This paper describes the use and value of courses in the physical environment offered as part of a non-graded elective program in the English high school curriculum. The writer, who has taught some of these courses, argues that there is a definite place for environmental studies in the humanities curriculum. One course, entitled "Wilderness as a Way of Life," not only included readings but also asked the student to do some wilderness living and to submit projects related to these experiences. A course in survival required reading in and experience of survival techniques. The author describes some of the books the student read in this course and some of the projects they created. An appendix includes the course outline for "Wilderness as a Way of Life," a discussion of some suggested projects for the course, and a list of books, films, and multimedia presentations relevant to the course. (Author/DI)
ENIRONMENTAL STUDIES IN AN ELECTIVE COMMUNICATION PROGRAM

Kay Hauge

If numbers of classes offered, numbers of students enrolled in each class, and the numbers who cannot be accommodated are any indication of popularity, the environmental English courses we offer at Wayzata Senior High are indeed popular. That these courses are taught at all is directly related to the non-graded elective program initiated in the fall of 1970. This elective curriculum was developed cooperatively by the English faculty acting as a whole to "provide alternatives and options to accommodate the educational philosophies in the community and to meet the differing needs and methods of learning revealed among students". We perceived this approach as assisting the students "to become flexible, life-long learners, capable of choice and capable of change". From an initial list of over 100 course titles submitted by teachers and students, brief descriptions and outlines were written for about 70 of the most
popular course offerings. From these, students selected six mini-units, giving first, second, and third choices. Courses were offered to reflect these choices. We discovered the kids were very human. They had an uncanny nose for courses that sounded interesting and easy and flocked to them. Course names were important, too. When we labeled a course Ecology, no one came, but when we called one Survival the line formed around the block. Teachers are human, too. One weakness of our elective program is that occasionally a teacher is forced to "volunteer" to teach a class for which he may not feel a great affinity. I know that has happened in our environmental courses--as well as in other courses. Not everyone believes in survival or loves the wilderness!

Several mini-units appear to have unusual appeal for the students, and two of the most popular are Survival and Wilderness As A Way of Life. That students are concerned about the
environment and their relationship to it is evidenced by the fact that one or both of these courses is taught every hour of the day in every quarter they are offered. A third course, Organic Gardening, was offered only 2 or 3 times because of space and instructor limitations, but proved similarly popular. In addition to these units many students choose environment as their subject matter in such courses as Free Reading, Independent Study, Still Photography, Cinema and The Research Paper. If student interest influences course offerings, environmental studies are in!

A question arises concerning the propriety and the value of including a study of man in the environment in an English curriculum. What has environment to do with English? Doesn't this study properly belong in the sciences? I don't think so. I tend to agree with the educator who said, "If environmental education does not become inter-disciplinary and universally taught, we might all become the final victims of the abuse, misuse, and misunderstanding
of the environment." Each discipline is a vehicle for environmental education. The English discipline has much to offer and much to gain in a study of man in relation to his environment. Naturalists belong to literature as well as to science. Thoreau comes to mind, of course, along with such nature writers as Gilbert White, W. H. Hudson, John Muir, John Burroughs and the contemporaries, Joseph Wood Krutch, Aldo Leopold, Hal Borland and Rachel Carson, to name a few. Krutch draws a distinction between science and the literature of the naturalist. He says that science is knowledge about natural phenomena while the proper subject of nature writing is an account of the writer's experience with the natural world.

The nature writer sees the difference which sharing the earth with others does make—what is, or ought to be, our relation with other living things.

Man is caught up in his own technological advances. Perhaps if he can be lead to a contact with living nature, he will become
aware of the non-mechanical aspects of living and can sense life's mystery. We need to give our students alternatives in thinking. They exist in an electronic age where instant gratification seems to be the norm. This is the opposite of how nature works. We cannot expect them to make the concessions they are going to need to make to preserve this planet earth unless they can first learn to love and delight in the variety of nature. Reading nature writers enables students to participate in experiences of which they would otherwise be deprived. Perhaps if, in addition, we can lead students to the experience of solitude and quiet occasionally they may be more able to think through to the significant values of life. We can raise for them the question, "Must man destroy nature in order to survive? If so, what ultimately becomes of man?"

