

# Ecology Behind Prison Walls

By BAYLISS L. PRATER and DALLAS J. MENGES

Can a meaningful ecology program be presented to men incarcerated behind a wall 9 m high and 1 m thick? To answer this question the Fields High School of the Ohio State Reformatory, in Mansfield, developed a pilot program in ecology in the hope that it could be expanded into an accredited secondary-science course.

Fields High School is an accredited high school, chartered by the State Board of Education in 1965. It differs from other Ohio schools in that it is located within a major prison and its students are convicts. Most are high school dropouts.

## Objectives and Problems

In developing the course we faced a peculiar problem: how could classroom work in ecology be combined with field and laboratory experience under conditions imposed by a maximum-security penal institution? We thought about the social and emotional benefits to be derived from the interaction of inmates, teachers, outside experts (park rangers, naturalists), and administrators, along with the community involvement for the inmate and the serendipity of excellent public relations. These factors, we felt, were important enough to warrant the risk of releasing students for a series of field days of ecology study.

However, these were not the primary reasons for developing the program. Meaningful rehabilitation of inmates must come about by active participation

in current events and problems and by a refocusing of attention upon these. (It is worthy of note that the same approach is necessary in the general public if progress toward the solution of ecologic problems is to come about.) The ecology program at Fields High School had to do more than train the student in the techniques of ecology, such as water analysis, sampling, and the identification of fauna and flora. It was designed to give him a positive attitude toward his relationship with the environment: he would learn that a convict can be part of a solution as well as a social problem. Toward this end, the primary focus was on instilling in the student an appreciation of the aesthetics of nature.

The establishment of an Ecology Club, made up of participants in the program, was planned to provide an opportunity for continuing participation throughout the student's incarceration and after his release.



Fig. 1. Student and teacher sample bottom organisms in a stream.

Bayliss L. Prater is assistant professor of biology, Ashland College, Ashland, Ohio 44805. He serves as science consultant to Fields Schools. Dallas J. Menges is principal of Fields Schools (grades 1-12), Ohio State Reformatory, Mansfield 44901.



Fig. 2. Ecology students run a chemical analysis of water.



Fig. 3. Looking at plants in Mohican State Park and Forest.

### Selection of Students

The following criteria were used in selecting students for the course:

1. He must be a volunteer.
2. He must be bondable; that is, he could leave the institution under guarantees that he would return.
3. He must have taken Biology I in Fields High School and received a grade of C or better.
4. He must have a personal interview with the ecology committee, composed of the four instructors in charge of the program.
5. He must submit an essay to the committee. The essay would express his view of ecology; suggest corrective measures for current problems; and state his interest in the course and what he hoped to gain from it.

More than 40 men applied for the program; 12 were selected. Statistical information about the students is presented in table 1. (These data were not

considered in selecting the students or in the final analysis of the program.)

### The Program in Action

The program ran for five weeks. Monday afternoons were spent in the classroom in preparation for field trips on Fridays. The classroom sessions also included academic material on ecology and an evaluation of the previous Friday's field day. Tests, given on Mondays, covered the work of the previous Monday's classroom session and of the Friday field day. Participation in the next field trip was based on a passing grade on the examination. Fig. 1-4 illustrate student participation in the field days.

The field trips were arranged to correspond with the classroom sessions. Four state parks were selected for study, and a schedule and itinerary were prepared in advance (table 2).

