Chrysosporium was evident as the incubation temperature decreased. Ten cultures of this latter fungus picked at random were identified as *Chrysosporium pannorum* (Link) Hughes 1958. It is cellylolytic, grows at low temperatures, and has been identified from Japanese Antarctic expeditions[16]. Although occasional rock surface temperatures above 32°C. have been reported in Polar regions[17], one might assume that in the Arctic where in general the soil temperatures in the summer remain well below 25°C., such fungal genera as *Chrysosporium, Mucor* and *Mortierella* would be more competitive and play a greater role in colonizing and decomposing dead organic matter than they would in more temperate climates.

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Ornithological Observations in the Askinuk Mountains and Scammon Bay area, Yukon Delta, Alaska

Our two-man party arrived at the village of Scammon Bay on 10 May 1965. Conditions were essentially still those of winter and the migratory birds, particularly cranes, geese and ducks, only began to arrive a few days later. In the course of 7½ weeks, the Askinuk Mountains were crossed on foot from north to south in three well separated transects; the coast from Scammon

Bay to Cape Romanzof, (western extremity of the Askinuk Mountains which extend 40 miles from east to west) and the north western shore of Korechik Bay were followed by boat. Eighty-seven species of birds were recorded; these included the Wheatear, Arctic Warbler, Spotted Sandpiper, Cliff Swallow, Varied Thrush, Myrtle Warbler, Rusty Blackbird, Bufflehead and Common Goldeneye. All but the first two are species which would not be expected beyond the tree line. Mr. M. Wotton, a reliable observer familiar with the species in Europe, saw a White Wagtail (one of the grey backed forms) on 16 June in the course of his two-week stay in the village.

Red Phalaropes were not seen often enough for worthwhile behaviour observations, but Northern Phalaropes were abundant, about 30 nests being found. It was noted that the egg laying interval varied from 24 to 48 hours and, contrary to a previous publication on this species, there was no evidence of territorial behaviour at all. Mating, aggressive behaviour and the distraction display of this phalarope were observed on numerous occasions.

E. O. HOHN*

RESEARCH AND DEVELOPMENT IN NORTHERN CANADA

Following is an excerpt from the address by Mr. B. G. Sivertz, Commissioner of the Northwest Territories, to the Council of the Northwest Territories, February 1965:

". . . In November, Council members visited the Inuvik Research Station and I am sure that you shared my pleasure in seeing this new development. It is the only facility of its kind in the Canadian North. There is, however, much other research going on and the total research spending runs to millions. This is very necessary. In fact, it is essential because scientifically northern Canada is a comparatively unknown region. There is pressing need for research. Without scientific research the resources of the North will remain little-known and little-exploited and any development will be accompanied by high costs, — or prevented by high costs. The main, in fact the only hope of reducing these costs substantially lies in research. Research implies discovering, collecting, and compiling reliable information on the North. Without information of this sort we cannot avoid errors, and there is no place in the world where mistakes prove more expensive.

"The benefits of research tend to be long-term rather than immediate. As a result, research is always in danger of being deferred in favour of more immediate calls on resources of men and money. This policy is both short-sighted and self-defeating. If planning for development is to be effective it must be based on sound information — on fact rather than on conjecture, on tests rather than hopes. Sound policies can be framed only in the light of adequate research. The role of research is to guide, and it should, therefore, precede development. It should not be carried out in retrospect in an attempt to provide explanations for errors, — but this is exactly what will happen if it is not done in advance.

"We should not expect research to lead to sudden improvements. Sometimes it does result in important innovations in materials or techniques, but usually its advances are in a number of small steps rather than a leap. Transportation methods evolve, communications become better, weather forecasts more reliable, foundations more stable, housing more comfortable. This is the usual path of progress, and research leads us along this path.

"We have difficult problems in the North and ignoring them will not make them easier. The fact that we have difficult problems may dismay the developer, but not the scientist. For the

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