Dartmouth College News Service Hanover, N.H. Phone: 30, ext. 255, 286 George O'Connell, Director DIA12Spc1. From Madeund Cirasdale

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FOR IMMEDIATE RELEASE

HANOVER, N.H. -- A Dartmouth College biologist is engaged in a long-range research project to identify for the first time hundreds of different species of Alaskan algae.

Hannah T. Croasdale, associate professor of zoology, has been awarded \$21,400 by the National Science Foundation for her study of desmids, primitive forms of plant life that can provide clues to early conditions in an area. The grant is for two years.

Species in other arctic and subarctic regions have been studied by top-ranking desmidiologists for nearly 100 years, but Alaska has barely been touched, Miss Croasdale said.

Miss Croasdale, who has specialized in desmids for many years, started her current research on an expedition to Alaska 10 years ago. Some 200 different species in the area had been identified then. Since then she has published articles adding about 300 species to the record. She has found and named several that were previously unknown to science. Miss Croasdale hopes her work will eventually lead to a complete reference book on desmid flora of Alaska.

The only way to identify a species is to match it against pictures and descriptions in scientific literature, she said, and this is very

time-consuming. To help in this identification she has developed a reference file which now contains more than 15,000 entries. For each entry she has made detailed drawings of the species with descriptions and references. The file contains nearly all the arctic and subarctic forms and includes many original descriptions from papers that are now practically inaccessible, she said.

She noted that desmids in Alaska are especially interesting because vast areas of the region were not covered by glaciers in the Ice Age and therefore may have many species which exist only as fossils in other locations. In addition, Alaskan algae are found in varied habitats such as seaside marshes, mountain lakes, glacier snow and hot springs.

Miss Croasdale is working with an extensive collection of Alaskan desmids made during her 1951 expedition as well as specimens collected in various parts of the state by other scientists.

She has been a member of Dartmouth's Zoology Department since 1937. She was a summer staff member of the Marine Biological Laboratory at Woods Hole, Mass., for many years and has done scientific illustrations for two textbooks published by Holt & Co. Miss Croasdale received her bachelor's degree from the University of Pennsylvania in 1928, a master's degree in 1931 and a doctorate in 1935.