The transportation for the field trips was provided

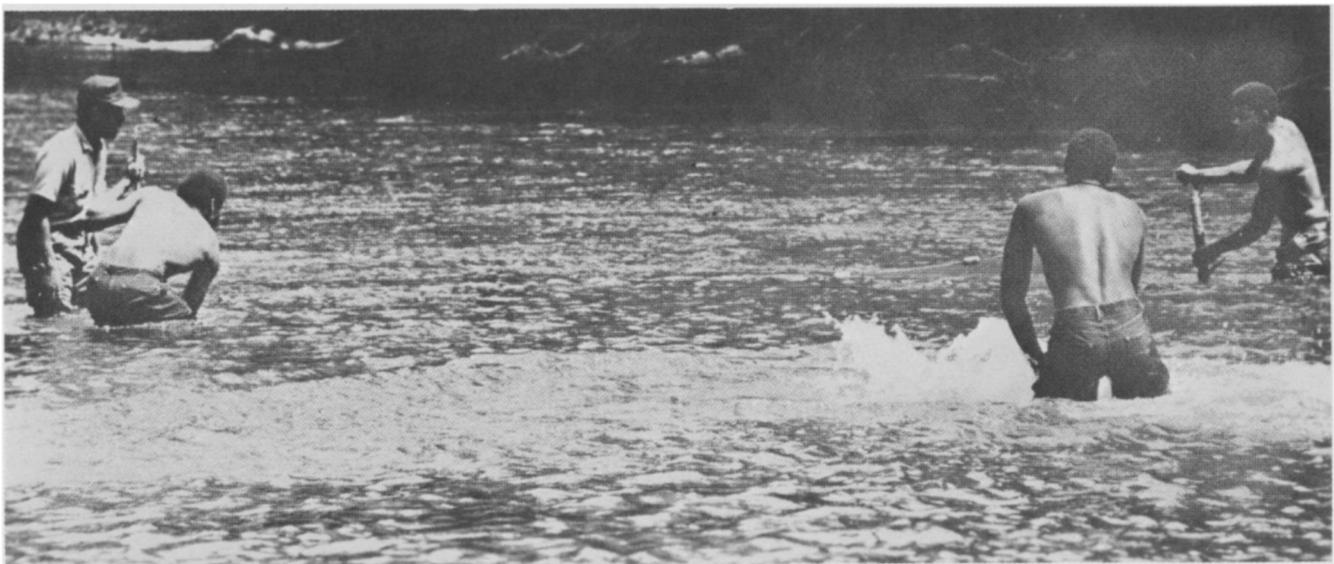


Fig. 4. Seining for fish—and enjoying the water.

**Table 1. Statistical information about 12 ecology students in Fields High School, Ohio State Reformatory.**

Item	Low	High	Average
I.Q.	74	120	100.4
Age	20	28	23.0
Period of incarceration in months	8	72	14.0
Grade level when incarcerated	6	11	9.7
Grade level at onset of program	9	12	11.3

by the instructors. The field equipment (water analysis kit, bottom sampler, seines, and the like) was lent by the biology department of Ashland College. Specimens collected were preserved, classified, and kept by the science department at Fields High School for use in other biology and ecology classes.

### Appraisal

To the question of whether a meaningful ecology program can be presented to prison inmates we answer yes. One inmate, who had been incarcerated for nine years, said that his participation in the program had been his most meaningful rehabilitation experience. This seemed typical of the whole class. It indicated that one of the primary objectives of the program—that of changing attitudes and behavior in a positive direction—had been accomplished. Hence the program will be expanded into an accredited secondary-science course and continued yearly with only minor changes and revisions.

Volunteers from the pilot program will be used as aides in future ecology programs; they will convey the "ecologic attitude" to the new students. The Ecology Club has been chartered, and its members

**Table 2. Schedule for a field day at Mohican State Park and Forest.**

8:00— 8:30—Load and leave OSR for Mohican State Park
8:30— 9:00—En route to Mohican
9:00—12:00—Nature hike to Lyons Falls (emphasis on flora and fauna)
12:00— 1:30—Lunch (cook-out and relax)
1:30— 2:30—Ranger program on forestry
2:30— 4:30—Fish-stream study; water analysis
4:30— 5:00—En route to the Menges residence (rural setting)
5:00— 7:30—Dinner and campfire program
7:30— 8:00—Return to OSR

have been speaking to various organizations outside the prison, posing the question: we belong and are concerned; why aren't you?

The results have an implication far greater than merely changing the outlook of 12 convicts. If a program at the Ohio State Reformatory can develop in high school dropouts an appreciation for nature, why not have similar programs for school students who are incarcerated behind the intangible socioeconomic wall?

*Acknowledgments.*—The program would not have succeeded without the help of Superintendent Bernard Barton, Associate Superintendents Woods G. Copley and Robert White, and Instructors Ronald Klein, Jon Flood, and Robert Weiss, all of the Ohio State Reformatory. The loan of equipment by Ashland College was a great asset.

### COLLEGE-TEACHER INSTITUTES

Awards totaling more than \$3.1 million for programs designed to improve college science, mathematics, and engineering teaching have been announced by the National Science Foundation. During the summer of 1972 more than 1,500 teachers from colleges, universities, junior and community colleges, and technical institutes will attend summer institutes and short courses in 25 states, the District of Columbia, and Bermuda. The awards were made to 49 institutions.

Both short courses and summer institutes explore in depth new subject matter and new approaches to teaching methods for undergraduate instruction. Summer institutes range in duration from four to ten weeks; short courses last up to four weeks.

A directory (E 71-U-9) listing institutions offering the summer institutes and short courses may be obtained from College Teacher Programs, Division of Undergraduate Education in Science, National Science Foundation, Washington, D.C. 20550.

### ENVIRONMENTAL PROJECTS ABROAD

The international environmental program undertaken jointly by the Peace Corps and the Smithsonian Institution has already placed volunteers in about 20 countries. Examples of projects are schistosomiasis research in Ghana, aquaculture in Brazil, national-park development and primate ecology in Colombia, ecologic surveys in Costa Rica, rodent ecology and marine biology in Tonga, air pollution studies in Thailand, and a wildlife survey in Iran. Those sent to countries requesting assistance are experts—often husband-and-wife teams. For information about the program write to Robert K. Poole, director, environmental programs, Peace Corps, Washington, D.C. 20525, or to Richard L. Jachowski, Smithsonian Institution, Washington, D.C. 20560.