

worthy of note that I found the Whimbrel in small numbers on the sandy flats between Chanthaburi and Tha Chalaep, southeastern Siam, in May, 1937, and succeeded in collecting four specimens. Of these, three (taken on May 4 and 6) are good examples of *Numenius phaeopus variegatus* (Scopoli); the fourth, taken on May 4, is an equally good example of *Numenius phaeopus phaeopus* (Linnaeus).

The collection of an adult female of Macklot's Sunbird, *Chalcostetha calcostetha calcostetha* (U. S. N. M. No. 337143), in a mangrove swamp between Chanthaburi and Tha Chalaep, on May 1, 1937, makes an interesting addition to the small number of characteristically Malaysian species now known to have discontinuous distribution on the two sides of the Gulf of Siam, and goes far to lend credibility to Tirant's early record for the bird in Cochinchine, whence it has apparently not been reported in the modern period.—H. G. DEIGNAN, *U. S. National Museum, Washington, D. C.* [Published with the permission of the Secretary of the Smithsonian Institution, Washington, D. C.]

Avian leukosis and the Great Black-backed Gull.—In company with John Phillips, son of the late great duck authority, I was canoeing in Wellfleet (Massachusetts) Bay last December 11 when, rounding a spit of sand, we flushed up from it a veritable umbrella covering of gulls. However, one Great Black-backed Gull remained behind where it had toddled to the water. It swam very weakly when we approached it in the canoe; and, though its plumage appeared in excellent condition (which later closer scrutiny verified), it obviously was ill.

I stepped from the canoe into the shallow water, dropped over its head a piece of sacking to protect my fingers from its bill, and put the whole contrivance, gull and sacking, in the bottom of the canoe. To my surprise the gull offered no resistance. When we had reached the mainland I tied it by a string to a large stone while carrying the canoe across the beach to the car. Still the gull made no attempt to fly, although it did try to get to its feet, but unsuccessfully, as if its capture had drained away the little strength it had.

Returning to the house where I was visiting, I caged the gull and offered it a little bread and some boiled herring which it refused. By gently moving the gull with my hand I could see that its legs and feet were greenish blue instead of faintly pink; also that it was very thin, with its keel-bone sharply showing. Otherwise it seemed in good condition. Its plumage, as I have said, was excellent—firm, closely laid, a shining-pastel shade if such a combination is imaginable. It showed no signs of being 'oiled' as I had feared. Its eye was bright enough.

The day I found the gull was Monday. Wednesday I had to leave for New York. Because I did not care to kill the bird or set it free again to die, and because I could find no one willing to care for it, I put it in a large cardboard box and took it by car to Boston, by train to New York, and so on Thursday by train again to Cornwall, Connecticut, a trip of roughly four hundred miles.

Early Friday morning, the day following my return to Cornwall, I found the gull lying on its back in its cage, its feet stretched rigid in the air. It was not dead, however, and so I gently righted it. On Saturday I sought the advice of a neighbor, Mrs. Lee Garnett Day, who, I had been told, had successfully experimented with vitamin deficiency in animals, especially in birds. The gist of Mrs. Day's diagnosis and recommendations is as follows:

"The sea-gull appeared to have a partial paralysis of the legs which caused it to rest its weight on its elbows. In addition to this it suffered from malnutrition and constantly regurgitated its food. These symptoms seemed to indicate the possibility of a form of Avian Leukosis as well as Coccidiosis.

"In view of this I recommended a balanced mineral yeast combination put out by the Harris Laboratories. The yeast provided the B Complex vitamins which build up muscle tone.

"Considering the possibility of Coccidiosis being present, a 5% iodine solution in organic combination was added. Iodine destroys coccidia in the intestines, and also stimulates the glands, primarily the thyroid. It helped to supply the iodine lacking in the bird's diet. (Why iodine should have been lacking, it is hard to say. Could it have been possible that the gull had learnt to feed on garbage about the town of Wellfleet, and therefore have missed a sufficiency of sea-food?) In view of anemia resulting from either cause, a 5% compound of ferrous iron and copper in organic combination was recommended to be fed twice a week.

"I further recommended that the bird's daily diet of raw fish be soaked in a concentrated form of cod-liver oil."

Mrs. Day supplied the medicines, and I followed her instructions to the letter. Within two days the gull was standing up and seeming to retain its food which, with the medicine, had to be forcibly fed.

Within three or four days the gull was already beginning to feed freely, to bite the hand that fed it, and its feet, heretofore a greenish blue as I have described, took on a pinkish tinge. Within a week its keel-bone was markedly less obvious; it was consuming close to half a pound of fish a day. Within ten days it was fighting to get out of its cage.

By Saturday, the 12th of January, a month since I had taken it at Wellfleet, I was satisfied that it had recovered sufficiently to be liberated—that it had enough excess strength and medication to carry it from Cornwall to whatever seaboard it chose.

I 'fought' the bird out of its cage (there is no other word than 'fought' which can describe the healthy temper of the bird at this point). As soon as it was free, it began running down the snow-covered lawn against the wind and toward the valley in our view. But both because its wings were doubtless stiff and because it tripped over a footprint in the snow, it failed to clear a fence beyond the lawn. It then walked up-lawn from the fence where it had fallen. It seemed contented with its lot, 'roused out' its feathers several times, and consumed large quantities of snow although I had taken care to water it freely all the time that it was caged. It remained sitting on the snow throughout Saturday night.

Close-by where it sat there is a pigeon cote, and it is interesting to note that the presence of the gull, on the ground though it was, terrified the pigeons. I wondered whether the excessive fear of the pigeons might have in some way betrayed an atavistic fear of the Great Black-backed Gull *per se*, and thereby lend credence to the statements that such gulls do at times eat young birds.

Sunday morning was much colder, and by the time I came out of the house it was snowing hard. I had in my hand a piece of fish which I tossed to the gull. It did not deign to look at it, but with now-strengthened wings ran down the length of the lawn, cleared the fence easily, and was away, seeming—so large was its wing-spread—more like a pterodactyl than a gull.

The snow necessarily obscured my vision, making it impossible for me to see whether the gull alighted near by, and snow the following day, as well, made any search for it impossible. Tuesday, dawning clear, betrayed no signs of the gull at all. I like to think it found its way by river to the sea.—MONTGOMERY HARE, *Cornwall Bridge, Connecticut.*

Purple Grackles 'anting' with walnut juice.—The recent discussions of anting and supposedly substitute activities by birds make it seem worth while to de-