is often opposed because it contradicts prevailing value systems.

b. What are the effects of uncontrolled population growth on the standard of living of the Navajo? May this possibly serve as a warning for the rest of mankind?

c. Although the reservation is "worn out, barren, eroded, hopelessly unsuited to support a heavy human population," does it still provide any positive benefits to the Navajo people?

d. What might be some possible solutions to the Indian problem? What might be some of the benefits and detriments of these proposals?

e. Abbey states that the Indian should not be expected to assimilate into our industrialized society. What is his reasoning? Do you agree or disagree?

f. Abbey also speaks of a difference between the Indian and the white man in value systems. He says that the Navajo's most severe handicap is poorly developed acquisitive instinct. "He lacks the drive to get ahead of his fellows or to figure out ways and means of profiting from other people's labor." Perhaps it is a sad commentary on our society that such "values" as materialism, success (defined as power and wealth), and individualism are necessary to find a niche in the affluent society.

"Water"

22. "Has joy any survival value in the operations of evolution? I suspect that it does; I suspect that the morose and fearful are doomed to quick extinction."

Discussion:

This is a rather unique statement by Abbey that may lend itself to discussion or a written exercise of some type.
23. "Water, water, water...there is no shortage of water in the desert but exactly the right amount, a perfect ratio of water to rock, of water to sand, insuring that wide, free, open, generous spacing among plants and animals, homes and towns and cities, which makes the arid West so different from any other part of the nation. There is no lack of water here, unless you try to establish a city where no city should be."

**Discussion:**

Many people complain about the desert wishing it were "wet and humid and hydrological, all covered with cabbage farms and golf courses." They are repelled by the dry and desolate landscape, viewing the desert as unfit for human habitation. But Abbey appreciates the harsh beauty of the desert. This land represents a unique ecosystem, with interdependent plant and animal communities know only to the desert. The dry climate, the seeming "lack" of water that so many complain about is necessary to the desert for it maintains the unique character of its landscape.

Some of us prefer New England, and that is our right. We like green mountains, and we respond to green landscapes. But some of us like the desert, and that also is our right. We like rock and we like the smell of the desert air and the vastness of the open sky. Beauty is not a universal truth; beauty is that which fits into its environment and expresses its character in that relationship. In the desert, a seed finds among the rocks a little soil that the wind has blown or water has washed into a crevice. Awakened by the desert sun and a little pain, that seed grows into a dwarfed, twisted tree, leaned out from the face of the cliff. The straight tree of the New England forest would be out of place here. Gnarled - some might say ugly - that tree expresses the character of its environment...its beauty consists in the unity and dramatic compatibility with its surroundings.

Nature has provided man with many beautiful landscapes, each with its own unique qualities. The varying flavors of light and sound and feel in these places provide inspiration and refreshment to those who experience them. But man has undertook to simplify his surroundings, to foreclose on this diversity of landscape, and in the process praise himself to boldly advocate the eradication of the desert and the complete subjugation of nature to the profit motives of man is only representative of such madness. Let us recognize this madness for what it is, and speak out for the preservation of the desert. Let us praise the desert, not condemn it, for its spareness and simplicity, for its barren sand and lifeless rock, for its strangeness and wonder.

"The Heat of Noon: Rock and Tree and Cloud"

24. "We need wilderness whether or not we ever set foot in it."

**Discussion:**

I asked my students to comment on this quote from Abbey in their final paper. The teacher may or may not wish to bring up the question - why do we need the wilderness? - for discussion in class in addition to the written assignment.
"Noon-time here is like a drug. The light is psychedelic, the dry electric air narcotic. To me the desert is stimulating, exciting, exacting; I feel no temptation to sleep or relax into occult dreams but rather an opposite effect which sharpens and heightens vision, touch, hearing, taste and smell."

**Discussion:**

The wilderness, like a drug, can be an exciting adventure. But unlike drugs which dull the senses, the wilderness "sharpens and heightens vision, touch, hearing, taste and smell." Perhaps in submitting mind and body and soul to the wilderness experience, to the elements of nature, one may find the ultimate adventure, the ultimate excitement, the ultimate trip.

Areas for discussion might include the following:

a. What are the benefits of the wilderness "trip" as compared to the drug trip?

b. Can you visualize a new drug culture, a "wilderness drug" culture taking over the country?

c. What would be needed to "turn on" the people of this country to the wilderness experience?

**Unexplored possibilities:**

One might obtain some literature listing the different reasons why people turn to drugs. I would guess that some of these reasons might include excitement, search for a new experience, escape from problems, unpleasant situations or environments, a search of self. One might then ask if these problems might not be resolved in the wilderness experience? Many have discovered excitement, new experiences, release from the daily strains of life, and a new realization of self among trees and fields, along mountain streams or desert canyons. Perhaps we can educate people to find fulfillment and satisfaction of their innermost needs in the wilderness experience instead of turning to drugs.

"The Moon-Eyed Horse"

**Discussion**

The students found "The Moon-Eyed Horse" to be a very exciting chapter. Abbey has a tremendous talent for relating a story. The reader experiences suspense and excitement as Abbey approaches old Moon-Eye in the desert.

"Down the River"

Allow me to quote several of my students: "'Down the River' was the most beautiful chapter in Desert Solitaire and that's why it made me angry. The beauty deepened the fact that Glen Canyon, as it was, is gone now. Now no one can ever do what Abbey and Newcomb did - slowly, unhurriedly, quietly discover all those wonderful things."
"The whole chapter of 'Down the River' made me sad. It was such a beautiful experience that he was describing, and so beautifully written. That in itself was enough to make me sad, because beautiful things always make me sad in sort of a warm way. On top of that, though, was that it was obvious that all the time he was writing, he was poignantly aware that all that beauty would soon be underwater, even though he didn't mention that fact outright very often."

26. "...when a man must be afraid to drink freely from his country's rivers and streams that country is no longer fit to live in. Time then to move on, to find another country or - in the name of Jefferson - to make another country."

Discussion Question: Which is the better alternative - "to move on, to find another country or ... to make another country?" Why?

27. "...the love of wilderness is more than a hunger for what is always beyond reach. It is also an expression of loyalty to the earth, the earth which bore us and sustains us, the only home we shall ever know..."

A beautiful statement relating man's dependence on the land.

28. This chapter contains several references to Abbey's personal religious philosophy. Note what Abbey says when he speaks of "Paradise" and "Original sin." "Original sin, the true original sin is the blind destruction for the sake of greed of this natural paradise which lies all around us - if only we were worthy of it." And, "Paradise is not a garden of bliss and changeless perfection...The Paradise of which I write and wish to praise is with us yet, the here and now, the actual, tangible, dogmatically real earth on which we stand."

The students were asked to comment in their Desert Solitaire paper on Abbey's religious philosophy, taking special note of his concepts of God, Paradise, and original sin. The above paragraph is significant in this respect. Other writers and poets have held similar philosophies, for they too have seen Paradise here on earth. Louis Ginsberg is such a poet. I have included two of his poems in this section, entitled "Song in Spring," and "All I'd Ever Ask of Heaven."
As I went walking
The road from town,
I gazed at Heaven
By looking down.

Buttercups, daisies,
And dandelions
Lifted up vistas
Of long-sought Zions.

And patches of violets
I could spy
Were busy marrying
Earth with sky;

Until I felt
On days like this,
Spring was rehearsing
Genesis.

Reprinted from Morning in Spring and Other Poems
by Louis Ginsberg
by permission of William Morrow and Company, Inc.
New York, 1970
"Song in Spring" p. 50
"All I'd Ever Ask of Heaven"

As I was walking down the street
I heard my heart, my heart repeat
That all I'd ever ask of Fate
Was often to be so elate.
I said I walked, and yet I noted
It was as if I really floated.

I looked around, and everywhere
The sunlight honeyed all the air.
I saw the vivid radiance brim;
I saw in it the houses swim;
I saw how every lawn and tree
Sparkled with a lucidity.
From window to office-window, were
Flashes of astonishment.
Upon the scales of telephone wires,
The birds were notes that scored desires.
Aerials from the root-top views
Semaphored they knew the news.

It was as if a strong intent
Was working for some sacrament,
As if behind this honeyed light
There might be seeing beyond sight.

Was I the meaning parleyed between
Both the seen and the unseen?

So as I walked along the street,
I heard my heart, my heart repeat
That all I'd ever ask of Fate
Was often to be so elate,
As with an elemental mirth,
As with an elemental leaven;
And all I'd ever ask of Heaven
Was only more of all this earth.

Reprinted from *Morning in Spring and Other Poems*
by Louis Ginsberg
by permission of William Morrow and Company, Inc.
New York, 1970
"All I'd Ever Ask of Heaven" p. 66
29. "No, wilderness is not a luxury but a necessity of the human spirit, and as vital to our lives as water and good bread. A civilization which destroys what little remains of the wild, the spare, the original, is cutting itself from its origins and betraying the principle of civilization itself."

"If industrial man continues to multiply his numbers and expand his operations he will succeed in his apparent intention, to seal himself off from the natural and isolate himself within a synthetic prison of his own making. He will make himself an exile from the earth and then he will know at last, if he is still capable of feeling anything, the pain and agony of final loss...."

Discussion:

Abbey says that we are fast becoming a nation of exiles--"exiles from the earth." In destroying those roots that bind us to the earth, we can only ponder the effect of our isolation upon our sensibility as human beings. Abbey has given this matter some thought and has left us with a haunting question--may our sensibilities as human beings become so diminished that when we finally succeed in isolating ourselves within the synthetic prison of our own making, we will never know or feel the agony of our loss? Food for thought.

30. **Note to teacher:** Another significant quote in relation to Abbey's religious philosophy can be found on page 208. "I am not an atheist but an earthiest. Be true to the earth."

31. **Unexplored Possibilities:**

Abbey has made reference to T. S. Eliot's poem, "The Wasteland" in the chapter, "Down the River." "...T. S. Eliot and 'The Wasteland.' Certain passages in that professorial poem still appeal to me, for they remind me of Moab, Utah. In other words, I like the poem for the wrong reasons--and dislike it for the right ones."

The teacher may wish to make available to the class individual copies of Eliot's poem, "The Wasteland." The teacher could then ask the students to state what they think Abbey's reasons are for liking the poem as well as his reasons for disliking it.

"Down the River"

**Supplementary Materials:**

A. Film - "Wild River"  50 min. color
   National Geographic Society series.
   Film distributor: NGS (National Geographic Society) 1972, fee $20.
Note to Teacher: This is a tremendous film, being superb in both photography and narrative. I would classify "Wild River" as a number one priority item in the Desert Solitaire unit.

Message of "Wild River:"

Wild rivers, such as the Salmon River in Idaho, teach man some very important lessons. They teach us respect for nature and they teach us humility toward man. We desperately need these perspectives in our rapidly deteriorating environment. Man must again show love and respect for nature. He must learn a new humility that will curb his recklessness toward the natural world.

The Craighead family have learned these lessons well. They have fought hard to save the wild places of this nation where man can be in harmony with his natural environment. They have experienced many of the same thrills to nature's beauty in their trip down the Salmon River that Abbey experienced with Newcomb in his float through Glen Canyon. The Craigheads, like Edward Abbey, have derived their life's meaning and style from these wild places they've know. The Craigheads and Abbey recognize man's need to renew his accord with nature and refresh himself. They know the value and beauty of places where man does not crowd against himself - where life follows nature's rhythms.

B. Magazine - National Geographic - July, 1967
   The Journal of the National Geographic Society, Wash. D.C.
   Article: "Lake Powell: Waterway to Desert Wonders" p. 44-75

This article in the National Geographic contains photographs of the Glen Canyon area - as Powell and Abbey experienced it - and after the gates of Glen Canyon were closed. With the advent of Glen Canyon Dam, the waters encroached on the land, destroying much beauty. (Note: A very dramatic visual comparison of the area - before and after - is shown on page 51 of the article.)

C. Magazine - Audubon, January-February 1966, Vol 68, No. 1
   Published by the National Audubon Society, Carl W. Buchheister, President
   1130 Fifth Avenue, New York, N.Y. 10028
   Article: "Visit to a Drowning Canyon" by Frank L. Griffin, Jr.
   p. 27-32.

D. Book - The Place That No One Knew by Eliot Porter
   A photo essay on Glen Canyon.

"Havasu"

This chapter contains a nerve-tingling adventure that the students will no doubt enjoy reading.

"The Dead Man at Grandview Point"

32. "Looking out on this panorama of light, space, rock and silence I am inclined to congratulate the dead man on his choice of jumping-off
place; he had good taste. He had good luck - I envy him in the manner of his going: to die alone, on rock under sun at the brink of the unknown, like a wolf, like a great bird, seems to me very good fortune indeed. To die in the open, under the sky, far from the insolent interference of leech and priest, before this desert vastness opening like a window onto eternity - that surely was an overwhelming stroke of rare good luck."

Note to teacher: The students were asked to comment on Abbey's thoughts and feelings concerning death and dying in their Desert Solitaire paper. Then they were asked to relate an incident which best exemplified Abbey's concept of "a good way to die." The above paragraph best illustrates Abbey's idea of "a good way to die."

33. "Each man's death diminishes me? Not necessarily. Given this man's age, the inevitability and suitability of his death, and the essential nature of life on earth, there is in each of us the unspeakable conviction that we are well rid of him. His departure makes room for the living. Away with the old, in with the new. He is gone - we remain, others come. The plow of mortality drives through the stubble, turns over rocks and sod and weeds to cover the old, the worn-out, the husks, shells, empty seedpods and sapless roots, clearing the field for the next crop. A ruthless, brutal process - but clean and beautiful."

Discussion:

Man has traditionally viewed death with great sadness. We grieve, we shed tears, we mourn for the loss of life. Surely, we miss those who have died, but we must not mourn death. One need only reflect on the changing seasons of the year in order to see the purpose of death. In the autumn, we thrill to the sight of leaves of crimson and gold, only to see them wither and die with the oncoming of winter. But it would be foolish to mourn the death of the fallen leaves. The leaves become a part of the earth, and in the spring we see buttercups and daffodils springing up from the dust with new life and vigor. And so it is with man. Man, too, must die to make room for the new season - for the new cycle of life. Death is not a dreadful thing, for it is from death that all life flows.

We seem to have forgotten this simple lesson. Man has intervened to prolong human life on earth. Fewer people die from illness and disease, and people live longer, healthier lives. But in the process, man forgot that death had provided a balance in numbers. For in artificially lowering the death rate without simultaneously decreasing the number of births at the same rate, man found himself faced with unbridled population growth. This rapid increase in numbers has contributed to problems of air and water pollution, poverty, clogged highways, overcrowded schools, urban blight. Rapid population growth has truly proved to be a drain on all our social and economic resources.

Man must look again to nature - to the cycle of the seasons in order to rediscover the purpose of death. For it is only through death that we dare make room for the living. Therefore, we find ourselves faced with two alternatives. Either we cease to make available to the people
of the world the benefits of medical science and technology, thus allowing disease and illness to again take their former toll of human life. Or we assume the responsibility for having intervened to lower the death rate and therefore act decisively in subsequently lowering the birth rate as well. Surely this is the only acceptable alternative. We must exercise reproductive responsibility and use all of our available resources to end population growth throughout the world. Man cannot afford to linger in accepting this responsibility. He must act with urgency, lest nature be forced to cast a massive death blow across the land in order to deal with a species out of control.