Perhaps the greatest emphasis was on reading in presenting these courses. Of equal value, though, was the use of numerous carefully planned experiences in survival and nature and the use
also of an extensive list of suitable films. We were thus able to meet the needs of a wide range of students. Some classes tended to become almost entirely reading oriented, others were more experience-oriented, with some reading and films. My own classes for non-readers relied almost entirely on films and tapes.

RATIONALE - RELATION TO ENGLISH AS WE USUALLY THINK OF IT

It seemed that among the eight teachers involved in Survival and Wilderness classes the rationale for these courses was almost as diverse as the teachers who had opted to teach the units. One teacher found environmental studies an excellent vehicle for experiential learning. He sensed a real opportunity for his students to do some concrete thing, never attempted before, and then to relate this experience to others. In his view education has become tragically depersonalized. For him, helping his students to experience something and then share it with others was what communication was all about. Others saw that a popular thematic
course could be used to attract many readers and cause students to read and write better as they attempted to explore and demonstrate the human condition and man's resourcefulness. Still others used opportunities for developing such skills as research, reporting, organization of information, evaluation of data, writing weekly journals, discussion and so forth.

When we began teaching the elective units, we voted that many students had chosen environmental studies as topics in units such as free reading, independent study, photography, cinema and others. One boy comes to mind. He used much of the year—through free reading, independent study and creative writing—to write, in first draft and final printing, an illustrated book on taxidermy. He finished up his project with a most impressive display in the library. He had mounted several wild animals, adding something of its natural habitat to each. The students enjoyed his display; he must have enjoyed the entire year.
We were fortunate to receive aid from sources outside our department. The English Resource Center ordered the paperback texts we had selected. The resource librarian also assembled a collection from the library of books we were most likely to refer to, and placed them on reserve in the center. The library circulated an extensive list of books and magazines related to our units. We knew what was at hand. We compiled a list of films from commercial distributors, free sources and our own district film library and these were ordered and routed to us by the A.V. librarian. The biology department shared some films they were using at the time. Speakers were contacted and arranged for and field trips were planned. Just before the units began, a schedule for the use of all these was drawn up by the department head.

The Survival mini-unit is largely an experimental course.
The objectives are concerned with developing a mental "set" for survival, discovering one's own strength, ability and imagination in times of stress, and learning to research--to dig for information--and to realize that survival is often dependent on the combined knowledge and effort of many people.

The survival areas to be studied range from wilderness survival to nuclear survival, from survival in plane crashes, boating mishaps, snowmobile breakdown to survival problems caused by overpopulation and environmental pollution.

Each student was required to read two books--Greenbank's *The Book of Survival* and a biography, autobiography or fiction work in which the main character encountered survival situations of great stress. Each student also kept a weekly journal in which he recorded his progress in gathering information and acquiring skills and solutions relevant to problems in his survival area. The third requirement was a survival
project in a chosen area. For example, someone might construct
and demonstrate the use of a survival kit, demonstrate drown-
proofing techniques, rope safety techniques in rescue, first-aid
or climbing or prepare a presentation on overpopulation and
solutions.

Guest speakers were available, experts and knowledgeable
people in climbing, wilderness survival, environmental pollution,
conservation and overpopulation, to mention a few.

Many students chose to build several types of survival
shelters, some went on survival outings in small groups, others
researched, found and prepared edible wild foods. Because
Survival units ran all year, students planned and outfitted
themselves for wilderness trips under both winter and summer
conditions. The final test for scores of students was nothing
short of spectacular. They and their instructors rappelled to
the ground from the roof of the school auditorium.

Fortunately, there were no failures.

The thrust of Wilderness As A Way of Life was somewhat different. Here we attempted to examine and assess a life style. We wished to acquaint the students with the pleasures and obligations of this life style. We hoped to give them some of the experiences of working with their hands inherent in that life style.

To accomplish this we asked them to consider why man seeks the wilderness; how he affects it; how it affects him. They tried to experience a wilderness adventure and share it with the class, orally or in writing. Many chose to fashion tools or necessities of the wilderness from materials found in the wilderness. Some were interested in edible wild foods or such food projects as making beef jerky, sourdough bread and dry-preserving foods. There are several good books on
activities that include much of the author's philosophy too. Photography, film-making and writing were explored as ways to express a love or understanding of nature. At the end of the course we asked the students to assess in some way whether or not they had experienced any change in attitude as a result of the unit. Many expressed a feeling of greater appreciation of nature, a better idea of the interdependence of all natural things, a knowledge of the true hardships of wilderness living, and a few avid hunters began to reexamine their motives.

