THE HAZARDS AND DELIGHTS OF BANDING AND OBSERVING BIRDS IN ANTARCTICA By George Lippert

Birds in Antarctica can quite distinctly be classified into three categories in their response to man. Some are very tame, some are very timid, and others are very vicious. This I learned my very first day at the new United States research station, Palmer Station, on the Antarctic Peninsula. This station is only about 600 miles off the tip of South America, in a relatively warm sector affectionately known as the "Banana Belt".

With my binoculars strung around my neck, I innocently set off on my first banding expedition. As I reached the crest of a rock-strewn hill, I chanced upon the nesting area of the Skua, a member of the jaeger family. The birds immediately became excited, and I knew nesting must be in progress. I continued on and they began screaming loudly and finally took to the air. Then, all of a sudden, I felt a gush of air past my head and heard a loud "whooshing" sound. Instinctively I ducked, and upon looking up saw a Skua bank sharply and dive straight for my face. Now this bird is about the size of a Cooper's Hawk, and I had no desire for a collision with it. All that was visible were two angry eyes, the open mouth and the fore edge of the wings. Again I ducked, and upon standing upright again, found that the entire colony of about ten birds had joined in the attack. I quickly left the area and sat down to ponder the situation. It was a very effective show of territorial defense.

Since this was one of the two species of birds whose young, Dr. William J.L. Sladen of Johns Hopkins University had requested us to band, a method had to be devised to minimize the chances of being struck by them. At the



At the left: adult Skuas; at the right, a Giant Petrel chick (white phase). All photos with this article by the author.

suggestion of John Ricker, a National Science Foundation representative who helped me with most of the banding, we put a long feather in our hats, and when the birds dove they would hit this rather than our heads.

After leaving the Skuas, I started to go down the hill by another route than that which I came up. Just as I started the descent, I heard a gagging noise. This was my introduction to the second species of bird we were to band, the Giant Petrel. Slowly I approached the nest on which this goose-sized bird was sitting, and it began to gag even more violently. When I was within three feet of it, I knew this was merely the priming of a pump, as a warm, oily, smelly stream of shrimp and assorted sea foods poured forth, covering my trousers. As John and I were to learn, these birds can seemingly swivel their heads 360 degrees, and with deadly accuracy, hit the target at a range of about six feet.

The Giant Petrel usually lays its single egg on a rather high spot and in more exposed areas than does the Skua. In the early stages of nesting it will readily desert the nest, but later on, when the chick is present, it is hesitant to do so. If an observer forces the bird off the nest it has a hard time getting its heavy body airborneunless there is a strong headwind. It will bounce from rock to rock, with its long wings outstretched, like a crippled piper cub, until it can get airborne. When it finally does get into the air it is extremely graceful.



Adult Giant Petrel

John Ricker and I finally devised a method of restraining the adult from vomiting while we banded the chick. He would approach the nest from upwind and I from downwind, and while I attracted the bird's attention, he would plunge forward and throw a rag over its head, and at the same time clamp the beak shut. Then I would band the chick; no easy job since the bands are "J" shaped and very stiff, and have to be wrapped twice around the leg. Then together we would jump back well out of range - most of the time. I was quite surprised to find out that within one year, at least six of the 224 birds we banded had been recovered in various parts of the South Pacific.

About 10,000 Adelie Penguins were nesting in the Palmer Station area. These birds are every bit as comical as cartoons make them out to be. Walking in a colony of them is like walking among a group of midgets dressed in tuxedos. If you venture too close to one that is nesting, it is quite capable of drawing blood with its sharp, conical bill. This rarely happens, however, unless they are unduly antagonized. Some individuals, even when not on the nest, can be quite aggressive, and will stand their ground when challenged for the right of way. Then again, others will meekly waddle out of the way. They are very curious and often waddle right up to a man to see what he is doing.

In water, penguins are as agile as fish, but on land they are quite clumsy. I never tired of watching them come ashore where the rocks dropped sharply into the sea. They would simply build up speed under water, propel themselves straight into the air and land upright on the rocks.