"Episodes and Visions"

The students found the opening pages of "Episodes and Visions" to be very amusing. They laughed at the conversation between Abbey and the tourists, while still feeling sad to find that the picture Abbey had painted of the typical American tourist was in fact true. One of my students wrote, "the part that made me laugh was in 'Episodes and Visions' when Abbey was talking to the tourists. This was a good ending. All through the book he was telling how people don't get out and really discover nature. Then those industrialized tourists come along to emphasize what he means."

Classroom Activity Suggestion: The teacher might select several students to read aloud the conversation between Abbey and the typical tourist.

34. "Revealing my desert thoughts to a visitor one evening, I was accused of being against civilization, against science, against humanity. ... With his help, I discovered that I was not opposed to mankind but only to man-centeredness, anthropocentricity, the opinion that the world exists solely for the sake of man; not to science, which means simply knowledge, but to science misapplied, to the worship of technique and technology, and to that perversion of science properly called scientism; and not to civilization but to culture."

Discussion:

The accusations which were brought against Abbey are often heard today among certain segments of our society. As the environmental movement has gained force and posture in this country various people and institutions have felt threatened. Those environmentalists who have called for population control have been accused of hating children. But if one truly loves a child, one can only wish for that child a quality life. These environmentalists simply see unbridled population growth and quality human life as incompatible ends. Other environmentalists who work to save animal species from extinction are called misanthropes - people-haters. Somehow many have come to believe that one must either cast their lot on the side of man or the animals - that one cannot possible love both. Romain Gary has written a superb novel about a man, Morel, who dedicated his life to the preservation of the elephant. Morel, too, was accused of being anti-people, whereas all he really wanted was a better world for all of us - a world with "a margin of humanity, of tolerance, where some of life's beauty (can) take refuge." Perhaps the character Minna answers that kind of accusation best: "And people
have tried to represent him as a misanthrope full of hate, detesting
people, when he only wanted to defend us, to protect all the living and
the hunted."

Another group of environmentalists who met vigorous opposition are those
who seek regulatory controls on the corporate sector in order to achieve
a liveable and humane environment. They are accused of being anti-
industry, anti-progress, and anti-freedom. Freedom to those who are
angered by such regulation apparently means freedom to pursue private
interests, even at the expense of the public welfare. They seem to
ignore the fact that environmental responsibility requires acknowledgement
and acceptance not only by individuals but by institutions alike.

These are just a few examples of the backlash encountered by environ-
mental groups and people like Abbey today. The individual citizen will
have to be alert and intelligent in responding to those who wish to
chart our collective future. The individual citizen will have to answer
the question: "Which actions will move us to make the earth a better
land for ourselves and for those as yet unborn?"

"Bedrock and Paradise"

35. "When I return will it be the same? Will I be the same? Will
anything ever be quite the same again? If I return."

Discussion Questions:

a. Do you think Abbey will return to the desert?
b. If Abbey does return, do you think he will find the desert
   the same as before?

Student poem:

I must come to the desert again, to the lonely rock
and the sky,
For the call of the desert is wild and clear, and may not
be denied.
And all I'll ask when I return, is to find this place
as before,
Undiminished, open and free - I dream of no less
and no more.
Man and Nature Class
Abbey Assignment

Instructions (Part A):

Answer any 5 of the following six questions. Please give each answer considerable thought before you begin writing. You may quote from Abbey, but keep this to a minimum as I have already read the book and prefer to hear your thoughts. Avoid plagiarism at all cost. Length should not be less than 5 double-spaced typed pages or the written equivalent thereof. (Note: one typed page = 250 words).

1. Discuss Abbey's thoughts and feelings concerning death and dying. What incident in Desert Solitaire best exemplifies Abbey's concept of a "good way to die"? Under what kind of circumstances would Abbey least like to die?

2. What is Abbey's philosophy concerning the best relationship between man and the wilderness and commercial-industrial society? Does this philosophy agree or differ from your own? In what ways?

3. Describe Abbey's personal "religion." Be sure to include discussions of his concepts of God, Paradise, and Original Sin. What do you think would be Abbey's concept of Hell?

4. What are Abbey's proposals for saving the parks? Do you agree or disagree with these proposals? Consider each proposal separately in your answer.

5. Edwin Way Teale, New York Times Book review, has referred to Desert Solitaire as a "passionately felt, deeply poetic book." Relate either a passage or an incident that had the following effect on you as you read the book: a) laugh, b) angry, c) sad, d) shudder - either from fear or horror. Then make an attempt to determine why you reacted in each of these four particular ways.

6. Abbey has been accused of "being against civilization, against science, against humanity". What is your opinion of Abbey? Explain.

Instructions (Part B):

Write a paragraph on each of 4 of the following six quotations from Abbey. Indicate what you feel is meant or implied by each passage. Also, be sure to include your personal reaction to what has been stated.

1. "Love flowers best in openness and freedom."

2. "If we could learn to love space as deeply as we are now obsessed with time, we might discover a new meaning in the phrase to live like men."

3. "We need wilderness whether or not we ever set foot in it."
4. "It may be however that Los Angeles will come to me. Will come to all of us, as it must (they say) to all men."

5. "I stretched out in the coyote den, pillowed my head on my arm and suffered through the long long night, wet, cold, aching, hungry, wretched, dreaming claustrophobic nightmares. It was one of the happiest nights of my life."

6. "Cousin buzzard..."

Length of Part B should not be less than 2 double-spaced typed pages or the written equivalent thereof.
Paper by Mary McClintock

Part A

In the chapter "The Dead Man at Grandview Point", they find the body of man out in the desert. Abbey says the man is very lucky to have died that way - "to die alone, on rock under sun at the brink of the unknown, like a great bird..." Abbey is a man of nature, and he thinks the man was lucky to have died in such a beautiful place: overcome by the desert's harshness. I think Abbey would be insulted, degraded, if he himself was killed in a car accident, or slowly died in a hospital where he could not "be distinguished from the various machines to which he was connected" he would probably like to die of hunger or thirst or by a heart attack (quickly) or by falling off a cliff.

When he talks about death itself, Abbey again looks at it as a natural thing, as natural as a cougar eating a rabbit. A coming and a going. He doesn't feel emotion that this man died (he probably would if it was someone he knew and cared about), because the old die, and there is always new life. It is like leaves, I think. When they die (of natural causes, in a blaze of color), in the fall, we are sad because now the trees will be bare for awhile, but we always know that new leaves will come in spring, even more beautiful.

Abbey seems to look at death very matter of factly, to treat it the same way nature does - a way that seems almost cruel, but is the right way. No, on second thought, it's not really matter of factly, it is more like let life move where it will - it ends in death and that's beautiful. I'm really not sure how I view death and dying, but Abbey's is a nice way of looking at it.

Abbey's proposals for saving the parks are (very radical) and they make no compromises, but that's the way Abbey is and I think that if things are going to change - our ideals and our way of life - it has to be that way - a complete turn around or nothing. It's almost too late to change very gradually.

His first proposal is to ban automobiles from the parks. The government would provide bicycles, horses, and a bus service to and from parking lots for those who need it. I think this is a great proposal. As he says, parks are sacred places and cars have no right to be there. People would appreciate parks so much more and the parks would be better places. And as Abbey says, perhaps it would make people realize how much better walking and bicycling is, and they would use their cars less and every day life. The people who really hate exerting themselves wouldn't come, and that's good because only people who really love the wilderness would be there.

I'm not sure about the elderly and children. If someone asked me what to do about them, I wouldn't know how to answer.

Abbey's second proposal is to build no more roads in the national parks: this ties in with the first proposal. If cars are no longer allowed in the parks, there won't be a need for paved roads anymore. As he
says, there are enough paved roads already to be used for bicycles and official park trucks, and the unpaved roads and paths can be used for horses and hikers. I think both of these proposals are really important, essential, in fact, and I wish they could be put into operation right now. When I think about it, I don't like the idea of cement being poured in the midst of trees and grass, and rocks and sand.

Abbey's third proposal is to make the park rangers do their jobs. He thinks they do too much desk work. There should be people working in the parks who know and love the area their park is in, who feel what the land has to offer, and can help other people find it. They should show people who are new to the outdoors things that are necessary for safety, how to live in the wilderness, and how to take care of it. I think this is the way it should be even now, because if the rangers could give a little of their love for the land to the people who come to the parks, then maybe those people would help the other changes come about.

Abbey's personal religion is that of the earth. He worships nature, if anything his God (he doesn't always admit that there is one) is the eternal movement of the land, in his case, of the desert. But he scorns any organized religion. He spends part of a chapter criticizing the religions of the world, including, the firm, established atheist. I think that is because organization, and ritual like that of the Catholic and Jewish faiths, would take him away from the natural flow of everything.

In Desert Solitaire, Abbey doesn't ever really talk about all his definite beliefs, as far as religion, except in "Down the River" when he talks about Paradise and Original Sin. Original sin, to him, is when man destroys, for no purpose, the beautiful land. I feel that way, too, because if God created the earth, it must be a sin to harm it. Abbey's Paradise is the wilderness where he lives now, not a specified place he will go to when he dies. His Paradise is the harshness of the desert.

Abbey's concept of God reminds me of that of Hawkeye, in Last of the Mohicans. Hawkeye wondered about how men must be told about God from books, when he saw God all around him in the forest.

Teacher comment: interesting comparison. It is a good practice to relate past readings to new ones, as you have here.

One of the passages which made me laugh is in the chapter "Episodes and Visions." Abbey is telling what he would like to say to the tourists coming to the Arches. I laughed because it is so typical of Abbey humor - cynical, not trying to spare anyone. And also, it gave a picture of the American tourist, and it's so true. Traveling in Europe last summer, we constantly came in contact with that type of tourist. We laughed at them, at their ignorance. But at the same time, I wanted to say "Don't you see? You're missing it all, you're missing the feelings here." Maybe this is one of the times when laughter comes from sadness.
"Down the River" was the most beautiful chapter in *Desert Solitaire* and that's why it made me angry. The beauty deepened the fact that Glen Canyon as it was, is gone now. Now no one can ever do what Abbey and Newcomb did – slowly, unhurriedly, quietly discover all those wonderful things. Now they are covered by water, or are tourist attractions. It's the kind of anger that comes from knowing you can't do anything about it. I don't know enough about the dam to know if it was necessary or not, but there had to be some other way.

The moon-eyed horse made me very sad. The story of how he came to live in that canyon - being beaten, and running off, because he was hurt. And he had been living there for ten years, alone. He must have been a very sensitive horse, almost like a person - more so. It just made me feel sad to think of him there all by himself.

I didn't like the part in the chapter "Havasu" when Abbey got trapped in the little canyon. It reminded me so much of a bad dream. The way he described it - he wasn't just exploring, he was trying to get home faster, the narrow canyon with straight walls, the horrible pools, coming to the drop off. If I had dreamt it, I would've been terribly afraid, and I just didn't like reading about it. He described it so well, it was like it was happening to me.

I don't think Abbey is against civilization. To the contrary - he is preserving it. I think that if Abbey was ruler of the earth, (a rather unrealistic thought) the whole world would be full of beautiful people and beautiful places, all living within the flow of life, the way it should be. As he said in the book, Abbey is not against civilization, but culture. He is against what civilization has become. He is against that part of humanity which is working against the natural way of things. He is against science when it is used by that part of humanity, when it makes things worse instead of good. Science should help us find out more about our world, should help us take care of it, not help us get what we can from it. If we used science right, the world would take care of us.

Abbey is a person who has definite ways of thinking and says just exactly what he thinks. He criticizes those things which he thinks are wrong or disgusting, and he often seems cruel and harsh in that criticism. He sees things that are wrong, and says; "you and your cities" and lives by himself in his desert (as much as possible). Whoever said he is against civilization just doesn't understand him, that's all.

Teacher comment: Some will say that Abbey shows his scorn for humanity--perhaps Minna in *Roots of Heaven* answers that kind of accusation best: "And people have tried to represent him as a misanthrope full of hate, despising people, when he only wanted to defend us, to protect all the living and all the hunted..."
"We need wilderness whether or not we ever set foot in it." Abbey means by this, I think, that we need to know the wilderness is there, beyond the cities we live in, to keep our sanity. The knowledge that if it ever gets to be too much - the noise and confusion - that we can go where it is quiet and the air is clean helps us bear the bad things of city life. If the wilderness wasn't there, if there was no escape, I think everyone would go crazy to think they had to stay in the city. There is another reason why we need the wilderness. If it wasn't there, and the whole earth was inhabited by cities and towns full of people (people who had never come in contact with nature), we couldn't exist. I don't think people realize that whether or not they like the outdoors, the open spaces, it is the flowers and trees and animals and mountains, wherever they are, that make life beautiful. It doesn't matter if you never see those things - they touch you somehow.

"It may be however that Los Angeles will come to me. Will come to all of us, as it must (they say) come to all men." Abbey is referring to the fact that our cities, our populations, are growing, and perhaps soon the whole country will be one big city with the qualities of Los Angeles. So, whether or not Abbey ever goes to the actual city of L.A., he will get to see something similar, whether he wants to or not. I don't know if that will happen or not - that the cities of the world will grow so big that we can't escape them. I hope not.

"It was one of the happiest nights of my life." The night Abbey is talking about is the night after he almost died, by getting trapped in a little overhanging canyon. He actually thought he'd never get out, by trying very hard, and then he spent the night in that horrible little den. But he was so joyful and relieved, it didn't matter. The reason he described that night, I think, was to show how utterly ecstatic he was that he wasn't going to die, and how suffering like that was beautiful because he was alive and feeling it. The way Abbey writes, I felt every thing right along with him, especially in that chapter (Havasu). Living the way he did in the bottom of Grand Canyon, there were so many grassroots emotions, and his thoughts weren't so visionary and deep. They were natural, animalistic ones.

"Cousin buzzard..." I don't exactly know what Abbey means by this. Perhaps he sees himself as a buzzard, and is saying "you have the same qualities as me, old buzzard, so watch out for my park while I'm gone." Buzzards are hard, ugly birds - maybe Abbey has that concept of himself. Buzzards are parasites, in a way - they live off dead things and don't hunt themselves. Perhaps Abbey considers himself a parasite of sorts. It's a strange thing to say, whatever it means, but somehow, typical of Abbey.

Teacher comment: Abbey says (The Serpents of Paradise): (p. 24) "We are obliged ... to spread the news ... that all living things on earth are kindred." Perhaps this was what Abbey was saying in "Cousin buzzard."
Question 1: There are two places in Desert Solitaire where Abbey lets his thoughts on a good way to die be known. One is in chapter 7, "Cowboys and Indians." Here he talks about Roy Scobie's fear of dying and his (Abbey's) thoughts on it. The place that I think Abbey shows best his feelings on death, though, is in "The Dead Man at Grandview Point." I think his true feelings about death come out in the conversation between the men as they are carrying the body down the mesa to the road. They were all joking around about it. When I first read that, it made me a little mad and I couldn't help thinking that the reason they were joking was because they were very glad to still be alive. The jokes helped to ease the tension, I thought. But then I thought about it some more. I began to think that the reason Abbey could joke about it was because he considered death a very natural and accepted thing - especially the kind of death the man at Grandview Point had. If Abbey had feared death or thought it to be a horrible thing, I don't think he could have joked about it while carrying the dead man.