The course began with a general viewing of the Disney film, *White Wilderness*. All classes read (or in my classes, listened to a tape of) *Crusoe of Lonesome Lake* from the *Perspectives* anthology. There were several choices for students for the rest of the course. Some sections read Argier's *We Took to the Woods*, a lively account of a young
couple's attempt at wilderness living—not great literature.

but . narrative. In some units better students read Aldo Leopold's beautiful *A Sand County Almanac, Walden,* John Muir or other naturalists. Much good wilderness writing has been done in or about Minnesota's wilderness boundary waters. Sigurd Olson's *Listening Point* and *Runes of the North,* Francis and Florence Lee Jacques' *Canoe Country* and *Snowshoe Country,* Helen Hoover's *Gift of the Deer* and *Long Shadowed Forest* and the books of Calvin Rutstrum on nature lore and crafts were popular readings. Another book that proved interesting was Lois Crisler's *Arctic Wild* a fine account of the wolf photography she and her husband had done for *Disney's White Wilderness.* The *Bears and I* by Franklin Leslie is also an interesting, well-written account of what amounts to sensitive human-animal communication. Popular science books such as *Reading*
the Woods, The Life of the Forest, wild-flower books and
bird books and recorded songs appealed to many. In my
classes for non-readers, a score of free and commercial
films were substituted for reading.

Near the end of the unit, another feature-length film,
Edge of the Arctic Ice, was shown at a local theatre. This
film portrays man using the wilderness and, to an extent,
abusing it with bounty and trophy hunting. It provided a
good contrast at the end of the unit. Projects included photos,
films, journals, poetry, and plaster-cast tracks, many
ingenious woods "gadgets", several attempts at food
preparation and preservation and even the construction of
rustic furniture and some simple work with logs.

Following both these units, teachers and students
wrote evaluations. These were favorable and often made
references to wishing more could be learned or more time
made available. Nearly all teachers expressed a desire to teach the units again, many with the object of doing something better or different. We feel we need to include more, perhaps, for the very able student and we also feel a need to inform ourselves better.

As a whole we think our environmental studies were a success and we hope that we have modified to some extent the mentality to which Aldo Leopold referred when he said, "The last word in ignorance is the person who looks at a plant or an animal and says, 'What good is it?'"
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<th>SEMESTER I</th>
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<td><strong>Language Arts--A</strong>&lt;br&gt;Creative Writing (25)&lt;br&gt;Visual Communications&lt;br&gt;Programmed Mechanics (25)&lt;br&gt;Writing Lab (25)&lt;br&gt;Oral Interp. (20)&lt;br&gt;Journalistic Writing (20)&lt;br&gt;Radio Theater&lt;br&gt;Teacher Aides Revised&lt;br&gt;Still Photo--Unit 5 (20)&lt;br&gt;Cinema I, Basics--Unit 4 (20)&lt;br&gt;Cinema II&lt;br&gt;Film Production--Unit 5 (20)&lt;br&gt;Magazine (25)&lt;br&gt;Critical Thinking&lt;br&gt;Listening&lt;br&gt;Student as Tutor&lt;br&gt;TV Dramatic Production&lt;br&gt;Sue-Tom class (20)</td>
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<td><strong>Literature--B</strong>&lt;br&gt;Lit of Self-Discovery&lt;br&gt;Political Novel&lt;br&gt;Range of Poetry&lt;br&gt;Wilderness as a Way of Life--Unit 2&lt;br&gt;Biography&lt;br&gt;Shakespeare&lt;br&gt;Philosophy of Lit&lt;br&gt;Mythology&lt;br&gt;Twentieth Century Poetry&lt;br&gt;Russian Novel&lt;br&gt;Black Lit&lt;br&gt;Short Novel</td>
<td><strong>Literature--B</strong>&lt;br&gt;Existentialism&lt;br&gt;Science Fiction&lt;br&gt;Influence of Small Town&lt;br&gt;Doing Poetry (25)&lt;br&gt;Best Sellers&lt;br&gt;Wilderness as a Way of Life--Unit 4&lt;br&gt;Detective in Lit&lt;br&gt;Humanities 1, 2, 3&lt;br&gt;Prisons&lt;br&gt;Bible as Lit&lt;br&gt;Am. Indian Lit&lt;br&gt;Am. Short Story</td>
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<td><strong>Related Arts--C</strong>&lt;br&gt;A V Equip (20)&lt;br&gt;Current Issues&lt;br&gt;Survival--Unit 1&lt;br&gt;Stagecraft</td>
<td><strong>Related Arts--C</strong>&lt;br&gt;Humor&lt;br&gt;Emergence of the Counter Culture&lt;br&gt;One Act Play (15-30)&lt;br&gt;Creativity (25)&lt;br&gt;Survival--Unit 5&lt;br&gt;Free Reading&lt;br&gt;Independent Study&lt;br&gt;Family Tree</td>
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Description

