Population Dynamics and Social Behavior of Swans<br>William J. L. Sladen, M.D.<br>Johns Hopkins University<br>Project Number 149

A study was made of the trumpeter swans of the Jackson Hole area including a survey of numbers present, ratios of young to adults, and their behavior. A detailed report is not available at this time.

Biotic Succession in Lodgepole Pine Forests of Fire Origin in Yellowstone National Park

Dale L. Taylor
University of Wyoming
Project Number 133
This study was begun in the summer of 1965. During that time, six areas that were burned in 1960 , 1954, 1942 , 1910, approximately 100 and 300 years ago were selected for intensive study. In these areas $I$ have two summers' data on hygrothermograph records; one full summer on Moeller distance thermometers at one and six inches in the soil; atmometer and rainfall data. Soil moisture, litter depth, chemical and mechanical analysis data of ten composite soil samples from each area were collected. The random pairs method was used for sampling trees and the Daubenmire canopy coverage method for herbs and shrubs.

Each area was censused for birds in June and trapped for mammals in June and August in 1966 and 1967. Insect sweep samples and berlese litter samples were collected throughout the two summers.

A completed report is expected in June 1968.
Assisted by Keith R. Taylor and Brent Costain, Student Conservation Program. Supported by the New York Zoological Society and the Wyoming Chapter of the Society of Sigma Xi.