The reason I thought that Abbey's feelings about death came out better in this incident than any others in the book was because he managed to say so much by relating that conversation. He could have just said, "I think it was a good way to die. I accept death. It is a natural thing," but instead he recorded a conversation that took place and that brought out true feelings in an honest way.

Abbey is a passionate lover of nature. I think if he were deprived of dying in what he considered to be a natural way, it would, well, kill him.

Question 3: Abbey's religion is very comparable to that of the Hopis. The Hopis are firm believers that everything is dependent on everything else. They realize that if the balance in nature is destroyed their culture and way of life will also be destroyed. They worship the spirits of animals and earth, air, etc. They consider themselves very much a part of nature's cycle.

I think that Abbey would fit in very well with the Hopi traditional culture. One incident in particular in his book makes this true. It is the incident with the rabbit in "Cliffrose and Bayouets." He killed the rabbit with the stone and then felt that "We are kindred all of us, killer and victim, predator and prey..." This incident bothered me when I first read it, but after thinking about it, I began to think that it really was fitting and right the fact that Abbey had no guilt feelings about it means that he really did feel a part of nature's predatory cycle.

Besides considering himself a part of nature's cycle, Abbey relates everything to nature, including his personal religion and his ideas of paradise and original sin. His paradise is what he has now on earth - his paradise is earth. He passionately wants other people to look at the earth and its creatures in that light and to love them and to be a
part of them. But, according to Abbey, man, because he is destroying this paradise, is living in original sin.

I think that my religion, if conscious, is like Abbey's in at least some ways. I remember thinking as a child that it was crazy getting up to go to Sunday school to worship God. I always thought it made a lot more sense to get up and hike up a hill and watch the sun come up. When I see the sun come up I can't help but believe in a God and miracles.

Question 4: Abbey's first proposal for saving the parks is to ban private motorized vehicles from them and instead have the government supply horses, bicycles and shuttle buses (for equipment and sick or old people) free.

I very much agree with him that people need to experience nature, to forget about time for a while, and to see and do things outside. A person can get more enjoyment in doing whatever he likes to do outside within the space of a few acres than he can from hurriedly driving through all the parks from coast to coast. The thing that I think most important is that people have a chance to learn to forget about time, to take their time and take each moment for what it is, instead of using it to think about what they're going to do the next moment. I think that one of the best ways to do this is to camp, to really live in nature for at least a while.

Abbey's next proposal is to ban the building of any more new roads in the national parks, and use the money instead to build trails for non-motorized traffic all over the parks. I would like to see this done all over the country and I think we should at least have it in our parks.

Abbey's third proposal is that we "put the park rangers to work." I think this is a good idea, too.

All of Abbey's proposals seem to be tied into each other; that without one you couldn't have the others. I agree with all of them.

Question 5: The parts of the book that I found funniest were when Abbey wrote in an exaggerated satiric way about tourists, park administrators, etc. One of the best examples of this I think, is in "Industrial Tourism and the National Parks." It is the announcement he said should be put up on a huge billboard at the parks' entrance: "Howdy folks. Welcome....Park your car, jeep truck, tank...." I laughed out loud at this, because it was the best way for him to get across his feeling of disgust for developers: poking fun at them by exaggerating their own mania for development.

I think the thing that made me angriest in the book was the incident in "Cowboys and Indians" Part II, when the woman got out of her car and tried to get the old Navajo to let her take his picture. It really made me mad because she was thinking of him only as something she could take a picture of, not as a human being. And then she got mad when he wouldn't co-operate!
When I read that, it reminded me of a time I was at Niagara Falls. It was a very windy day and I was standing at the fence right at the edge of the falls looking at it and thinking about the power of all that water (!). A couple came up to the fence beside me and stood there for only about a minute before the woman said, "Let's get out of here before this damn wind ruins my hair." So they left.

Both of these incidents, the one in Desert Solitaire and the one I witnessed, made me mad. I compare them because both of the women were simply thinking of what they were experiencing as something that should co-operate with them entirely and then got mad and hassled when it didn't.

The whole chapter of "Down the River" made me sad. It was such a beautiful experience that he was describing, and so beautifully written. That in itself was enough to make me sad, because beautiful things always make me feel sad in a sort of a warm way. On top of that, though, was that it was obvious that all the time he was writing, he was poignantly aware that all of that beauty would soon be under water, even though he didn't mention that fact outright very often.

The chapter "Rocks" really horrified me. I didn't think it sounded like Abbey at all. It wasn't beautiful, or joking, or even cynical, but very cold and horrible. Because it showed so clearly how greedy and scheming so many men are, it really made me feel a little sick. It upset me a little, too, because it didn't sound the way I had come to expect Abbey to sound. He wasn't hiding his disgust behind any jokes, but instead it was completely out in the open, and it frightened me a little.

Question 6. I do not think that Abbey is "against civilization, against science, against humanity." He is against man's stupidity and his "original sin." By speaking out on what he thinks has to be done, he is trying to save man from his own blindness. I would say that it is lucky we have men like Abbey now. Now we still have wilderness areas to point to, to say we need, to try to save. We still have time to simply be against man's stupidity in not looking ahead to the future. I think there is still barely time to correct this stupidity. But if we don't use this time, if we don't listen, and heed, men like Abbey, it will be too late, and we won't have anything to do but lament our stupidity, and truly turn against civilization, humanity and science in our frustration. In that way we will destroy ourselves. Abbey is only trying to warn us of this. He's trying to save humanity from itself. To do that you cannot be against humanity.
1. "Love flowers best in openness and freedom." By saying this, I think Abbey is trying to compare the way everything is so interdependent in the desert, with the way he thinks our lives should be. A couple of times in the book he spoke out on over-population, saying that if there were population control, there would be better lives for the people living. If there were fewer people there wouldn't be such a struggle for land or food and we might have time to try being interdependent freely and in openness the way everything is in nature. If that were true maybe we could also learn to love each other.

I have always sort of thought this without really knowing what it was I was thinking, but now after reading that quote I think that it captured exactly how I feel.

3. "We need wilderness whether or not we ever set foot in it." Abbey believes that humans need to have underdeveloped areas even if as an individual one never goes near it. Humans need to know that there is something untamed that they can go and see. The danger is, though, that humans also feel the need to tame and discover everything. That is one of the reasons we are going into space, I think, because we have this desire to know all there is to know about it and to tame it. It is time though, that we curb that urge and leave some areas undeveloped.

I think that we do "need wilderness whether or not we ever set foot in it." I really love living in the Willamette Valley and I was thinking the other day that the reason I do is because there are mountains on either side of me and the climate of the valley is sheltered by them from the climate of the ocean on one side and the desert on the other; as I am sheltered. I love the feeling of knowing that I am here in a sheltered place but that I can go to another place just over the mountains almost any time I want to.

4. "It may be that Los Angeles will come to me...." This quote bothers me a little because it sounds very resigned as though Abbey has accepted the fact that everything is going to be urbanized sooner or later. I don't think he has though, I think that rather than that, he is trying to say that he has no desire to see Los Angeles and will not make an effort to do so. If Los Angeles wants him to see it, it will have to come to him, but he would very much rather it didn't.

I feel the same way, although I've thought of going sometime just to see what a yellow sky looks like, because I've never seen one.

6. "Cousin buzzard...." I was really intrigued when I read this, because it seemed to say something, but I wasn't sure what. Then, after finishing the book, I read the paragraph that Abbey wrote about his life. It's on the very last page of the book and at the end of the paragraph he says "....and what with one thing and another I've been living off the government ever since." I thought about that in comparison to the "Cousin buzzard...." quote.
A buzzard is little more than a parasite, although a useful one. He lives off of the desert and its victims without really giving anything in return. Abbey was doing this, too, in a way, living off the government and doing something that he loved doing and that came completely naturally to him. He was sort of calling himself a buzzard unashamedly and even a little proudly, I thought.
II. Poetry
Man has traditionally viewed himself as the dominant species. This man-centered philosophy has tended to govern his relationship to his environment. The wilderness has been levelled by his axe and his plow; the romance of wildlife continues to disappear in the name of "progress."

Man pursues his struggle with nature, seemingly unaware that he is a part of the larger community of all living things and that without this community, he dies also.

In his poem, Van Dearing Perrine shows us an enlightened kind of vision - a balanced view of man and nature which moves us to silent wonder and glad affirmation. Here, there is an element of humility; here, there is the awareness of one immense and vast whole of which man is a part.
Poem: "Celebration for a Small but Important Planet"
by Harold Gilliam

Source: No Deposit - No Return
Man and His Environment
A View Toward Survival
Edited by Huey D. Johnson
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Part II Facts, C Institutions and the Environment, Art
p. 278

Poems: 
"Wet Air" by Daniel Ausbury  p. 20
"Penthouse Garden On The Upper East Side" by Dean Curtis  p. 109

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WET AIR

Wet air,
At night on a wet shimmering black-top
to nowhere
Silent, clean dark and wet
Natural energy of wet air
fills my mind with thought
Sweet rich air
Floral thick, water soft
insect air
Air to lie and dream in
Air to float and apin in
together
Wet night surf air
Near the beach all summer,
alone
Moonlight rain air
While lying in a sea of
glistening grass
Air to play laugh and love in
Air to sleep in...
forever?

Daniel Ausbury
"Wet Air" - Daniel Ausbury

Student Comments:

"I like this poem - it's images. 'Wet Air' seems to talk about humid dark nights in the south, or the midwest - nights that are largely sleepless and people listen to scillions of insects and the screen door slamming. Maybe it's getting nostalgic to cherish climate and times like that, often described by words like 'muggy' and 'sullen'... It could be he's talking about misty Oregon air or ocean spray. It's very nice; I think I'd like to meet him and hear what he talks about in wet air nights."

- Annette Fuquay

"I think Daniel Ausbury is saying that even the smell or feel of the air around us can help put us in a mood or create a special feeling. I think he's telling us to go outside and let the air or anything else natural and seemingly unimportant give you a feeling of closeness to nature. It doesn't have to be something big and tremendous in order to give you this feeling. Look at the things you see every day, and appreciate them."

- Karin Lagerstedt
PENTHOUSE GARDEN
ON THE
UPPER EAST SIDE

A long wooden box
Filled with pseudo-dirt
  brown dried moss
  and styrofoam
Sits sullenly
On a shelf
With its vinyl flowers
  ferns
  and some plastics engineer's
  newest plant discovery.
All leaning on one another
And hoping that their skeletons
Have been securely inserted
Into the pseudo-dirt
  brown dried moss
  and styrofoam.
And a make-believe rosebud
And its stem (with all its leaves on one side)
Finds no room
To rise above it all
And, straining to bend low,
Seeks the shiny coolness
Of the speckled
Black
Linoleum floor.

Dean Curtis
Poem: "Penthouse Garden On The Upper East Side" - Dean Curtis

Student Comments:

"Man has created a false nature. Supposedly, this way the 'beauty' of nature is always present and in full bloom. But in nature, there is a cycle of life and death. New plants grow and thrive on other plant's decay. All needs are met within a self-sustaining system. People today have modernized everything, but it's just not right with this false 'beauty'. The intricacies of nature cannot be reproduced in plastic!"

- Steve Eickelberg

"I feel the need to fight against this thought - this feeling that the poem gives me - that I am a plastic flower and I'm floating in styrofoam - trying to hold onto something and finding only a rose - a rosebud who doesn't know how to begin to grow her own leaves - whose only hope after her efforts is the blackness of the linoleum floor - at least she is no worse than I - nor any better - we're all the same - how can any of us be different when our roots are all in the same never used but well used styrofoam? I feel the need to fight against these thoughts - to shut them up in blackness like the linoleum floor."

- Lisa Spencer
Poem: "The Call of the Wild" - Gary Snyder

Gary Snyder is committed to a life style of being part of nature rather than attempting to "subdue" it as men have done for centuries. "As a poet," Snyder tells us, "I hold the most archaic values on earth. They go back to the late Paleolithic; the fertility of the soil, the magic of animals, the power-vision in solitude,..."

Poem reprinted by permission of author.

Books by Gary Snyder:

Earth House Hold
The Back Country
Myths and Texts
Regarding Wave
Riprap and Cold Mountain Poems
Six Sections from Mountains
and Rivers without End

Publisher: New Directions Publishing Corporation
THE CALL OF THE WILD

The heavy old man in his bed at night
Hears the Coyote singing
    in the back meadow.
All the years he ranched and mined and logged.
A Catholic,
A native Californian.
And the Coyotes howl in his
Eightieth year.
He will call the Government
Trapper
Who uses iron leg-traps on Coyotes,
Tomorrow.
My sons will lose this
Music they have just started
To love.

* * * * * * * *

The ex-acid heads from the cities
converted to Hari Krishna or Yogananda,
Do penance with shiney
Dopey eyes, and quit eating meat.
In the forests of North America, the land of Coyote
And Eagle,
They dream of India, of
eternal blissful sexless highs.
And sleep in oil-heated
Geodesic domes, that
Were stuck like warts
In the woods.

And the Coyote singing
    is shut away,
    for they fear
    the call
    of the wild.
And they sold their virgin cedar trees,
    the tallest trees in miles,
To a logger
Who told them,
"Trees are full of bugs."

* * * * * * * *
The Government finally decided
To wage the war all-out. Defeat
is Un-American.
And they took to the air,
Their women beside them
in bouffant hairdos
putting nail-polish on the
gunships cannon-buttons.
And they never came down,
for they found,
the ground
I.: pro-Communist. And dirty.
And the insects side with the Viet-Cong.

So they bomb and they bomb
Day after day, across the planet
blinding sparrows
breaking the ear-drums of owls
splintering trunks of cherries
twining and looping
deer intestines
in the shaken, dusty rocks.
All the Americans up in special cities in the sky
Dumping poisons and explosives
Across Asia first,
And next North America,

A war against earth.
When it's done there'll be
no place

A Coyote could hide.

envoy

I would like to say
Coyote is forever
Inside you.

But it's not true.

- Gary Snyder
Poems - by Henry Gibson

Source: "National Wildlife" December-January 1971 Vol. 9, No. 1
Published by The National Wildlife Federation
"I feel a little sick" by Henry Gibson (p. 18-19)
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Reprinted from the December-January issue of NATIONAL WILDLIFE Magazine.

THE INGREDIENTS OF EXPEDIENCE

There's a new recipe for water
That's caught on to such a degree
I now pass it on to others
The way it was passed on to me:
   Into an ocean of fluids
      Add a roentgen of fallout or two,
      Aluminum cans, detergents
         (With the phosphates most pleasing to you).
      Stir in ground glass, melted plastics,
      Any leftovers, sewage, rough waste,
      Thicken with chemical acids
      And mix to a pliable paste:
         Mercury, mustard or nerve gas
         Well blended with plenty of oil,
         Insecticides, powdered or liquid,
         Then slowly bring all to a boil.
That's it. Oh, yes, one reminder --
And forgive me for throwing a curve --
Fish die, but children prefer it
if you cool before you serve.

