

latter stages of the Wisconsin ice age. It also seems likely that, as the ice melted, superglacial till was extensive. This could have formed the substrate for extensive superglacial vegetation.

Ice melting is rapidly destroying this ecosystem (Fig. 3), as it was in those reported by Tarr and Martin⁶. Ecosystems on Wisconsin-age glaciers would also have been destroyed. However, organic matter, nitrogen, and other plant nutrients built up in the superglacial ecosystem could make significant contributions to young post-glacial ecosystems. For instance, ecosystems of this age below the Mendenhall Glacier have accumulated about 2,000 pounds per acre of nitrogen in and on the soil, not including that in the live vegetation³.

Superglacial vegetation could have been important in hastening extension of plant ranges after deglaciation. Seed sources for much newly deglaciated land may have existed on nearby ice. Vegetated, stagnant ice bridges could have been important in the spread of vegetation and animals between islands and between the mainland and islands.

F. R. Stephens
USDA Forest Service,
Alaska Region,
Juneau, Alaska.

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A Northern North American Record of the Starling

The spread and establishment of the starling (*Sturnus vulgaris*) in many parts of

North America since its introduction into New York City in 1890 is well known. It was not until recently, however, that evidence for its northward spread on this continent was obtained; the first record of this species from the Northwest Territories, near Fort Smith, was reported by Fuller¹. Since that time starlings have repeatedly been seen in the Fort Smith and Yellowknife areas² and on 16 June 1964 Kuyt² found a nest at Lookout Point, about 225 miles northwest of Fort Reliance, Northwest Territories. Starlings were first reported in Alaska in 1960³ and since that time several have been seen in interior Alaska.^{4, 5}

On 27 June 1968 I observed a starling feeding at the edge of a sewer lagoon, about one-half mile north of Inuvik, Northwest Territories (68°21'N., 133°44'W.). This bird was not seen again despite several subsequent trips in the vicinity of where the original observation was made. This appears to be the most northerly record of the starling in North America, being about 120 miles north of the Arctic Circle.

This observation was made while I was employed on contract with the Canadian Wildlife Service.

Spencer G. Sealy
Museum of Zoology
University of Michigan

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Coordination of Arctic Research in the U.S.A.

To improve the coordination of basic, unclassified research conducted in the Arctic under the auspices of U.S. Government agencies, an Interagency Arctic Research Coordinating Committee was established in 1968. The committee members represent twelve Government agencies: the Department

of Health, Education and Welfare; Departments of the Navy, Air Force, and Army; Atomic Energy Commission; Department of the Interior; Department of Agriculture; National Aeronautics and Space Administration; Department of State; Department of Commerce; Department of Transportation; and the National Science Foundation. Dr. T. O. Jones, Acting Deputy Assistant Director for National and International Programs, National Science Foundation, is chairman of the committee.

The committee is concerned with: the compilation, on an annual basis, of federal, unclassified research in the Arctic; the promotion of cooperative use of available logistics among research groups; the maintenance of a current survey of foreign arctic research efforts; the identification of scientific problems to determine the scope and costs of recommended efforts; the identification of potential cooperative ventures in field work, data exchange, and research analyses between the United States and other nations doing arctic work; the encour-

agement of useful international meetings of scientists whose work is oriented to the Arctic; the coordination of research in both polar areas to effect a better understanding of significant related problems and to effect economies of operation through the coordination of logistic support.

A survey by the committee shows that the U.S. Government expended \$15,827,400 on basic, unclassified arctic research in the fiscal year 1968. Fig. 1 shows the expenditures of each agency.

As a further aid to arctic research coordination, the National Science Foundation has expanded its clearinghouse for antarctic information to a polar information service. The availability of funds and manpower will determine the rate of progress of the arctic portion of this service.

K. G. Sandved
 Polar Information Services
 Office of Antarctic Programs
 National Science Foundation
 Washington, D.C.

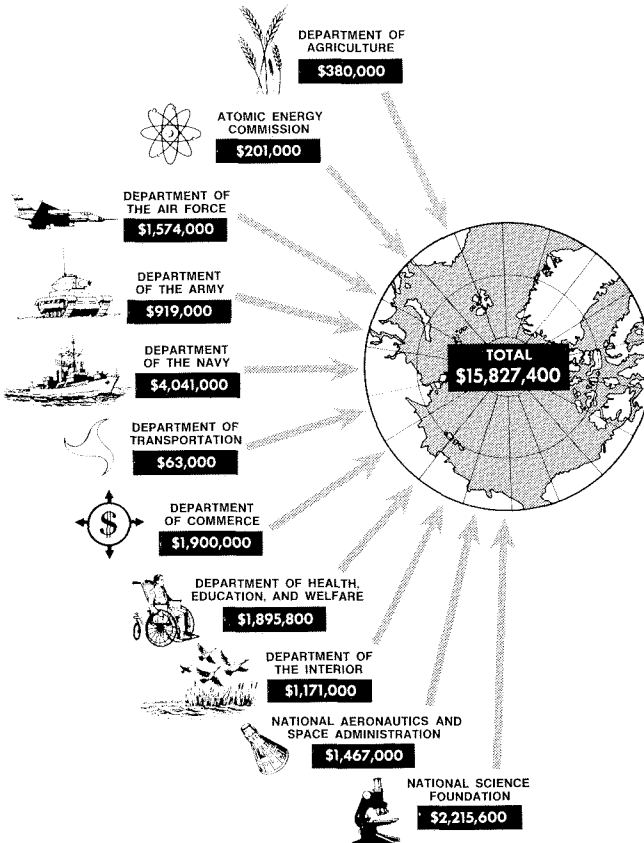


FIG. 1. Total funds expended on arctic research by the U.S. Government, fiscal year 1968.