This course is designed to afford the student an opportunity to read several types of literature in an area in which he may have an interest—living in the wilderness. The readings will be chosen from essays, journals, autobiographies, short stories, novels, magazines and newspaper accounts. The student will elect to do some wilderness living and/or construct some necessities for living in the wilderness and will submit two projects related to these choices. The course might also include some work on identification and appreciation of wildlife and readings on a plan of action to preserve it.

Objectives

1. By using a theme approach it is hoped students will be encouraged to read a wide variety of literary types.

2. The student will be able to assess a life style.

3. He will consider why man seeks the wilderness, how he affects the wilderness and how it affects him.

4. He will fashion some tool or necessity of life in a wilderness setting.

5. The student will express a love for nature in writing, photography or cinema.

6. He will consider orally or by writing whether or not his attitude toward environment has been modified in any way as he studied the unit.

7. The student will discuss his awareness of the need to preserve wilderness.

Materials

1. Books, films, tapes and magazines relating to wilderness. See those listed.

2. Cameras—35 mm and movie.

3. Experts who can speak or demonstrate wilderness ideas.

Outline

1. The class will read Crusoe of Lonesome Lake in Perspectives. Class will discuss implications of wilderness living. There will be a quiz.

2. Class will view White Wilderness and Edge of the Arctic Ice or two other feature films.

3. Each student should choose one major and one minor project from the suggested list and work on it individually or in small groups. The project is to be turned in the last week of the unit.

4. Each student will choose to read two books from the list of readings. He should share his reading experiences with the class. Non-readers may select short films from the list instead.
Projects

Please discuss your plans with the teacher before beginning a project. Do not wait until the last week.

1. Use Rowland's Cache Lake Country, any of Rutstrum's books, The Golden Book of Camping and Camp Crafts or Foxfire to find projects related to wilderness living. Choose and make one or more of these; for example, furniture, animal tracks, gadgets, etc.

2. Find, identify and prepare foods from the wilderness.

3. Preserve food in a wilderness way--dry, apples or corn; smoke beef or venison; make a fish smoke-box and smoke fish. Make sourdough bread. Experiment with a wilderness way of cooking, for example, fish baked on a plank. Make maple syrup. Make molasses candy.

4. Use a wilderness method for clothing--construct moccasins, a jacket, parka, etc. suitable for the wilderness--you might like to try leather. You might tan leather or fur for use. Use dyes made from leaves, bark or berries to dye yarn or cloth. Learn to weave on a backstrap loom.

5. Take a wilderness trip and keep a journal.

6. Photograph a wilderness project.

7. Make a film of a wilderness experience or one on wild animals.

8. Make a photo essay on "how to do" any wilderness project.

9. Learn to identify trees, plants, animals and show them in some visual way--poster, collection, bulletin board, etc. Learn bird songs and demonstrate to the class.

10. Keep a daily journal of your experiences in this unit. Note your feelings and particularly any change of attitude towards wilderness.

11. Write a song, poem or essay expressing your feelings about wilderness.

12. Interview on tape and/or in writing someone who is an expert on wilderness life or who has had an interesting wilderness experience. Share this with the class. You might like to work this up with photos, etc., a la Foxfire.