On land they walk rather clumsily and slowly because of their very short legs. In snow however, they can move quite rapidly by falling flat on their stomachs and tobogganing along, using the feet and wings like paddles.

Several less spectacular birds nest in this area also. Among them is the Wilson's Petrel, a small bird about the size of a Purple Martin. This bird is quite famous for its flights to the oceans of the northern hemisphere after it has finished nesting. I was quite surprised one day to see a Wilson's Petrel land on a perfectly open snow field and begin to burrow down. That evening I covered the hole loosely with snow, and when I investigated the next day it was open again. I kept this up for a few days, always with the same result. When the snow melted I found a burrow going under a rock, which had the same odor I had smelled so many times in similar habitat where the Leach's Petrel nests on islands off the coast of Maine.

Most birds in Antarctica feed singly or in small groups, but the Blue-eyed Corporant, a colonial nester like the penguin, is often seen in flocks of a thousand or more. One day I saw about one thousand of them lined up from the shore of one island to the shore of another, a distance of about one-eighth mile. One end of this line began to dive, and this continued wave fashion right across to the other island. But before the last one had gone down, the first ones were coming up, about 100 feet ahead of where they started. Then they dove again, and the process was repeated over and over. They were probably chasing and feeding on a school of shrimp or some other marine animal. Another method of feeding commonly used is the leapfrog method, similar to that seen in starlings and blackbirds in a field.

Other birds nesting in the area include the Dominican Gull, very similar to our Great Blackbacked Gull, and the Antarctic Tern, which is much like the Arctic Tern. Both of these generally nest among mosses, though the Antarctic Tern may occasionally choose a sandy beach.

A common winter bird, though rarely found in the summer, is the Sheathbill, a member of the sandpiper order (Charadriiformes). This bird is snow white, and looks more like a small white chicken than a sandpiper. Only two nests of this scavenger have been found near Palmer, though they are common throughout the Antarctic Peninsula.



Left: Adelie Penguin (Adult)

Below: Blue-eyed Cormorant (Adult and three chicks)



Birds that do not nest in this area, but do visit it occasionally, include the Gentoo and Chinstrap Penguins, and the Pintado and Snow Petrels.

Most people are curious to know why many of the birds are so tame, and I think the answer is that they have no really serious predators on land and thus have learned to fear nothing there. At sea however, the leopard seal takes many of them for food. It seems that penguins are quite aware of this danger at sea, and it is often impossible to force them into the water if they have not had a chance to scrutinize it closely.

All life in Antarctica is dependent on the sea. Diatoms are probably the start of the food chain, and are then eaten by several marine animals, notable among which is <u>Euphasia</u>, a shrimp which is the main food of the penguins. One of the reasons the Antarctic Peninsula is so rich in life as compared with the rest of the continent is that it is ice-free for long periods, and this allows more sunlight to penetrate the water and thus more plant growth occurs.

Along with the seals, the birds offered a major diversion to the small complement of men who spend the year at Palmer Station. Every morning when the garbage was dumped, and the skuas and petrels and gulls came in to feast, three or four faces could be seen peering out the window, and comments would be flying about the bahavior of these birds. Whenever someone thought he saw something different he would quickly call it to the attention of the biologists. It could have been quite a dreary stay and I think the birds did much to make it more enjoyable.

115 Giles Street, Ithaca, N.Y. 14850



WITH THIS ISSUE, A NEW EDITOR

This heading last appeared in the May-June 1956 issue of EBBA News, when Frank P. Frazier Sr. took over the editorship. This time, however, the change is not so radical as the Editor and Co-Editor have merely changed places, so to speak, and the former Editor will continue to assist and advise. We plan no immediate changes, but shall strive to maintain the high standards set for EBBA News, relying as always on the increasingly excellent cooperation of our readers.

Frank P. Frazier, Jr. - P.O. Box 147, Hanover, N.J. 07936

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