SING ME NO COUNTRY AIRS

Hello. The sky is yellow
Mineral-rich and squinty-thick
And I look a little sallow
And I feel a little sick
And the leaves on the trees aren't growing
And the grass is turning brown
And there's no wind blowing
But that's how it is downtown.
Poems by Henry Gibson

INSTANT ARCHIVE

I don't remember much before television
But I remember after eagles.
Everybody protested at first
And then forgot till some old movie
Taunted the memory a tenth of a second.
How do you say goodbye
To someone you never got to know?
Things get pinched out so fast new
It's like history is quicker than life.

MAPTRAP

Maps tell you where a place is
But not really what it's like
For instance my cousin lives in the city
And when you look at the map that shows his street
You see the park marked in green at the corner
And you think what a great thing to have so close
That's where I'll sneak off to
Next time I visit my cousin.

The map is wrong.

Sure there's a park
But it's all worn out. All shriveled. Grey.
And there's no room to be alone in.

There must be fifty buildings
Forty stories high
Thirty rooms each story
Around that park near my cousin's in the city
And after a fast, hot, crowded day
The people need to get out
See something green
Touch the earth
Stop listening.
But there it's life being inside again.

They should draw some more parks on that map.

Source: "Africana"
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    © Africana, Nairobi
    Africa's Poetry p. 45

Poems: "Africa's Presence"
    "Africa Beckons"
    Poems by Miss M. E. Honsaker, Pasadena, California, U.S.A.

Source: "Africana"
    June 1968 Vol. 3, No. 6
    "Poetry of Africa," p. 22

Poem: - "A Prayer for Americans" - by Bob Strohm (p. 3-12)

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    Washington, D.C. 20036

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A PRAYER FOR AMERICANS

Lord, I Thank Thee . . .

For the healing beauty of flowers -
welcome balm for the battered spirit . . .

For the exciting wonder of new life
as manifested in the smallest creatures . . .

For the majesty of trees
that protect our soil, husband our waters, provide us shelter . . .

For the mysterious process of plant growth
and endless bounty of fields that nourish my body.

Lord, Give Me Knowledge . . .

Help me to understand that life on earth
is part of an awe-inspiring pattern,
with man the chief steward.

Teach me to appreciate the delicate relationship
of all things on earth:
The majesty of an elk . . .
The springtime promise of a pussy willow . . .
The crystal purity of a dew drop.

Lord, teach me my proper place.

Guide me in doing my part
to solve the problems that beset us.

Let me be as dedicated to this task
as a bee gathering pollen.

Lord, Give Me Perspective . . .

Show me how to draw inspiration
from the daily miracles I can witness on any walk in the outdoors.

Help me remember that a song and a smile
are more in tune with life
than a wail or a frown.

Make me realize that just as in nature there is both tranquility
and power -
so that capacity also resides in me.
Lord, Make Me Humble ...

Please give me humility to see how crude the most spectacular man-made thing is compared with ...
   A baby rabbit ...
   The wondrous perfection of a snowflake ...
   Or the grandeur of a 4,000 year-old bristlecone pine.

Give me the wisdom to know that if our environment fails wildlife then I, too, am doomed.

Lord, Open My Eyes ...

Help me to understand that we are indeed all God's creatures.

This is my prayer -
I hope a prayer for all Americans.

Amen.

- Bob Strohm
III. Essays and Stories
"Appalachian Pictures" - by Edward Abbey
From the book Appalachian Wilderness: The Great Smoky Mountains
by Eliot Porter. Copyright ©1970 by Eliot Porter. Published by E. P. Dutton & Co., Inc. and used with their permission.

This essay is from Edward Abbey's latest book Appalachian Wilderness: The Great Smoky Mountains. Many of the themes of this essay are reminiscent of Desert Solitaire. "How strange and wonderful is our home, our earth,...", Abbey tells us. "We are none of us good enough for the sweet Earth we have, and yet we dream of heaven."

"Strange powerful birds, sir" - by Franklin Russell
Source: Audubon magazine, July-August 1968 Volume 70, No. 4 (p. 74-81)

Franklin Russell's love for seabirds and their wild places is eloquently expressed in this essay. In observing the gannet, Russell discovers "a joy of life and a harmony of existence" that touches him with its perfection.

"General Yoffe's Biggest Battle" - Raphael Rothstein
Source: Audubon magazine, March 1972 Volume 74, No. 2 (p. 64-67)
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It is interesting to note that General Yoffe's "biggest battle" in Israel, a country constantly threatened by war, is not the maintenance of national security but rather the battle against environmental problems.

The following two quotes from the essay "General Yoffe's Biggest Battle" have been selected for discussion.

Quote from article:
"In their zeal to reforest and cultivate the barren and rocky earth, the Zionist pioneers of prestatehood days introduced a species of pine. The success of their first plantings persuaded them that the tree, so familiar from the forests of Eastern Europe, was ideal. But the resulting monoculture forests have reduced the nourishment available to wildlife and produced extreme patches of monotonous landscapes." (p. 64)
Discussion:

1. Throughout the world, man has failed to grasp the complexity of the interrelationships of all living things on earth.

2. Depletion of the environment is sometimes the result of well-intended actions on the part of man. Waste, greed and plunder have obviously taken their toll in the deterioration of the world environment, but good intentions have also brought about ill effects. Man, either from ignorance of a failure to grasp the long-term effects of his actions, has often seen his well-intended plans drastically upset the balance of nature.

3. "monotonous landscape"
The random wilderness of the forest is uniquely beautiful. Tangled woodland, diversity of species, luxuriant overgrowth and a sudden clearing - this random quality of the natural forest provides us unequalled beauty.

We are told today by the forest industry that the panacea for our dwindling timber resources is reforestation. As the original forest is replaced by cultivated crops of trees, one cannot help but wonder if the end result might be "extensive patches of monotonous landscapes." As the random quality of the forest becomes more predictable, we lose the joy and beauty of the unexpected.

The original, the proto-landscape which we cherish and remember has become for each generation fainter and harder to recall. As a new angularity, a new geometry, a new predictability appears on the landscape, we can only ponder what has been lost.

Quote from article:
"Israel's isolated and embattled position has fostered an extraordinary sense of national purpose and cohesiveness. The still manageable size of the country and the relatively small population make it possible to transcend bureaucratic and institutional divisions that often paralyze conservation projects in other nations." (p. 66-67)

Discussion Questions:

1. What characteristics of Israel as a nation and a people are advantageous to efforts to solve Israel's environmental problems?

2. a. What are some of the characteristics of the United States as a nation and as a people that are detrimental to efforts to solve our environmental problems?
   b. What are some of the factors we Americans have in our favor in the effort to save our environment?

Additional Comment Relating to Article:

The importance of history and religion to the people of Israel has given the movement to save their environment a unique emotion and
Attempts to save the Seas of Galilee are not thought of merely as efforts to save a body of water that is dying. The Israelites are trying to save a holy and sacred place.

It is interesting to contrast the feeling of concern in the United States for the death of Lake Erie. Various environmental groups and some individual citizens have shown great concern for the fate of this enormous body of water. But Lake Erie does not evoke deep emotional and historical associations for the majority of Americans as the Sea of Galilee does for the Jewish people. Perhaps if Americans developed a historical conscience - a renewed sense of history, then they would begin to possess a new feeling for the rivers and lakes and valleys and forests of this nation. In recognizing what these places have meant to generations of Americans past, we might bring a new emotion and love and urgency to our attempts to save the land of our forefathers.

"A Time for Walking" - by Lew Dietz
Source: Audubon magazine, January 1972, Volume 74, No. 1 (p. 9-11)
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In these cold, Maine winters on his snowshoes, Dietz learned more about nature and her laws than in all the other seasons together. "Once the snow covers the earth, nature is an open book. Everything that lives and moves leaves its record in the snow."

"The Plains, a Boy, a Summer Day" - by Hal Borland

"This is a story of youth . . . The area was the High Plains of eastern Colorado and the time was those years when the Old West was passing and the New West was emerging." This is the story of a boy, who saw, heard, smelled, felt and tasted the world around him. The world was a good place to be, and it was a part of him that summer morning. There was an intimate sense of being, of belonging to that very special place.
The Plains, a Boy, a Summer Day

This is a story of youth. Because I happened to be the boy, it is autobiography. The area was the High Plains of eastern Colorado and the time was those years when the Old West was passing and the New West was emerging.

It was a time when we still heard echoes and already saw shadows, on moonlit nights when the coyotes yapped on the hilltops and on hot summer afternoons when mirages shimmered, dust devils spun across the flats, and towering cumulus clouds sailed like galleons across the vast blueness of the sky. Echoes of remembrance of what men once did there, and visions of what they would do tomorrow.

We heard the echoes of prayer-chants, war-chants, hunting-chants of Arapaho and Cheyenne. We saw the hills dark with buffalo, more buffalo than man could count, meat to feed the plains people forever; and we heard the echoing rifle shots of the buffalo killers, who took tongues and hides and left the carcasses for the carrion-eaters, the bones for us to find in the eternal grass forty years later. We saw the shadowy herds trailing north, Texas cattle, heard the echoes of their bawling, their hoof-and-horn rattle. the sad chants of their night herders.

We saw the railroad-builders come, thrusting steel rails westward, rod by rod, heard their grunt-and-heave, their profane brag, their spike-hammers ringing, smelled their sweat, watched the black-smoke locomotive and the clanking wheels follow them, mile by mile.

We who were young in that time and place were fortunate to know something of that old heritage at the same time that we were growing up into the new.
It was the last Friday in June. The paper was printed for that week and I had the whole day off. Mother asked what I was going to do and I said I didn't know, maybe go down to the river and hunt arrowheads. She made two bread-and-butter sandwiches for me and said, "Just be home in time for supper." I put the sandwiches in a paper sack, tucked it inside my shirt, told Fritz I didn't even want him along, and set out on my bike on the road east, the road to Seibert. I didn't know why, but I knew I had to go alone and find whatever it was I was looking for.

It was almost eight o'clock. The sun was nearly four hours high, but the night's coolness, typical of the High Plains, still hung in the air, especially in the hollows. It was a graded country road but it followed the contours of the land, and when I coasted down a slope into a hollow it was like easing into a cool stream. But the hilltops were already warming up and I knew that by noon it would be a brassy-hot day. The sky was a vast blue bowl that sat on the horizon without a tree or a mountain to dent its rim.

On the high ground meadowlarks were singing. They probably had stuffed themselves with chilled beetles and grasshoppers and now they perched on fenceposts and whistled loudly. Their breasts were gleaming yellow and the V's on their chests were coal black. As they sang they lifted their heads, opened their long beaks, and seemed to stand on tiptoe, putting their very hearts into it. By afternoon they wouldn't make a sound. They would hunt the shade, even the shade of a fencepost, and stand with wings half-spread, beaks agape. Then, just before sundown when the cool returned, they would sing again.

In the road and at the roadside, horned larks were feeding on weed seeds or taking dust baths. They rose in front of me, half a dozen at a time, twittering as they spiraled upward, a good many of them the young of that year's broods, without the yellow throat patches of adults. They were past their peak of song. Earlier they had sung beautifully as they spiraled high, a sweet warbly song that seemed to spill out of the sky.

The plains were just beginning to show the bronze of ripening buffalo grass, later than usual because of the wet spring that had made such a good wheat crop. Another few weeks and they would be tawny. But the roadside had its bright green fringe, Russian thistles not yet gone to seed, resinweed with its gummy green foliage and inconspicuous yellow flowers, and in the sandy places, prickly poppies and sand verbenas. The verbenas sprawled along the ground and lifted fragrant white clumps of blossoms as big as baseballs. We called the prickly poppies fried-egg flowers because, with their overlapping white petals and big, pollen-y yellow centers, they looked very much like fried eggs. They were true poppies, though their light silvery-green foliage and stems were thickly set with prickles as long and sharp as those on bull thistles.

I stopped to look at a clump of verbenas and smell their almost too-sweet fragrance, and was surprised to see how many bees and ants were already busy there. Still stiff with the night chill, the ants walked
like arthritic old men and the bees had to sit in the sun and flex their wings before they could fly away with a load of pollen. There were half a dozen kinds of bees, from tiny black ones to brown-and-gold ones as big as honeybees. I wondered where they lived and where they stored their honey. Probably underground like bumblebees, I decided, maybe in ground squirrel holes. Some day I would try to follow them and find a honey-hoard. I tried several times, that summer and the next, but I never found a High Plains bee's nest.

I rode on, singing inside. The world was a good place to be, and it was all mine that morning. Or I was the world's. It didn't matter which. It wasn't a matter of ownership; it was a matter of being, of belonging. I belonged right where I was.

Two miles from town I passed a wheatfield, a quarter section, half a mile square, where the sod had been plowed the previous autumn and seeded to winter wheat. It stood almost three feet tall, gleaming in the morning sun, gently rippling like a golden sea as a few breaths of breeze crept over it. The bearded heads were four inches long and heavy with fat kernels, the bumper crop everyone in town was talking about. Another week and the harvesters would move in to reap the precious grain. Not only here and in a similar field half a mile down the road, but north of Flagler where dozens of such fields rippled in the sun.

I rode slowly past the wheat, marveling, wondering what Flagler would look like with harvested wheat overflowing the elevator bins and piled in vacant lots like huge anthills of golden grain. Then I went on, toward the river. Wheat was a money crop, tamed, domesticated. And that early summer day I was wild and free, an untamed wanderer without a nickel in his pocket or a care on his mind.

The river was five miles east of town. It was called the Republican River, but it wasn't a river at all. It was just a broad valley with a gravely run winding through and no flowing water except at the height of the spring melt or after a summer cloudburst. It was supposed to have a stream of underground water and the occasional long, narrow, willow-lined water holes in the dry riverbed seemed to prove it. The only flowing water was at Crystal Springs, in the hills north of the road just before one came to the river valley. It was one of the few springs in the whole area, sweet water that bubbled from a rocky ledge and fed a small pond whose overflow became a narrow creek that wound down into the big valley and in turn fed one of the river's bigger waterholes. A wagon trail angled across the flats from the main road to the spring.

Little Doc Williams had told me about Crystal Springs. He and Spider Miner and I were going out there some day to catch bullfrogs. But we hadn't got around to it, and this morning when I came to the wagon trail I knew I had to go there alone. I started to ride down the trail, but soon knew that I would have to leave my bike and go on afoot. That hilltop was one of the few places around where cactus thrived, an old sheep range that had been overgrazed a few years before and taken over by grizzly-bear and prickly pear cactus. The past few wet years
had begun to restore the grass, but the cactus persisted. Most of it was grizzly-bear, as we called it, with grayish-green pads and covered with white-tipped spines that glistened frostily in the morning sun. The few clumps of prickly pear were greener, less thorny, and had bigger fruit. All the cactus had bloomed early, with the wet spring, and the fruits would be apple-red and juicy, those of the prickly pear reddest and juiciest by far, but all of them so full of ivory-hard seeds that they were hardly worth eating.

There was too much cactus for bicycle tires. Those thorns could penetrate even a heavy work shoe. So I left my bike beside the trail and walked, watching for snakes. Where there was cactus there usually were rattlers, and on a morning like this they probably would be sunning themselves in the trail's warm dust. By afternoon they would be out in the grass and in the shade of the cactus clumps. Sure enough, as I rounded a sharp turn in the trail I saw a huge silvery snake writhing and rippling just ahead of me. I leaped back. But when I looked again the snake floated right up out of the trail and into a clump of cactus. It caught on the thorns for a moment, then ripped loose and was blown away, no snake at all but the cast skin of a snake five feet long and as big around as my arm. I caught my breath, but my heart still thumped. It was a warning. Snakes were molting, and molting rattlers sometimes strike without warning. I walked on warily.