13. Choose an aspect of wilderness that appeals to you and begin a serious research on the topic. You might consider registering for the research paper next unit to complete it.
Book list for Wilderness As A Way of Life

I. Classroom sets or multiple copies:

- Crusoe of Lonesome Lake - Stowe - in Perspectives
- At Home In the Woods - Angier - Collier, $1.50
- How To Build Your Home in the Woods - Angier - Hart Pub., $2.45
- Wilderness and Plenty - Darling - Ballantine, .95
- Desert Solitaire - Abbey - Ballantine, .95
- Sand County Almanac - Leopold - Sierra/Ballantine, .95
- Gentle Wilderness - The Sierra Nevada - Ballantine, $3.95
- Living on the Earth - Laurel - Vantage, $3.95

II. Non-fiction

Shelter:

- Angier, How To Build Your Home in the Woods
- Rutstrum, The Wilderness Cabin
- Foxfire - paper edition

Foods:

- Angier, How To Live In the Woods on Pennies a Day
- Living Off the Country
- More Free For the Eating Wild Foods
- Gibbons, Stalking the Wild Asparagus
- Medager, Edible Wild Plants
- Johnson, Anyone Can Live Off the Lane
- The Old-Fashioned Dutch Oven Cookbook

Animals:

- Adamson, Born Free
- Outdoor Life, A Gallery of North American Game
- Olsen, Night of the Grizzlies
- Crisler, Arctic Wild
- Captive Wild
- Haynes, The Bears and I
- Purden, Gifts of an Eagle
- Lorentzen, King Solomon's Ring

Observing and enjoying wilderness:

- Rowlands, Cache Lake Country
- Caman, The Endless Adventure
- Thoreau, Walden
- Rutstrum, Challenge of the Wilderness
Rutstrum, Paradise Below Zero
   Challenge of the Wilderness
   North American Canoe Country
   The Wilderness Route-Finder
Male, Wilderness Canoeing
Brooks, The Pursuit of Wilderness
   Roadless Area
Krutch, The Twelve Seasons
   The Desert Year
   The Voice of the Desert
Jacques, Canoe Country
   Snowshoe Country
Nearing, Living the Good Life
   The Maple Sugar Book
Hoover, The Gift of the Dear
   The Long-Shadowed Forest
Rich, We Took to the Woods
Borland, Beyond Your Doorstep
   Our Natural World
Olson, Listening Point
   Open Horizons
   Runes of the North
   The Lonely Land
   The Singing Wilderness
Severaid, Canoeing with the Cree
East, Survival - 23 True Sportsmen's Adventures
Watts, Reading the Landscape
Hylland, Wildlife Communities
Porter, Birds of North America
Lennon, Wildflowers of North America

Endangered Wilderness:

Laycock, America's Endangered Wildlife
Pringle, Wild River
Carson, Silent Spring
Carr, Death of Sweetwaters
Allen, Our Wildlife Legacy
Grossman, Our Vanishing Wilderness
Krutch, Best Nature Writing
Teal, Life and Death of the Salt Marsh
De Bell, Environmental Handbook
Kreps, Our National Resources
Fitter, Vanishing Wild Animals of the World
Udall, The Quiet Crises

III. Suggested fiction

Freeman, Mrs. Mike
London, Call of the Wild
   White Fang
Rolvaag, Giants in the Earth
Melville, Typee and Omoo
Clark, Northwest Passage
Irving, Adventures of Captain Bonneville
Murphy, The Peregrine Falcon
Guthrie, The Big Sky
Robinson Crusoe
Swiss Family Robinson
FILMS

Feature-length:
White Wilderness
Edge of the Arctic Ice

Shorter Films:
National Geographic T.O. Specials
Alaska, Settling a New Frontier
The Great Mojave Desert
Journey to the High Arctic
Buffalo--Majestic Symbol
Prowlers of the Everglades
Wild River
Olympic Elk
Bear Country
Beaver Valley
The Changing Forest
Altered Environment: An Inquiry Into the American Wildlands
Cry of a Marsh
North with the Spring
Animal Adaptations in a Northern Environment
Small Wilderness
Life in a Tropical Forest
Our Vanishing Wilderness: The Prairie Killers
Ecology - Olympic Rain Forest
Touch of Nature

Free Films:
The River Must Live - Shell Oil
Wilderness Forest
Castles In the Snow - Life Support Tech., Inc.
Wild Rivers, Northern States Power

MULTIMEDIA

Wilderness As A Way of Life - taped interview Pacifica Tapes
The Wisdom of Wilderness - Charles A Lindberg
on record or cassette tape - Guidance Association
National Geographic - Book and Record - Birds of North America - Songs
Filmstrips - Survival in the Desert
Game: (group) Outdoor Survival - $10.00