

40 students and faculty members and grew to the 400-member Environment Action for Survival, mostly as the result of a large university-wide rally in mid-October. The group plans a program combining workshops, seminars, rallies, speeches, entertainment, community-action projects and the sponsorship of local high and junior high school activities.

At the same time, university departments of geology, biochemistry, zoology, botany will examine environment-related advancements in those fields. The law school will review state and Federal laws regulating environment management. Michigan's biomedical research faculty plan a day-long seminar culminating in major panel discussions on the root causes of the environmental crises, including special discussions on human ecology and urban problems.

On the last day of Michigan's observance, action projects will bring students into the community constructing a vest-pocket park in an Ann Arbor ghetto, and conducting a canvass of local grocery chains to encourage environment-related selection of products including the rejection of phosphate detergents.

"The teach-in is not displacing the movement on hunger or Vietnam. It's

another kind of thing," says Douglas Scott, a graduate student at the School of Natural Resources.

Student leaders like Scott see the issue of environment swelling into a major years-long protest. But unlike the divisiveness of the Vietnam moratoria, "We're in this together," he says.

Dr. Francoise Mergen, Dean of the Yale School of Forestry, regards environment-committed students as a new missionary force. "These students should be ordained," he says.

Yale University has long been identified with concern for the troubled environment and will be joined in April by other major centers of teach-in activity at the Universities of Massachusetts, Minnesota, Wisconsin and California and Boston University.

Basically, to the Sierra Club's Bob Waldrop, the environmental movement has only just begun. Having sensed their effectiveness in earlier protests, students see their involvement in the environment issue as representing a step away from traditional conservation tactics.

"Kids feel trapped by our freedom to exploit. They are searching for balance and regard the evils in the environment as much more identifiable than other objects of protest," he says.

## DIPHTHERIA

### Recurrence of a killer

Vaccination against diphtheria, whooping cough and polio has greatly reduced the incidence of these childhood diseases. But diphtheria, unlike the others, cannot be eradicated by immunization alone. The diphtheria vaccine is unique in that it immunizes against the toxin of the bacteria and not the bacterium itself. The diphtheria germ therefore is carried by individuals whether they are immunized or not, and it is estimated that 2 to 4 percent of the population carries the disease.

**The result** is that diphtheria keeps popping up in areas where immunization has not been carried out. The latest outburst is in Miami's Dade County, Fla., where eight cases have occurred since late August.

The persistence of the diphtheria bacillus, combined with the virulence of the disease—two of Dade's eight victims died and one was on the critical list this week—causes epidemic-control officials to take heroic measures even when only a few cases occur.

The outbreak in Dade County prompted the largest immunization campaign against diphtheria in years. Some 240,000 doses of vaccine were distributed last week in an effort to inoculate more than 41,000 school children attending over 40 schools in the county. The outbreaks were unrelated to each other and occurred in five separate districts all within a low income area called Liberty City in Northwest Miami.

CBW

### A hole in the ban

The Departments of Defense and State sharply debated their interpretations of the use of deadly nonliving toxins this week in the backwash of President Nixon's firm order of Nov. 25 to ban all biological agents for warfare (SN: 11/29 p. 495).

The issue centers on the precise classification of toxins as chemical or biological agents. Toxins are the dead, but poisonous, end-products of bacteria, and since they are not living, Pentagon officials say they don't belong in the category of biological agents; they are chemical agents, they argue.

Mr. Nixon's order banned a first use of chemical agents and leaves the door open for their manufacture.

State Department officials argue that the possible inclusion of toxins as allowable chemical agents invalidates the sense of the President's order. □

## NEWS BRIEFS

### Pipeline; Laser; West front; Scientist-astronaut

A major obstacle to the construction of a \$900 million oil pipeline running North-South through Alaska's heartland (SN: 12/6, p. 524), was cleared this week with House Interior Committee approval of the project right-of-way. The Senate Interior Committee approved the measure a week earlier.

The action declares no objection to Interior Secretary Walter J. Hickel's proposal to grant right-of-way involving 25 million acres to three oil companies. Most of the land contains permafrost deposits representing one of Alaska's major ecosystems, and the 700-mile hot oil pipeline has been the subject of much heated debate between conservationists, governmental officials and agents representing the three oil companies. Despite the committee action, Hickel said this week that the problem of laying the pipeline would have to be solved before construction can begin. □

**The chemical lasers** that have been developed up to now require an outside power source for their operation (SN: 11/15, p. 448). This need has been eliminated by Prof. Terrill A. Cool and Ronald R. Stephens, who have developed two continuously self-operating chemical lasers. In their sys-

tems, fluorine is first reacted with nitric oxide. Then deuterium or regular hydrogen is quickly mixed in with carbon dioxide. The result is a chain reaction producing deuterium fluoride or hydrogen fluoride, which in turn cause the carbon dioxide to lase. □

**President Nixon** last week signed a bill approving a \$250,000 study that will lead to a final determination on whether the defective west front of the U.S. Capitol building (SN: 11/29, p. 506) will be saved by restoration or extension. The bill authorizes a six-month outside study on the restoration plan for the west front. The results of the study will be given to the Commission for Extension of the United States Capitol. □

**Geologist** Harrison (Jack) Schmitt was under consideration this week as a backup scientist-astronaut for Apollo 15, to fly next November. Dr. Schmitt, a Harvard-trained geologist, has been working with all the moon-landing crews in getting the most out of their moonwalks. He would be the first scientist-astronaut assigned to fly in space, and his backup post would probably lead to a position on the prime crew of Apollo 17. □