Half a mile from the road I came to the crest of a slight rise and saw the whole rolling panorama of the river valley—high, rounded hills, deep valleys, and the shadowed line of still higher hills beyond the river. Just to the right of due east and beyond the river was Kit Carson Hill, highest of all.

I went down the slope to the brink of the sandstone ledge. It was a sheer drop of about fifteen feet, and below it a little valley widened into a hollow several hundred yards long where a pond of clear sweet water rippled and glistened in the sunlight. The far side of the pond was fringed with willow brush and cattails, with a few scraggly cottonwoods lifting their green heads above the brush. The near side was mostly grass and reeds. At the foot of the ledge, just beneath me, where the spring bubbled and whispered and fed its constant flow of water into the pond, was a thicket of poison ivy, its glossy leaves deceptively inviting. It was the only poison ivy in the whole area and probably was planted there by the droppings of birds from better-watered places far away.

I sat on the grass at the brink of the ledge and watched a dozen kill-deers on a sandbar just off the near shore. They bobbed, ran about, fed on small insects, peeped; and now and then one would leap into the air, crying kill-dee, kill-deee-dee-dee, circle the pond on graceful wings, and return to the sandbar. Beyond them, at the far side of the pond, half a dozen ducks came out of the reeds, mallard drakes with gleaming green heads and canvasback drakes with heads exactly the color of a sorrel horse. They swam about, upending grotesquely from time to time to feed on something at the shallow bottom. The females apparently were hiding back in the reeds with their ducklings.
At the lower end of the pond were several grebes—we called them hell-divers or mudhens. I thought there were four, but there may have been more. They were diving, and a hell-diver can swim a long way under water, and every time I tried to count them one would disappear and another would bob up somewhere else. High overhead a big hawk was circling, just floating without a wingbeat. I watched it, expecting it to make a stoop, come rocketing down and catch a duck. But it just floated there, in a great circle. But even as I watched the hawk, something swept in, seemed to brush the treetops, and climbed again with a blackbird in its talons. It was a prairie falcon. I knew it by its sharp wings and the light color underneath, the wings almost white except for black patches at their base. I hadn't even seen the blackbird in the cottonwood.

I sat there half an hour, maybe even an hour—time had no meaning—watching, feeling the warmth of the sun, smelling the water and the reeds, which had such a different smell from that of cactus and buffalo grass. Then two big green-bodied dragonflies came and hovered not two feet in front of me, seeming to look at me with those huge dark eyes. A dragonfly can make you feel very foolish, just hovering and looking at you, maybe because they have been around so much longer than man. In the fossil beds at Florissant, Colorado, they have found dragonflies at least 250 million years old. Those two hovered and stared at me, and I stared back a little while, then gave up, got to my feet and followed the path down around the ledge to the pond. It was a cowpath, probably made by the buffalo long before the cattle came, a very old path, worn right into the soft rock.

I went down through the reeds and big frogs leaped into the water with wet clunks and the ducks swam back among the reeds on the far side. I wasn't wanted there, wasn't needed. I was an intruder. I was about to turn back when a strange quivering shook the grass and I saw a big dark-brown water snake. It moved a little way, stopped, seemed to shiver its whole length, then moved on again. Then I saw its head. A big green frog's leg dangled from its mouth, still twitching, and its throat was swollen to twice its normal size. It shivered again, a kind of gulping convulsion, and the frog's leg disappeared and the lump in its throat moved a few inches. I remembered the day on the homestead when I saw a big bull snake swallowing a half-grown prairie dog. It gulped the same way, a convulsion that ran all the way to its tail, and the prairie dog's tail disappeared.

The water snake saw me and turned and glided into the pond, making hardly a ripple. And I thought how dragonflies eat flies and gnats, frogs eat dragonflies, snakes eat frogs. I wondered what eats snakes. Hawks, maybe, though I never saw that happen.

I had seen enough. I went back up the path and back along the trail to where I had left my bike. As I leaned over to pick it up I saw an arrowhead, a perfect red chert point an inch and a half long. I admired it and put it into my pocket, and as I wheeled my bike back to the road I wondered if it had been a Cheyenne or an Arapaho who had shot that arrow, what he shot with it, where he came from, where he went. I wondered if he had sat on the ledge above the spring and been stared at by a dragonfly.
It was past midmorning and warming up. The meadowlarks had stopped singing. I rode on east and came to the crest of the long hill that flanked the river. The valley made a big curve, there below me, and ran almost due north before turning northeast again, toward the northwest corner of Kansas where the river became a flowing stream, a real river. I coasted down the long hill, trailing a cloud of dust, and crossed the gravelly dry wash on the narrow concrete slab that gave solid footing for cars and wagons. There was no bridge, just that concrete slab over which the periodic floodwaters could wash harmlessly. Beyond, the road wound round the slope of Kit Carson Hill and up through a gap to the flats again, on the far side of the river.

I was going to climb Kit Carson Hill, but first I explored the dry watercourse. Stones have their own fascination, especially streambed stones. Every stone was once a part of something bigger, something that time had worn down to a hard, round kernel, smoothed and polished. Most of the stones there were about the size of hen's eggs, with a few as big as a man's fist and an occasional one as big as a man's head. All were rounded, water-worn, and shaped by each other. And they were of all colors—reds, yellows, whites, grays, browns, like a vast tray of gigantic beads waiting to be drilled and strung.

I walked upstream, then down, marveling. And searching. I was looking for something I knew I wouldn't find—a stone hammer, a stone ax, a spearpoint. Among so many stones, there just might be something a man had shaped to his own use. But if there ever had been one it would have been worn and ground beyond all recognition by time and travel, all human marks wiped away. It was like looking for Indian pony tracks in the grass, and I knew it. But I kept looking, for somehow I was a part of that dry watercourse, a part that partook by being there, by walking on those stones.

Then I had looked long enough. The sun had passed the meridian, the nooning. I took my bike and went to the road that wound out of the valley, up the flank of Kit Carson Hill. I knew I had come, not to see Crystal Springs or the riverbed, but the hill itself. Legend said, or hearsay, that Kit Carson had used that hilltop for a look-out. What he looked for, I don't know. Buffalo, perhaps, or Indians, or maybe just the horizon. Kit Carson, to me at least, was a man who might have looked at the horizon, or the clouds, or the stars as the Indians looked at them, as a part of the universe to be known and valued for themselves. Anyway, that was the story, and if one were the kind of skeptic who said that Carson's Colorado home was at La Junta, near Bent's old fort, a hundred miles south of Flagler, or that he was more mountain man than plainsman, that made no difference. This was Kit Carson's hill, tradition said, and sometimes tradition is more real than fact.

I rode until the hill became too steep, then pushed my bike until I was just below the crest. There I left the bike and quit the road. It was a stiff climb, up a steep slope carpeted with buffalo grass and with a scattering of soap-weed clumps. Then I reached the top, a rounded knoll perhaps fifty yards across, where the grass was thin and the soil gravelly. And on the very crest of the knoll was a rough
square, about ten feet on a side, outlined with chunks of reddish sandstone each about a foot square. It wasn't a foundation or the remains of one, and it was not a tumbled wall. Just those rough sandstone blocks, half buried in the grass, in an irregular square. They had been there a long time. To this day I do not know who put them there, or when, or why. But in that square was a flower garden, fifteen or twenty low-growing, dusty-green plants with clusters of brick-red five-petaled blossoms. They were flowers we knew as wild geraniums or cowboy's delight. Eventually I learned that the botanical name is Sphaeralcea coccinea, that it is a member of the mallow family and distant cousin of the hollyhock. The plant seldom grows more than six inches high and the flowers are only about an inch across. But there they were, those wild geraniums, as I then knew them, in full bloom. And they were the only ones on that whole hilltop.

I stared at the square outlined by those stones and at the scarlet blossoms, wondering, marveling. Then I turned and looked out and away. In every direction I could see the horizon. Below me was the river valley, broad and deep. Beyond, to the west, was the smudge that was Flagler, recognizable only by the upthrust of the grain elevator; and far beyond that western horizon were the mountains. To the north the valley disappeared beyond its flanking hills, angling northeast again; and beyond those hills and flats to the north, a hundred miles away lay the valley of the Platte. To the east were the gently rolling uplands that slowly fall away, bronzing green flats that sloped gently into Kansas and all across Kansas to the Missouri. To the south were the flats again, reaching beyond the horizon and all the way to the valley of the Arkansas. On that southern horizon lay a dark cloud mass, the only cloud in the sky.

I was on top of the world. It reached away in all directions, out and away.

I was hungry. I sat down beside the rectangle of stones and began to eat my sandwiches. The only sound was the soft shhhhhh of the breeze in the grass around me. Then a hawk, perhaps the one I had seen circling over Crystal Springs, began to scream, a faint, far away kaa-kaa-kaa, and I looked up and saw it high overhead, a gnat-size dot against the sky.

My eyes were dazzled, for the sun was only an hour past midday. I lay back on the grass and closed my eyes, but the dazzle persisted, lightning against my eyelids. I covered my eyes with one arm and gradually the lightning faded. I felt the warm earth beneath my shoulder blades. I was one with the earth, like the grass. I had been there forever, since grass grew, since the ocean went away, since the stones in the dry riverbed were ledges on the distant mountains. I drifted off to sleep.

Thunder wakened me, violent, crashing thunder. I sat up, bewildered, not knowing where I was. The sky was dark, the air hot and tense. A flash of lightning ripped the clouds off to the southwest and an instant later another thunder crash shook the earth beneath me. The southern horizon had vanished. In its place was a gray curtain that
seemed to hang from the boiling, greenish-gray cloud mass that towered to the very zenith. The band of clouds I had seen before I slept had built up to one of those violent High Plains thunderstorms that are like the very wrath of the gods.

I watched in awe, wincing each time another crashing peal of thunder jolted the hills. The wind freshened into gusts, now damp and cool. The gray curtain advanced swiftly, blotted out the second line of hills, and I heard a faint, distant roar. I was going to get wet. I got to my feet, debated whether to stay there on the hilltop and take it or to head for home. Then I realized that a cloudburst up the valley would send a flashflood boiling down the riverbed. Unless I got across before it came I would be marooned, unable to get home until the flood went down, maybe overnight.

I hurried down the hillside toward my bike, barely able to keep my feet on the steep slope. Halfway down I tripped and fell, and got to my knees and saw that I had fallen over an old buffalo skull half buried in the sod. My foot had tripped on the peeling black horn and torn the skull from its bed. It lay there, one gaping eye socket seeming to stare at me. And in the uprooted sod was something that looked like a dark clot of blood. I scuffed it with my toe. It was an arrowhead, red dirt and intact, a companion of the one I had found beside the trail to Crystal Springs. I picked it up, compared the two. They were mates, line for line, almost flake for flake; they must have been made by the same hand, from the same stone. Perhaps they were shot from the same bow.

A spatter of cold rain splashed my face. I heard a roar from up the valley. Thrusting the two arrowheads into my pocket I ran down the hill. The rain came in a sheet before I reached my bike, but I got on, pedaled furiously, and raced down the road toward the concrete slab. Half-blinded by the downpour, I almost missed the slab. Then I was on it, the first lap of water already spilling over it. The water sprayed from my wheels, but I kept going, reached the far side, struck the muddy road beyond, and lost control completely. Down I went, flat in the mud. And got up, the roar of rushing water close behind me, and pushed my bike on up the slope another fifty yards. Then I looked back and saw a wall of water three feet high and still rising as it boiled over the concrete crossing and went rolling on downstream.

I plodded up the hill, pushing my bike. The rain roared, but even louder was the roar of the flashflood I had just escaped. The road was sloshing mud, creeks rushing down its edges. I was soaked to the skin. Then the chill came, icy chill, and the first burst of hail. The stones, about the size of marbles, bruised and stung. They whitened the air for a few minutes, then let up, then came again. Three waves of hail, with the rain in between almost as cold and bruising as the hail for it came with gusts of wind that almost took me off my feet.

And finally I was at the hilltop and the hail had passed. The rain still beat down, but the gusting wind had eased. Hail lay in white drifts in the buffalo grass, washed like foam in the roadside runoff. Up on the flats again, I tried to ride my bike, but the road was slick with mud. After two falls I gave up and walked, my shoes sloshing at every step.
I walked a weary mile, and the storm eased, the rain slackened. Lightning still flashed, but distant now, off to the northeast, and the thunder was a distant rumbling growl. The sky began to clear on the southwestern horizon. A faint mist hung over the flats, fog rising from the hail still there in the grass. Then the sun burst through and the whole world was dazzling, fresh-washed and gleaming-clean.

The road was still too muddy to ride. I trudged on, warm again after the cold drenching. I came to a place where the road was barely damp and rode for almost a mile, exulting. Then I came to mud again, and rifts of hail in the grass. And just ahead was the first roadside wheatfield. What had been a wheatfield that morning, rather. Now it was a hail-beaten scene of devastation. That golden sea of grain was gone, the stalks downed and beaten into the soil. As far as I could see, there wasn't an acre of wheat still standing. What hadn't been hailed into the ground had been knocked down by the wind and beaten into the mud by the driving rain.

I went on, and saw a meadowlark at the roadside, bedraggled and dead, stoned to death by the hail. I saw another. Then I saw a horned lark trying desperately to fly with a broken wing. I tried to catch it, put it out of its misery, but it got away in the roadside weeds. I passed the second wheatfield, not quite as completely devastated as the first one but so windblown and rainbeaten that it was scarcely worth harvesting.

I came to drier road and was able to ride again, and the closer to town I got, the less rain they had had. My bike was kicking up dust the last mile into town. It was almost six o'clock when I got home. Mother was cooking supper. She looked at me and said, "Aren't you a mess! You must have got caught in the storm."

"I was," I said.

"We got an awful thunderstorm, just awful. But not much rain, just a sprinkle. It got so cold I thought we were going to get hail."

"They had hail, out east of town." I said.

"They did?" She sighed. "Well, get washed up and change your clothes. Supper's almost ready and you can't come to the table looking like that. I don't know what's keeping your father, but he should be here any minute."

I washed, put on a clean shirt and clean overalls, and we waited. It was half-past six before Father came home, walking like a very tired man, his shoulders sagging. He came in, saw me and said, "I'm glad to see you here. I hear they got a bad storm out along the river."

I said yes, it rained awfully hard, and there was a lot of hail. I wasn't telling about how I crossed the river just ahead of the flash-flood.
He kissed Mother and went to hang up his coat and hat. When he came back he said, "I guess they got hailed out up north. Clarence Smith just told me he heard the storm swung out across the wheat country up there and practically wiped them out."

He didn't say anything about the harvest or the bumper crop that was going to overflow the elevator and put money into everybody's pocket. But it was all right there in his eyes, the pain and hurt and disappointment. He had so wanted Flagler to boom and prosper, and it wasn't going to boom that year.

Mother saw it too. She said, "Supper's on the table. Let's eat. If they got hailed out, they'll have to do what they've done before. They'll make out, somehow. So will we."

