

from each of the first four teams to have completed their missions. (See p. 117.) Although the scientists are not making any dramatic claims, they are almost unanimous in their feeling that remaining beneath the surface for periods of two to three weeks gives them valuable advantages in accomplishing their research.

"The reports, in general, clearly reflect that there are distinct advantages with respect to conducting detailed investigations while living on the ocean floor," says Dr. James W. Miller, Tektite II program manager.

**Probably the most** interesting finding in this respect is the geochemical work by three University of Miami scientists indicating that the results of measurements of a few important parameters such as oxygen concentration vary markedly depending on whether the analysis is done immediately in the bay-bottom habitat laboratory or later on the surface. This shows, they believe, that to obtain certain kinds of precise measurements from now on the work must be performed out of an underwater laboratory. But there are other examples.

Two University of Washington fish biologists, Charles Birkeland and Brian D. Gregory, say they could probably have accomplished the specific objectives of their studies of fish predation by repeated surface-based dives, if given considerably more time than they spent in their Tektite II mission, but they still would not have learned as much. "We do not justify saturation diving because we acquire more information, but because we acquire a different kind of information," they explain. Many of the most original and valuable insights came through incidental observations of fish behavior that they would not have had time to make during dives from the surface. They were also able to watch the predatory behavior of a particular individual for days at a time.

Dr. A. C. Mathieson and Richard Fralick of the University of New Hampshire studied the composition, distribution and abundance of vegetation on the bottom of Great Lameshur Bay and compared the results with their previous surface-based studies along the New England coastline. "There can be little doubt in my mind that the habitat provided us with an unprecedented amount of diving time and is a very effective tool," says Dr. Mathieson. "In conclusion I can only say that we could never have studied 20 individual 1,500-square-foot areas in New England."

Tektite II is now into the seventh of its planned 17 missions. By the time the project is finished, around Nov. 1, some 50 scientists will have conducted two to three weeks of research 50 feet beneath the waters of Great Lameshur Bay. □

## SCIENCE NEWSBRIEFS

### Radioactive wastes

The Atomic Energy Commission, faced with the controversial problem of finding a way of disposing of radioactive wastes from nuclear power plants, hit on the idea of using Kansas salt mines as a repository for the materials. The mines are relatively free of moisture and there is apparently less likelihood of environmental contamination than from other underground sites (SN: 3/28, p. 312).

But the Kansas State Geological Survey has asked the AEC to slow down its plans for use of a mine near Lyons, Kan., until adequate studies can be made. Says Dr. William Hambleton of the Survey: "My expectation is that the studies in the main will be confirmatory (of AEC's desire to use the mines). But now there is virtually no geological information on the site at all."

Dr. Hambleton says AEC has responded favorably to his request for a study lasting about six months. □

### Seeding for snow

Cloud seeding to increase the snowpack this winter over the San Juan Mountains of southwestern Colorado (SN: 5/9, p. 461) will be conducted only in the eastern half of the original target area, the Interior Department's

Bureau of Reclamation announced this week.

Of the four subareas in the original target zone, one—in the Silverton and Ouray area of Colorado—had previously been exempted from seeding because of such problems as the threat of avalanches. This week's addition of a second exempted subarea to the south was made in part because data on wind patterns and precipitation effects were not complete enough there. The action leaves a 1,300-square-mile zone in the region of the Piedra River and Wolf Creek Pass to be seeded under suitable conditions starting in late October. □

### Dissertation support

For some time the National Science Foundation has awarded grants for doctoral dissertation research in the social sciences. The awards are intended to improve the scientific quality of dissertations by making it possible for the student to gather more data of better quality. In particular they allow the student to conduct field trips.

This week NSF announced that doctoral dissertation research awards will also be granted for research in the environmental sciences (atmospheric and earth sciences and oceanography) and biological field sciences such as ecology, systematics and biological oceanography. □

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