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## Ornithological investigations of the antarctic tern

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Plans to study birds of the antarctic pack ice in conjunction with seal studies had to be abandoned because of mechanical difficulties aboard R/V *Hero*. While awaiting *Hero's* departure from Ushuaia, Argentina, we made numerous observations of birds on Islas Bridges, in the Beagle Channel. On November 15, many weeks behind schedule, *Hero* sailed for the South Shetland Islands.

From November 18 to November 21, in company with seal investigators Messrs. Robert J. Hofman and Nathaniel R. Flesness, University of Minnesota, we visited the following sites: Stigant Point, King George Island; Harmony Cove, Nelson Island; Waterboat Point, on the Danco Coast. On November 22, *Hero* arrived at Palmer Station. A large breeding colony of antarctic terns (*Sterna vittata*) was located on nearby Bonaparte Point, and we decided to remain at Palmer to study these terns following National Science Foundation approval of the change in plans. Messrs. Hofman and Flesness left Palmer the next day aboard *Hero* on its originally scheduled return trip to Ushuaia.

Study of the little-known antarctic tern (figure) went well and we were able to gather much data on the species breeding behavior. Preliminary findings indicate that although its breeding biology (clutch size, egg laying and incubation periods, role of the sexes in care of eggs and chicks, etc.) is generally similar to that of the arctic tern (*Sterna paradisaea*) and others of the



Antarctic tern.

genus, it differs remarkably from the others in its adaptations to its peculiar environment. The study ended prematurely when *Hero* left Palmer for a second time on December 12. The return trip to Ushuaia included stops at Deception Island, at False Bay (Livingston Island), and at Harmony Cove (Nelson Island).

What first appeared to be a disappointing season turned out to be a highly profitable one. With respect to terns and other charadriiform species, the breeding grounds near Palmer were by far the best of many study areas assessed. The study initiated at Palmer holds much promise for future investigation.

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## Bird sightings in Marie Byrd Land

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Bird sightings are not expected deep in the antarctic interior since there is no food source on the extensive continental ice sheet. At a camp on the Hollick-

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Mr. Rugh, in the Environmental Biology Program, The Ohio State University, is doing doctoral research in avian adaptations to polar environments. Last season he was with an Institute of Polar Studies glaciology team that did research reported on page 167 of this issue.