* * * * * * * * * *
"Song of the North" from OPEN HORIZONS, by Sigurd F. Olson
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"The North Country is a siren. Who can resist her song of intricate and rich counterpoint - the soaring harmonies of bird melodies against the accompaniment of lapping waters, roaring cataracts, the soft, sad overtones of pine boughs. Those who have ever seen her in beauty or listened to her vibrant melodies can never quite forget her nor lose the urge to return to her."

- Grace Lee Nute

"The Nurslings" - by Hal Borland
Source: Audubon magazine, May-June 1978, Volume 70, No. 3 (p. 72-73)

There are still many things about the natural world that are unknown to man. We observe, and yet we often wonder what purpose of reason lies beyond what we can see. But perhaps there are things "that simply are and need no explanation." There should always be sweet, enduring mysteries that haunt us in our memories. And Nature provides all who observe her with these sweet mysteries of life.

"Trailing the Gray Ghost" from FROM LAUREL HILL TO SILER'S BOG: THE WALKING ADVENTURES OF A NATURALIST, by John K. Terres. Copyright 1969 Published by Alfred A. Knopf, Inc. Used with permission.

This is a chapter from John K. Terres book, The Walking Adventures of a Naturalist, published by Knopf. In "trailing the gray ghost", Terres found that where the gray fox runs, his life touches, if ever so lightly, on the delicate destinies of many of nature's creatures. Terres saw that in the natural scheme of things, life is rich and varied.
That cold February morning I had walked five miles over the snowy Carolina fields and through black-trunked woods before the trail of the gray foxes had ended. It was a day to remember. A naturalist feels lucky when a light, wet snow enables him to follow a single fox trail to its conclusion. I had followed not one but two, wondering what inner demands had driven these foxes partway through the night—and made my adventure possible.

During the summer, after dark and in the glare of my powered lamp, I had seen foxes on the old farm roads. But the light had scarcely touched them before they were gone—ghosts slipping into the shadows of the woods trails without a whisper of sound.

I did not need to see them now. From their tracks I could read their stories, told in a language that only one who in his heart runs with the fox and the wind can interpret with true understanding. For to know a wild thing is to be touched with its own magic awareness of earth and sky—to know its fire or fear, its loneliness of joy, its need to satisfy a thousand urges.

Ahead, the rising sun had sparkled a blaze of light from the snow's surface. A golden trail lay across the wide field, from the dark woodlands of oak and hickory a quarter of a mile away to the nearby banks of Morgan Creek. Under the streamside thickets, the pointed tracks of cottontail rabbits crisscrossed until, in places the snow lay packed under their trails. The wind sweeping the icy creek was cold and sweet.

I had come on the trails of the gray foxes after crossing a bridge and had followed them over the white-buried road that led across the North Carolina farm. Each trail was etched in the snow as sharply as that of a small dog in fresh concrete. But where the trail of a wide-chested dog would have shown all four feet in two parallel lines of travel, the fox trail was a single line, as if only one paw had touched the snow. The reddish feet of the narrow-chested fox were swung ahead in almost a straight line, and each hind foot was laid so exactly in the 1½-inch-long foretrack that only a single trail showed where each fox had passed.

The gray fox lives throughout most of the United States, except on the Great Plains and in the Rocky Mountain states. There are forms or varieties that vary in size and color—the western gray fox, the desert gray fox, the northern gray fox, and others.

Weighing only about seven pounds, the southern gray fox is smaller than the better-known red fox. Its grizzled, salt-and-pepper gray body, with rusty red along the sides and neck, is about two feet long; the bushy, black-tipped gray tail, with a black streak along its top, adds another twelve or fourteen inches to the fox's length. He stands not much more than a foot above the ground at the shoulders, and when he trots, his paw marks along his trail are about eleven inches apart.

The character of this small wild dog is a mixture of raccoon, bobcat, squirrel, and even of cottontail. He will fight desperately against overwhelming odds. He will leap into the lower branches of a tree and, with the scrambling aid of the four sharp claws on each foot, jump
upward from limb to limb as surefootedly as a squirrel or a cat. He loves the refuge of the densest thickets, the thorniest brier patches, the roughest rock piles.

A gray fox also has a streak of curiosity that, despite his wildness and wariness, sometimes leads him to his death. Hunters take advantage of the gray fox by using a predator call—a small device that is blown to produce the simulated squeal of a rabbit in distress. Gray foxes, which are fond of rabbits, come unerringly to the source of the sound. Many are shot by the hidden hunters.

Gray foxes will also come to the mimicked calls of a crow in trouble. Years ago Dr. Alexander Wetmore, former secretary of the Smithsonian Institution, told me a story about a gray fox's curiosity that ended comically, not tragically. He and Watson Perrygo, a preparator at the U.S. National Museum, had gone to the Blue Ridge Mountains of Virginia, not far from Washington, to shoot some crows for the museum's collection.

Dr. Wetmore was squatting under the downsweeping branches of an old wild-apple tree, blowing on a crow call, while Perrygo was hiding with his gun at ready behind an old stone wall. Both were astonished when, instead of crows, a gray fox suddenly dashed toward Dr. Wetmore's hidingplace and, to clear the stone wall, leaped upon the back of Perrygo. "It was a question," said Dr. Wetmore, "of who was the most surprised—Watson or the fox!"

A gray fox is not so swift as the longer-legged, black-footed red fox of open country. To escape from dogs that hunt him in his woodland home, he depends more on trail tricks—leaping to the top of a rail fence and running agilely along it to throw the dogs off his scent; or climbing a tree, then running out on its longest branch and leaping to the ground. While the dogs are still puzzling over the broken trail, the gray fox may be two miles away. And if pressed too closely, he may hide in a woodpile or rock crevice rather than run cross-country for fifteen, twenty, or even fifty miles, as will a pursued red fox.

A gray fox will also shin up the vertical trunk of a tree, much like a small boy, and hide in its leafiest branches or in an abandoned nest of a hawk or crow—if the dogs chase him too hotly. Yet I was to learn that even a tree is not always a refuge for a gray fox, that—sometimes—it can be a deadly trap.

From the two sets of tracks in the snow, I could tell that the foxes had been traveling side by side. The paw marks of one, possibly the slightly larger male, were only a little bigger than those of the female. It was mating time, and in places the tracks ran wildly ahead like those of two playful dogs. The trails told how they had raced in the night, their short legs propelling their small gray bodies, bushy tails flowing behind. The sharp, eager faces with their large luminous eyes and big ears had pointed southward, the short muzzles with their brown streaks—like the dark masks of raccoons—raised slightly into the night.

THE GRAY FOX is more nocturnal than the red, its eyes better adapted to the dark. At dusk the pupils become rounded in the subdued light, ad-
justing to the growing blackness of on-coming night. But the gray fox also hunts in daytime. At dawn, as the light increases, the pupils contract with the growing brilliance of the day until the vertical slits screen out the brightness. At noon one summer day, a gray fox sped across a Southern road in front of my car and whisked into a pine woods like a gray wraith. Gray foxes often hunt well into the morning and may start their night's hunt in late afternoon, especially when there are young to be fed.

Once, where the pair I was following had stopped, a yellow stain spread across the snow. The scent of urine came to me strongly, a catlike odor that had lingered on the clear cold air. These urinating places are of great interest to foxes that may come along the trail later. They are thought to be scent stations--communication centers where foxes sift through their sharp little minds the shades of meaning in each individual odor.

For a time the trails ran straight ahead over the snow-hidden road, not deviating like those of foxes on the hunt. When hungry, a fox will wander across an open field, then back to woodlands and swamps. In ten thousand places a lone gray fox may scent delicate and delicious odors of bird, rabbit, or mouse rising from pine, greenbrier, or wild blackberry thickets, from rose hedges, cattail marshes, thick patches of weeds and grasses in old fields. For there the cottontail has its resting place, the mouse its nest, the mockingbird its nightly roost.

At dawn one misty autumn day, after I had spent the night in the woods, I watched a gray fox steal with lowered belly across a grassy field. He held his head high, swinging his moist, sensitive black nose from side to side like a pointer or a setter, testing every rubbly current of air. Suddenly he crouched before a clump of tawny grass. Then he leaped forward in a catlike spring. A covey of quail roared up from the place where they had roosted for the night. The fox bounded high with them, and snatched one from its flight. Then with the dead quail gripped in his jaws, he trotted away and disappeared in a deep and dry drainage ditch.

Some naturalists believe gray foxes remain paired all of their lives, or until one is killed. Yet even if this were true, it is fox nature that--once a year--the union must be plighted again. In the South, it is under the bright stars of mid-February that the first vixens come into their heat. Then the short, sharp barks of the mated pairs--like the yapping of feisty dogs--pierce the winter cold.

Mating and pregnancies continue through March, and by April and May many vixens are nursing their young. But even in June, I have heard the barking of pairs of foxes in the low Carolina hills. Then, for a month or two, there may be fox silence--until autumn, when the eerie night squalling of the young begins. Once, on a starlit September night--while I listened to flying squirrels harvesting hickory nuts in a nearby tree--a young fox squalled so close to me that my hair stood on end. Only a young horned one can outdo the gray fox's demoniac night sounds.
I had not suspected that the snow trail of the paired foxes I was following would lead me to the home den. Gray foxes have several winter dens for resting and undisturbed sleep. North Carolina fox hunters had told me that, when their hounds chased gray foxes too closely in the woods, the quarry often took refuge under the great mounds of slab wood left by old sawmill operations. One hunter showed me an immense pile of sawdust near the abandoned site of a mill; it was riddled with burrows dug by red foxes. A gray fox, he said, seldom if ever digs its own burrow. In some of these abandoned red fox dens, the gray vixens bear their one to seven young—usually four in a litter, with one litter a year.

Some of the dens are under old buildings in lonely forest clearings, others in rock crevices in the hills, in hollow logs or trees in forests of oak, hickory, and pine, or in low woods of swamp maple. I learned that, for some reason known only to the foxes, their dens are seldom far from water—a swamp pond, a woodland lake, a winding creek.

I knew of a farmer who had raised a dark-colored gray fox of courage and alertness that he called Perro. Perro drank water mostly at night, between ten o'clock and two in the morning—when wild gray foxes are most active—and during another period of activity from six to seven in the morning. Perro could race up a five-foot ladder in his pen and could leap more than six feet. He preferred to sleep outside his nest box except during the coldest or rainiest times. He slept soundly most of the day but awakened at the slightest unusual sound that touched his wonderfully keen ears—a distant dog barking, a car starting, the whistle of a diesel train far down the valley.

When he was four months old Perro was full-grown—he weighed seven pounds, nine ounces. He liked to play with the farmer's dog and was still playful when he was ten months old. When Perro was very young he would creep on his belly to the dog, wagging his tail from side to side. Then he would nuzzle the old dog's breasts and try to nurse.

At fourteen months the farmer gave Perro his freedom. The first day that he ran free he got into trouble. Used to dogs, he had gone to a neighboring farm—where he was attacked by the farmer's chow. Perro, in a slashing defense, had beaten the dog thoroughly. He came home only a few times after that. Then he was gone, returned to the wild, free life that the farmer had generously given back to him.

Tracks in the snow tell much of the news about a wild animal, and one has only to follow them to read the stories. Hunger must have touched the mated gray foxes I was following, for after a mile of travel the two trails separated. Sometimes paired foxes do hunt together, but more often they hunt alone.

Where the trails forked at Big Oak Woods, I was left with a choice. I chose to follow the larger tracks of the fox I suspected was the male. His trail went not across the whitened fields but through snow-filled woods. A crow flying high overhead called a sharp warning of my approach, and a gray squirrel barked from a giant oak ahead. The snow, piled on twigs of dogwood, holly, and chinquapin, brushed against
my arms and face and sifted down on the blue-white surface. A cardinal whistled a morning song, then flashed red in flight as his wings thrupped in the cold air.

THE FOX TRAIL wound ahead between the trees, avoiding thorny tangles of greenbrier, yet stopping there as though the fox had paused to sniff the air. Then the trail moved on southward. Suddenly the tracks stopped, then turned toward dense honeysuckle. Now the fox's pace had slowed, for his steps were closer together. A deep gash in the snow and torn-up leaves showed where the fox had leaped and turned sharply. A rabbit's trail led away from the thicket in great bounds of eight or nine feet, the fox's tracks following only a short way. Then the hunter's trail again turned south.

Beneath a gray-barked white oak, the fox had stopped to dig in the snow. A few crunched bits of acorn lay where he had chewed the dry but nourishing seed. Farther on, by the side of a mouldering log, the fox had paused. A quick, short leap over the log and a few drops of blood on the snow told me he had caught and gulped a woodland mouse.

For any small wild creature to move in the open is to risk life. The gray fox itself might tremble at the strong scent of the ferocious bobcat whose tracks I had seen in a nearby swamp. In a fight the gray fox can beat a domestic cat, but not the larger, heavier wildcat--which sometimes kills and eats foxes. And in California, a naturalist once watched a golden eagle sweep down in a terrifying dive to drive its talons deep into a gray fox sleeping on a high rock in the sun. He shuddered at the almost human screams of the dying animal as it vainly fought to free itself from the eagle's fatal grip.

Most of all, the gray fox has reason to fear man with his dogs and guns. I remembered the hatred that men who hunt wild turkeys hold for the gray fox. In a small country store where I had queried about foxes, a fierce-looking little man had said: "You want foxes? Just come over my way where they're so thick they've cleaned out all my rabbits and wild turkeys. I hate the damn foxes. If there'd be a way I could touch one trigger and blow 'em all to hell, I'd do it!"

Another told of a gray fox his dogs had chased so hotly that, to escape, it had climbed straight up the vertical trunk of a tree. It had reached the first horizontal branch 30 feet up when the hunter arrived. The fox had tried to hide close to the trunk, but the man had shot it to the ground. Although a fox may find safety in a tree from a dog--or, in days gone, from its ancient enemy, the wolf--it faces certain death when its adversary is a man with a gun.

The turkey hunter's hatred, however, is unjustified, even though foxes try to catch turkeys. The big, 12- to 20-pound birds are the wildest and wariest of any game in the woods, as any turkey hunter knows. Their keenness of hearing and sight matches or even excels that of a fox. In studies of the food habits of foxes throughout the year in the best wild turkey country, scientists discovered that birds of all kinds which were eaten by foxes totaled but a small fraction of their diet. Cottontail rabbits, deer mice and meadow mice, wild fruit, and beechnuts were the food most often eaten by both red and gray foxes.
The fox trail I was following had swung sharply to the east. Perhaps the wind had shifted in the night and had forced the fox to circle in order to scent whatever prey was ahead. His move had been a significant one, as I was soon to discover.

A gray fox has 42 teeth, the same number as the red fox, Arctic fox, wolf, coyote, and all the bears. One day I found the bleached skull of a fox lying on a wooded slope. It had 20 teeth in the upper jaw, 22 in the lower (two-extra molars). It had incisors, or cutting teeth like those of a dog, and long canines for catching and holding prey and for fighting. These are the long, pointed teeth that a dog shows when it snarls. The skull also had premolars and molars that are used for grinding and chewing. This is why a gray fox can catch and hold a struggling rabbit, chew meat or grind up bones, gnaw the hardest nut into edible pieces, eat fresh corn from a field, pick up grasshoppers, crickets, beetles, and caterpillars, or delicately pluck ripe persimmons, apples, or grapes from a tree or vine.

But if the teeth of a gray fox serve it well, its cocked ears and moist black nose are among the sharpest in nature. The fox trail had now approached the south edge of Big Oak Woods. And after circling widely, the fox had turned sharply to intercept the trail of a wild turkey. The distance between each footprint of the big bird told me that it had been striding swiftly as it fed. Each turkey track was more than four inches from heel to the point of the long middle toe. In places I saw that the small flock turkeys which often fed in these woods had been scratching for acorns under the snow. All the turkey trails suddenly moved in long strides toward the wood's edge. Then they disappeared for there the birds had taken to the air. Early that morning the gray fox, with his nose close to the snow, had stalked the largest turkey, probably the gobbler.

The keen nose of a fox or dog must have a certain moisture for it to assimilate the scent-trail particles. A fox's sense of smell is made keen by delicate nerve endings and tissues which hold the odorant substances that pass over them from the air or from the ground. No man with his dull sense of smell can appreciate the world of odors in which --and by which--a wild fox lives.

The trail showed a careful stalk of the turkey. Crouching low, the gray fox had crept from thicket to thicket, keeping a large tree between it and the feeding gobbler. Deep marks in the snow behind the tree showed that the fox had leaped around the trunk, bounding swiftly at the turkey.

How fast is the rush of a fox at its prey? In an automobile, I once timed a gray fox running full speed at 35 miles an hour; this fox must have been running just as fast. But swift as it was, the rush came too late. The turkey's trail ended just ahead of the fox's. There must have been a thunderous beating of wings as the gobbler left the ground with the rest of the flock to fly out of Big Oak Woods. Beyond an open field, on the lower slopes of Laurel Hill several hundred yards away, I saw the marks in the snow where the flock had alighted. There, far from the wistful little fox at the edge of the woods, they had resumed their feeding.
NOW THE FOX’S TRAIL turned eastward, across a field and into a swamp. I had expected the tracks of the pair of gray foxes to rejoin there, but the single trail went on through places where the trunks of young sweet gums grew so densely I could scarcely pass. The fox seemed to have grown more cautious, for his steps were shorter. He had stopped more often, perhaps to scent the wind.

When the trail ended at the base of a leaning sycamore near Morgan Creek, my heart leaped. The fox had scrambled up the flaky white trunk. I looked up into the bare branches, half expecting to see him crouched in a fork, basking in the sun. A few clusters of brown leaves still clung to the windfallen tree. It was among these that I searched carefully. But as I moved under the trunk of the tree toward its tip, I saw from deep marks in the snow that the fox had leaped to the ground. Perhaps he had broken his scent trail deliberately.

where Willow Oak Swamp touched Morgan Creek, the fox trail crossed the stream over a fallen tree that bridged the water. A hundred yards beyond I found the den. The tracks of the fox entered an eight-inch hole near what had been the top of a giant willow oak that, years before, had crashed to the floor of the swamp. The old log was hollow and undoubtedly had a roomy chamber within its base. Here the tracks of the vixen had come in from the northeast and had also disappeared in the hole.

In April, when purple violets covered the banks of Morgan Creek and bees drone at the pink-white flowers of wild apples, I returned to the den. There were no foxes about, but I heard the faint growls of young ones quarreling within. As they grew older they would become more sociable and even show an attachment for each other.

In June, when wild swamp roses were in flower, I went there again. All about the den lay the playthings of the young foxes—discarded bones and the furry feet of rabbits that the young foxes chew and toss in the air as puppies worry an old shoe. At the end of summer, when full-grown, they would travel on their individual ways, far from Willow Oak Swamp and the thicketed banks of Morgan Creek.

I told no one about the den, remembering the hatred of hunters for the gray ghost. But I also remembered a kindly farmer who had given a gray fox his freedom. More than that, I was thinking of the rabbit and the turkeys that had escaped from the fox that day, and of the whole fabric of life on this farm that is bound up so intricately, one life with another.

I had seen that where turkeys and foxes forage, the hunger of each would assure that not all acorns grow into oaks. And the fox would be sure in his hungry way that mice, rabbits, and mockingbirds would not overrun the woods and fields. I had learned that where the gray fox runs, his life might touch, if ever so lightly, on the delicate destinies of butterflies, moths, and beetles; and that the hungry bobcat or eagle will see, in turn, the gray fox stretched lifeless on the ground. I had seen once more that, in the scheme of things, life in the wild remains rich and varied and that death, the necessary evil, makes it so.
"Goose Music" - by Aldo Leopold

Source: A Sand County Almanac
A Sierra Club/Ballantine Book
An Intext Publisher
Copyright 1966 by Oxford University Press, Inc.

Aldo Leopold tells us of the beauty of wildlife from the view of the hunter. He fervently hopes that man will not wantonly destroy nature's wildlife. He wants his sons and their sons to know the thrill in the sound of "goose music."
IV. Contemporary Music
Contemporary Music: The Message

Contemporary music can serve as an interesting and educational addition to the study of contemporary literature. Popular records, in my opinion, ought to be used much more widely than they are at present. Much of the music of today's generation has a real message, and an increasingly number of young musicians are writing and playing music which deals with the man-nature relationship. Listen to some contemporary songs: listen to the message.

Examples of contemporary music which deal with the man-nature theme include the following:

"Morning Has Broken" sung by: Cat Stevens (From the A & M Album "Teaser and the Firecat" SP-4313) (E. Farejon)
Produced by Paul Samwell-Smith

"A Horse With No Name": the record album, "America"
Produced by Warner Brothers

"Counterpoint": Words and music by Malvis Reynolds
Copyright © 1962 by Schroeder Music Company (ASCAP)
V. Films
Film: End-of-One  
7 min. color, film distributor: LCA (Learning Corporation of America)

As sea gulls compete for edible bits of garbage from a city trash dump, a lone sick bird limps, struggles, and dies ignored by the rest of the sea gulls. Suggests a death knell for our environment, an allegory on greed, a parody of life. No narration.

Discussion:

This film lends itself very easily to a writing exercise in class. The film is short, but dramatic in its impact. There is no narration, so I had my students write their own story. I put it this way:

"The man who produced this film was trying to say something to the viewing audience. What was the message he was conveying to you in this film?"

I let the students know that I fully expected them to vary in their reactions to the film and that therefore, there were no "right" answers. The assignment was simply to express in the written form of their choice what "End-of-One" had said to them. (I have included two of the student papers which were written in response to this film.)

Student Paper

We have destroyed the birds' natural feeding grounds to the extent that they must eat our own toxic wastes. As the birds circle around the dump, they are attempting to find enough food to stay alive. It seems like they were crying and screaming to have their old clean beach again. While years ago they ate the natural life along the beach, now it has been destroyed and covered by tons of manufactured waste. It gives these birds no second choice of what to eat. They will either be sick or die from eating this waste or will surely die of starvation.

Man has poisoned the environment of that beach because he wasn't considerate of the delicate relationship of all life on earth. It's too bad, because through our ignorance we supply a sure destiny to many species of life.

- Steve Eickelberg
the end-of-one

how strange

to come upon a bird
dead

to see his footprints
in the sand
that clings
to his
now earthbound wings
(heavy and wet)

how strange

to know that
jets
still fly.

- Lisa Spencer
Film: "Wild River" - 50 min. color. National Geographic Series
A trip down the Salmon River in Idaho, a wild river set aside by Congress under the Wild and Scenic Rivers Act. Scenery, wildlife, and survival in this unspoiled natural area. Conservation activities of the Craighead family.
Film distributor: NGS (National Geographic Society)

This film can serve as superb supplementary material to the Desert Solitaire unit. There is a discussion of this film in the above unit under the section "Down the River."

Film: "Roots of Heaven"
Film Distributor: Films, Incorporated
5625 Hollywood Blvd.
Hollywood, Calif. 90038

Fees:
Rental fee $30.00 (if shown to 100 students or less)
Lens fee 7.50 (this film must be shown with a cinema

Note: This film comes in five reels, each reel running 20-25
minutes in length.

This film is based on the internationally famous best selling novel
The Roots of Heaven.

Book: The Roots of Heaven by Romain Gary
(translated from the French by Jonathan Griffin)

The Roots of Heaven is available in paperback from Popular
Library. New York
Copyright 1958 by Romain Gary. Published by arrangement with
Simon and Schuster, Inc. Used with permission.

The Roots of Heaven is a novel of major importance. It deals with many
grIPPING questions concerning the character of man, the relationship of
man to the natural world, the purpose of life. The novel is quite
lengthy and would require the major portion of a nine-week unit for
study. In my opinion, the issues brought to light in this novel would
be best suited for study by the gifted student. If I had had a homoge-
neous grouping of high ability students in my "Man and Nature" class,
I would have likely chosen The Roots of Heaven and the film based on
this novel as the main substance of the course.

The value received from viewing this film without having read the nc el
is, in my opinion, quite limited. There are also some organizational
problems to be tackled if one wished to show this film. The length, of
course, presents a major problem. Optimum value is received by viewing
the film in one sitting. This is difficult to arrange due to the film's
length. There is also the problem of finding a place to view the film
as it requires an enormous screen for adequate projection. We used the
large screen in the auditorium but this still was not very adequate for
enjoyable viewing. Although the film itself is excellent, the problems and expense involved in showing this film make it a poor choice for inclusion in the course as presently designed. However, I would definitely recommend this film for inclusion in a "Man and Nature" course which revolved around Romain Gary's novel, "The Roots of Heaven."

Quotes from The Roots of Heaven

"The time for pride is finished...we must turn with far more humility to the other animal species, different but not inferior...Man on this planet has reached the point where really he needs all the friendship he can find, and in his loneliness he has need of all the elephants, all the dogs and all the birds...It is time to show that we are capable of preserving this gigantic, clumsy, natural splendor which still lives in our midst...that there is still room among us for such a freedom... from More's petition.

"...how can we talk of progress when we're still destroying, all around us, life's most beautiful and noble manifestations? Our artists, our architects, our scientists, our poets, sweat blood to make life more beautiful, and at the same time we force our way into the last forests left to us, with our finger on the trigger of an automatic weapon, and we poison the oceans and the very air we breathe with our atomic devices. ...We've got to resist this degradation. Are we no longer capable of respecting nature, or defending a living beauty that has no earning power, no utility, no object except to let itself be seen from time to time? ...It's absolutely essential that man should manage to preserve something other than what helps to make soles for shoes or sewing machines, that he should leave a margin, a sanctuary, where some of life's beauty can take refuge and where he himself can feel safe from his own cleverness and folly. Only then will it be possible to begin talking of a civilization."

...And Peer Quivst turning his eyes in the direction of the open window and saying with a sudden flash in those pale eyes of his: "Islam calls that 'the roots of heaven,' and to the Mexican Indians it is the 'tree of life' - the thing that makes both of them fall on their knees and raise their eyes and beat their tormented breasts. A need for protection and company, from which obstinate people like More try to escape by means of petitions, fighting committees, by trying to take the protection of species in their own hands. Our needs - for justice, for freedom and dignity - are roots of heaven that are deeply imbedded in our hearts, but of heaven itself men know nothing but the gripping roots..."
VI. Trips as Educational Enterprises
Trips can provide unparalleled learning experiences, or they can be pleasure jaunts and fiascos, depending on their organization. Here are some ideas on ways to make them really educational enterprises.

First of all, trips are important because they provide first-hand observation and new information. Secondly, trips tend to stimulate interest in a topic. Thirdly, the trip is beneficial in that it provides common experiences for a group. This can be very helpful when returning to the classroom. And lastly, a well-planned trip can broaden the background of students and provide new vistas.

What are some of the criteria for selecting trips? Obviously, a trip should be related to the theme of the class. In our "Man and Nature" class we would naturally expect to look at the different ways in which man has related to the world of nature. Another important factor in planning a trip is the element of contrast. Students should view contrasting policies in man's relationship to his environment. Oftentimes man has greatly diminished nature when thoughts of expedience have overruled esthetic considerations. Such examples of man's disregard for nature should be well illustrated by the trip. However, man has also at times shown insight and concern with respect to natural environments and has recognized the need to maintain compatibility between man and nature. Examples of such intelligent stands in man's relationship to his environment can only serve to bring man's abuse and disregard of nature into sharper focus.

All students should go on these trips. Do not punish students by depriving them of these rare learning experiences. Also, do not "kill" the trip by assigning tedious follow-up activities such as long essays, reaction papers, notes, etc. The students will no doubt be eager to discuss their experiences in the classroom the following day. This discussion can serve as sufficient follow-up to the trip if the teacher facilitates the students in evaluating their experiences.

A well-planned trip can indeed be an educational enterprise. For if your trip was well thought out, you have provided your students with a unique learning experience, facilitated communication within the group, heightened student interest in man's relationship to his environment, and your students have responded with genuine enthusiasm.
Our trip to the Oregon Coast -

Our trip to the Oregon coast began with a drive through the mountains as we followed the --- River. The scenery was very beautiful - a quiet, flowing river, little rustic cabins along the water's edge, green trees and lush plant growth lining the river's banks. Then we were met by a large sign which bore the message: CHOICE RIVER LOTS FOR SALE! Suddenly the landscape had drastically changed. Bulldozers were forming a series of S-shaped fill dirt mounds in the river bed, thereby artificially increasing the amount of river frontage many times over. Some "choice" lots - the banks of the river had been raped of all vegetation, and the river had become murky and stagnated as its flow had been interrupted by the dirt mounds. Apparently some California physicians had purchased a section of river frontage and were out to make a profit by rearranging the landscape to suit their greedy needs. In the process of this money-making venture, they had succeeded in interrupting the river flow (which will affect life downstream) and stripping the landscape of all its natural beauty. The students were very bitter about what they had just seen, and rightly so. One could only deplore such thoughtless destruction of nature.

On our drive through the mountains, we also encountered some ugly, bare eroded hillsides where the forest had been stripped by the logging industry. Such ugly scars in the landscape were not only esthetically offensive but also constituted a great devastation of the land in the erosion of rich soil.

Upon reaching the town of ----, we proceeded to follow the coastal highway. The Oregon Coast provides a grand display of tides, weathering sea cliffs. The view was so vast, so beautiful that clear blue day. It seemed no wonder that so many poets and artists had found their inspiration in the grandeur of such landscapes.

We made our first stop at the Sea Lion Caves. Although the sea lions only enter the cave in the winter, we were still able to view them lying on the rocky cliffs below us. Some of the sea lions were sunning themselves; others were slithering and diving off the rocks as though in sport, the water dotted with their heads. "Hey, will you look at that one?" "Man, they're huge!" "Wow, look at 'em - they're really fighting!" I was gratified to see those kids experiencing such delight in the sight of those sea lions. The presence of the lions had stirred genuine excitement among all those who observed them. Aldo Leopold has said that a man who does not like to see birds or animals is hardly human. "He is supercivilized, and I for one do not know how to deal with him. Babes do not tremble when they are shown a golf ball, but I should not like to own the boy whose hair does not lift his hat when he sees his first deer." I was happy to observe that my students had not become so "supercivilized" that there was no thrill in the sight of the sea lions.

As we got back into the bus, one student commented: "It doesn't seem right that we should have to pay to see nature. The Sea Lion Caves should belong to the public for their enjoyment. I don't think it's right for a private citizen to own a nature spectacle like that, and then charge everyone $1.50 to look at it." The other students seemed to agree.
Authentic

Authentic Indian Village
enter the world of the American Indian
but first
you must walk through our souvenir shop.

See the Hupa Cedar Plank House
Hey, can someone tell me if these are
authentic
Indian
nails
holding the planks
together.

See the Indian Wigwam
it's made of canvas
with an authentic Indian hem stitched by
machine
(and all along I thought Indians had covered their teepees with skins)

See the horse standing by the wigwam
touch him
he doesn't move
he's made of
plastic
with
T.S. + M.W. and
C.H.S. '72 and
other authentic pictographs of the ancient Indian culture
written on his
plastic belly

See "Barney" the Buffalo
he's penned up in that
authentic
pioneer
log
corral
The flies crawl in his eyes and nostrils
he rolls in the sand
there's no place to run.
(I didn't know Indians kept buffalo in corrals)
Exit through the souvenir shop
and we thank you for your visit
and we hope that it's been an
exciting
historical
educational
Authentic
experience.

But before you leave, don't forget to buy some of these
authentic navajo rugs
authentic sand paintings
authentic woven baskets
authentic Indian dolls
authentic Indian toys

made
in
Japan

Somehow, this visit to the Indian village had failed to "magically transport (us) to North America as it was long before the arrival of the European explorers." Upon first entering the exhibit, we had crossed a modernly constructed footbridge which spanned an artificial pond poured in concrete. This initial encounter on our walk through the Indian village turned out to be symbolically characteristic of the entire experience.

The American Indian who first inhabited this country had a deep abiding love for the land. He believed that man must keep an ear to the earth, that he should replenish his spirits in frequent contacts with animals and wild land. And most important of all, the American Indian had had a sense of reverence for the land. Our visit to this recreated Indian village of cement ponds and plastic horses and machine-stitched tepees and buffalos named "Barney" did not reflect the love and respect the American Indian had shown toward his Mother Earth.

The last stop on our trip was a State Park. It is a beautiful park, which includes a small clean lake bordered by a dense growth of beach pines, huckleberry, and rhododendron on one side and miles of sand dunes in an open, sparse landscape on the other side. The students hiked into the sand dunes area in their bare feet, sliding down sand banks and exploring several oases. Then they chose the cooler environment of the lake and beach pine to make a small fire, roast weiners and exchange conversation. They talked about how glad they were that we had come to the park before the tourist season was in full swing. Some of the kids had visited this park in the summer months, only to find themselves shoulder-to-shoulder with men, women, children, babies, dogs,
cats, campers, cars, buses, pickups, motorcycles, trailers, tents, and other assorted paraphernalia. As the quantity of traffic had increased in the park, they had found that the enjoyment and value they received from their surroundings had sharply decreased. I asked them what they felt needed to be done to keep the park and other natural areas unimpaired for the enjoyment of future generations. The students' comments focused on the following three themes. First of all, they said that we need more state and national parks and more wilderness areas set aside for the enjoyment of the people. Secondly, they said that there would have to be regulated use of these areas. They thought that motorized vehicles should be restricted in many areas and that the number of paved roads should be kept to a minimum. They also thought there should be construction of trails and bikeways to accommodate the non-motorized traffic. Finally, one girl said: "This is all fine and good, but if we don't stabilize the population, how can we possibly hope to have enough wilderness areas or parks for everyone to enjoy or to even save the ones we have? It seems to me that we're fighting a hopeless battle unless we solve our population dilemma."
VII. Books about Wildlife
The students were given the choice of reading one of the following books about wildlife:

1. **Last of the Curlews**  
   by Fred Bodsworth  
   Copyright 1954, 1955, by C. Fred Bodsworth  
   Published by Dodd, Mead & Company, New York

   This extraordinary story - now a classic - concerns a bird, about to become extinct, a bird which winters on the Antarctic tip of South America and flies the whole length of the two continents to breed in Arctic Circle. Years ago flocks of curlews were so thick they darkened the skies, but they were such swift, powerful fliers that they never developed a sense of fear - even of man. An that was their un-doing. The courage of the one last curlew and the beauty of this simple tale make a story for all readers.

2. **Never Cry Wolf**, The true story of one man's incredible adventures with a family of wolves in the Canadian wilderness.  
   by Farley Mowat  
   Copyright 1963 by Farley Mowat  
   Published by Dell Publishing Co., Inc.

   *Never Cry Wolf* is a charming and engrossing scientific study that explodes many centuries-old myths about wolves. Far from being treacherous and vicious creatures, the author reveals that the wolf family he studied could be a model for its human counterpart in its loyalty, responsibility, hospitality, child-rearing practices, and even sense of humor. With engaging wit, with warmth and compassion, Mr. Mowat describes the captivating summer he spent in the Arctic with these long misunderstood animals.

3. **The Year of the Seal**  
   by Victor B. Scheffer  
   Copyright by Victor B. Scheffer, 1970  
   Published by Charles Scribner's Sons, New York

   This is the story of an Alaska fur seal mother and her companions in the great Pribilof Islands herd of more than a million animals.

4. **The Year of the Whale**  
   by Victor B. Scheffer  
   Copyright by Victor B. Scheffer, 1969  
   Published by Charles Scribner's Sons, New York

   A delightful and deftly written account of a sperm whale, one of the most interesting of all cetaceans....Scheffer's book is natural-history writing at its best." -Dr. Remington Kellogg, Smithsonian Institution

Note: Victor B. Scheffer was awarded the John Burroughs Medal in 1970 for *The Year of the Whale*, the best book in the field of natural history.
Other Books About Wildlife:

1. **Monarch of Deadman Bay**, The Life and Death of a Kodiak Bear by Roger Caras
   Copyright 1969 by Roger A. Caras
   Published simultaneously in Canada by Little, Brown & Company (Canada) Limited

   Through Monarch's story contemporary man may become at least dimly aware of some of life's secrets and hidden beauties. The author says, "My aims are simply to communicate the joy and enrichment I have found in wild places and to convince people to preserve those wild places and their population for future generations."

2. **Sarang**, The story of a Bengal tiger and of two children in search of a miracle.
   by Roger Caras
   Copyright 1968 by Ivan Tors Films, Inc.
   Published simultaneously in Canada by Little, Brown & Company (Canada) Limited

   Sarang is definitely one of the better animal-adventure stories.

3. **The Custer Wolf**, Biography of an American Renegade
   by Roger Caras
   Copyright 1966 by Roger A. Caras
   Published simultaneously in Canada by Little, Brown & Company (Canada) Limited

   It was hunger which had taught the wolf to kill, and he had killed without lust, cruelty or wastefulness. But it was man, stalking, baiting, hunting the white wolf, which taught him to hate, to slaughter and mutilate. "It was as if he knew his days were numbered..." writes Caras, "that therefore he had decided to even a very lopsided score with the men and cattle who had taken over his range and declared him outlaw in his own ancestral hunting grounds."

4. **The Winter of the Fisher**
   by Cameron Langford
   Copyright 1971 by Margaret Langford, executrix of the estate of Cameron Langford
   Published by W. W. Norton & Company, Inc., New York

   "The Winter of the Fisher is a special reading experience. The fisher's savagery in defense, his careful taking of food from a human hand, his intelligence, his exuberate play in the snow, are all as real as the fishers I used to know. The wild and beautiful North-Woods setting, with its chains of life, is as real as living there."
   - Helen Hoover, author of A Place in the Woods

   Note: The fisher is a magnificent fur bearer larger than the marten which dens in the forest of the North. Seldom glimpsed, he is solitary and nocturnal.

   Note also that most of these books are of the currently popular form known as the "novel of the wild," in which the chief protagonist is a wild creature.
Books about Wildlife: Student Papers

Never Cry Wolf by Farley Mowat

Never Cry Wolf is about a man (Farley Mowat, who is telling the story) who is sent by the Canadian Government to the Barren Lands in Northern Canada. The government claims that the decrease in caribou numbers is because of the vicious wolf herds. They want Mowat to investigate and study wolf habits, and affirm the fact that the wolves are eating up the caribou.

In the story, Mowat tells how he comes to love the family of wolves he studies, and slowly realizes that, contrary to stories and fears, wolves are not savage, bloodthirsty animals, but placid, intelligent animals, who have strong family structures. He learned that the wolves hunt only to keep alive, not because they like to kill for no reason, and that they (the Barrens wolves, anyway) live basically on small rodents and once in awhile, caribou. He learned that the wolves actually keep the caribou strong by killing only the weakest, and that it is man's interference which is reducing the caribou numbers. The government was displeased with his results and is determined to continue to "control" the wolves by whatever means possible.

Relating Never Cry Wolf to our study of man and nature - Mowat shows how, by completely becoming part of the life in the wilderness, we can see how really wonderful the balance is, the balance that was there before we tried to change it. He lived almost like a wolf, communicating with them by following their habits, eating their food, sleeping like a wolf - in short naps.

Farley Mowat is different from Edward Abbey in that he doesn't yell a lot about civilization. He is just quietly, humorously indignant at the government. At the end, though, he angrily criticizes the government's ignorant wolf policy. He is like Abbey in that he lives (for the six months he is there) in total harmony with nature - he feels no rush. He doesn't just observe the wolves, he feels what they feel.

In the end, Mowat realizes that, somehow, he is too civilized. In tense, fearful moments he reacts irrationally forgetting what he had learned.

"...the lost world which once was ours before we chose the alien role; a world which I had glimpsed and almost entered...only to be excluded, at the end, by my own self."

It gives me the strange, sad feeling that perhaps all of us are too far away from life as it was meant to be, to ever really live it.

Never Cry Wolf - Farley Mowat

Patti Johnson

I thought that this book "Never Cry Wolf" was very interesting. I liked the way in which Farley Mowat wrote it. He told his adventure in such a way that you learned a lot about the wolves and yet there was a great amount of humor.
I think the wolves family life is very interesting. During the day it is the female's responsibility to take care of the den and to keep the pups amused. Meanwhile, the males are usually relaxing and resting for their big midnight hunting trip. Each wolf family has its own den and their property is "marked off" from the other dens. The wolves usually don't wonder far from their home except when they are looking for food.

These hunting trips for caribou are very well organized. The wolves can't kill just any deer because of their enormous strength and speed. So, they developed a system to determine which were the sicker or weaker deer of the herd. The wolves, two or three of them, would rush a band of deer. They continued their flight long enough to determine if there were any inferior caribou. If there are, the wolves would chase it until they made the kill. There are a couple of facts about their hunting which really makes me mad at human hunters. Wolves always make their kill fast. They don't let the deer lie and suffer by barely killing it. Another thing is the wolves don't kill for the fun of it. Once they have made a kill, they take it home and let the entire family enjoy it. There, the den, they will stay until the meat is entirely eaten and the wolf is forced, by hunger, to go back to work. Even when there are a numerous amount of caribou, the wolves are not known to be piggy and selfish. During these times they will catch several deer, but will dismember the meat from the carcass and bury it. Later, when the meat is needed it will be there.

Motherly care shown to the pups is very strong, I think. It seemed like whenever the pups wanted to play, the mother, being a good sport, would romp, tug and fight with them. In all of the cases that I read, when the mother and/or father had to leave the den, they would always get a babysitter. I think the thought of leaving their youngsters alone never crossed their minds.

In many cases the wolves seemed to show so much love and compassion for one another. Like when they're hunting, they don't let their victims suffer or when it is known that a herd of caribou is going to be crossing by one family's den, other wolves will pass the message on. I think this is what a person would call "caring."
VIII. Summation
In reviewing the book *A Sense of Place, The Artist and the American Land* by Alan Gussow, Anatole Broyard has elaborated on this theme of "a sense of place":

"So many of us have lost our religion, our feeling of ethnic or national identity, our instinctive moral orientation, that the coordinates of our spirit are becoming increasingly rootless and vague - perhaps even precarious. One more - and perhaps final - root we seem in danger of losing is our sense of place, and we can ill afford it. For 'the places we have roots in,' as David Brower sees it, 'and the flavor of their light and sound and feel when things are right in those places, are the wellsprings of our serenity.' A place, says the poet Richard Wilbur in his Introduction, 'is a fusion of human and natural order.' We need that fusion. We need it because it is as close as many of us can come to a religion. To be continuous with nature, intimate with it, is immensely reassuring in a world of abstractions and inconceivable distances. As Spengler said, religion is a tension between man and the universe that we can love. Our places are the bases of that tension, and we need to love them just as much as we need to love each other. Otherwise, we are 'intellectual nomads' who walk the earth like ghosts, who 'have lost the landscape inside themselves and will never find it outside.' "

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Formerly, man acted in the realization that he was a part of nature. In earlier days, the Indians who inhabited this country lived in kin-ship with the land which they referred to as their "Earth Mother." Nature was everything important to them; it was the land, all living things, the water, the trees, the rocks - it was everything. And it was the force or power that came from these things that kept the world together. When the white man came, everything started to get out of balance. Man was no longer a part of nature; he was the exploiter of nature. Man and nature were no longer one; man and nature were two things, and man was master.

What we will be able to do about eco? today really depends on our ideas about this man-nature relationship. More science and technology are not going to get us out of the present ecological crisis until we achieve a reconciliation with the land. William Sidney Mount once said: "Nature beckons us one and all...to be great." But we can only achieve this greatness if we open our hearts and minds to nature. If we do, we will keep our roots alive in those places where there is a "fusion of human and natural order." We will have regained our "sense of place" here on earth.

There was a very popular song written not long ago - the lyrics went as follows: "What the world needs now, is love, sweet love - no, not just for some, but for everyone..." This song was talking about love between people - between man and woman, parent and child, friend and neighbor. But the world today needs an even greater love, where man not only loves his fellow man, but where he also loves his "Earth Mother" and all of nature. For we are not distinct from nature; we are a part of it. And if we truly love one another, we will show love and respect for the larger world community of all living things of which we are a part.

Love and understanding in the man-nature relationship - that's really what this course was all about. Literature was our medium; a little love and understanding was our intent. One student told me that after reading Desert Solitaire she was able to see much beauty in the desert, a landscape she had previously considered useless wasteland...A little love...Another student, after reading Never Cry Wolf, "...wolves aren't savage, bloodthirsty animals, but placid, intelligent animals...After reading this book, I'm straightened out about wolves."...A little understanding.....

The following poem was written by one of my students. He tells us of a dream, "a dream of love and man and nature," a dream "that man and nature were one." Then he awakes from his dream, finding himself very happy until he remembers that his vision was only a dream. This poem makes me feel a little sad - to think that this boy finds the reconcili-ation of man and nature, "united together, each helping the other, each loving the other" comes true. Don't you?
"I Had A Dream"

I had a dream,
A dream of love and man and nature,
I dreamt that man and nature were one,
United together,
Each helping the other,
Each loving the other,
Each keeping the other alive.
No one spoke,
But everyone communicated.
There were no such things as smoke,
or pollution,
or rat races,
All was peaceful, quiet, and full of life.
There was no wild,
No civilized,
only understanding.
Then I understood that the dream was not out of reach,
That we could have it,
All we have to do is . . .

I awoke from my dream alive,
And was very happy,
until I remembered,
It was only a dream.

- Than Beck