until they stood "knee-deep" in a water-sand mixture. Meanwhile, sand washed forward under the webbed feet and built up a raised arc just below the breast. This produced a nearly saucer-shaped depression in the sand approximately nine inches across and two inches deep, the deepest part being where the gull's "heels" rested.

After pumping, the gull stepped back onto firm ground, waited a few seconds, presumably for the water to clear, and then picked out certain items from the assortment which had been washed to the surface of the arc in front of it.

The gulls seldom worked close together. In some cases they wandered about making widely-spaced single "puddles," presumably prospecting for a good feeding area. In other cases, possibly where "pickings" were good, instead of making individual puddles they extended those already made. This seemed to be done by slowly edging backwards during the pumping. In this fashion sometimes six or eight puddles were created and successively obliterated, except for the last which remained to mark the site of the working. The position of each of the earlier ones was usually indicated by a semicircular arc of sand raised about one-half inch above the general level of the flat. After about five minutes' effort such a working was in several instances 20 to 24 inches long and the soil in it churned to the consistency of gruel to a depth of three and one-half inches. Previously, the writer had often encountered such workings during examinations of clam flats in other parts of Nova Scotia but did not know what they were.

The tide flat at Belliveau Cove is sandy throughout and when fully exposed is one mile long and one-half mile wide. About half its area below half-tide mark is covered by tide pools with an average area of four square yards and seldom deeper than two inches. That day the cove was occupied by 1000 to 1500 gulls, and puddling was very popular. Half the pools had puddles in them, although very few had more than one. They were seldom "singles," most had been extended until the total length of the working measured 18 inches.

The puddles were easy to recognize, not only because of their characteristic saucer shape but also because the sub-soil brought to the surface by the puddling was darker than the regular surface sand. Presumably all these features would be obliterated by the rising tide, except on very calm days.

Exactly what the gulls were eating could not be determined because they would not permit close inspection, and the writer had no gun to collect specimens. The beach is heavily populated with small soft-shelled clams, *Mya*, and clam drills, *Polinices*, and both these live in the upper few inches of sand during the day. Remnants of both these mollusks were found in regurgitated gull "pellets" collected from the beach on several occasions during the past summer. Obviously, the birds had access to food from below the surface—probably through the device of puddling just described.

The only record of similar behavior of gulls that has come to the writer's attention is that of Witherby *et al* (Handbook of Brit. Birds, 5: 86, 1941). In discussing the herring gull, they state that it exhibits "feeding habits common to several other species—tramping with both feet on wet sand of shore to bring up worms (also sometimes on turf, especially after rain: A. F. J. Portielje)." No detailed observations are given.

Puddling may be regarded as analogous with scratching which is so significant in the feeding of some of the gallinaceous species.—J. C. Medcof, *Atlantic Biological Station, St. Andrews, New Brunswick, Canada.*

Black-headed gull in Florida.—On March 2, 1948, while crossing Tampa Bay, Florida, on the St. Petersburg ferry we came upon a large concentration of gulls

feeding on some floating rubbish. Among the usual ring-billed gulls (*Larus delawarensis*), herring gulls (*Larus argentatus smithsonianus*), laughing gulls (*Larus atricilla*) and Bonaparte's gulls (*Larus philadelphia*) was a fine specimen of a European black-headed gull (*Larus ridibundus ridibundus*). Even though this is probably the first report of this Old World species for the state of Florida, I submit the observation with confidence; I have seen thousands of these birds in other parts of the world and had an excellent opportunity to observe all the necessary field marks on this Florida vagrant.—ALLAN D. CRUICKSHANK, *Rye, New York.*

Sooty tern and northern horned lark in South Carolina.—There was brought to me on September 25, 1947, an immature sooty tern, *Sterna fuscata fuscata.* It was taken alive by a young man at the Great Pee Dee River, 10 miles east of Florence, Florence County, South Carolina. Evidently this bird was blown in from the south by the tropical storm that struck the coast of South Carolina two days previously. Two weeks later this bird had become quite tame and ate fish and raw shrimp from our hands.

On January 26, 1946, I collected two female northern horned larks, *Eremophila alpestris alpestris,* from a flock of American pipits, *Anthus spinoletta rubescens,* feeding in an oat field on the Revel plantation about two miles west of Florence, Florence County. A male northern horned lark was taken on January 29, 1946.

Identification of the tern and horned larks was made by Alexander Sprunt, Jr. of the National Audubon Society and E. B. Chamberlain of the Charleston Museum.—H. L. HARLLEE, *1301 West Palmetto St., Florence, South Carolina.*

Winter record of ivory gulls, St. Jean Port Joli, Quebec.—The College Museum received, in the flesh, three adult ivory gulls, *Pagophila eburnea;* the birds were captured on March 3 and 4, 1947, at St. Jean Port Joli, Quebec. Two of the birds are now in the Museum's collection.—REV. RENÉ TANGUAY, *Director, Museum Ste. Anne de la Pocatiere, Province of Quebec, Canada.*

Status of roseate tern as a breeding species in southern United States.—As is well known, the distribution of breeding colonies of *Sterna d. dougallii* on the Atlantic seaboard shows remarkable gaps and is very highly localized. Particularly is this true in the southern states. If one reads the ranges given in "state" bird books of this region, he would get a completely erroneous idea. For instance, in the "Birds of North Carolina" (Pearson & Brimleys, 1942: 176) this statement appears, . . . "breeds from Nova Scotia to Virginia." Naturally, the assumption of the reader would be that it does not breed south of Virginia. In "Florida Bird-life" (Howell, 1932: 264) the range is given as "breeding . . . on the Atlantic coast of America from Sable Island, Nova Scotia south to Virginia." It is true that Howell, in the body of his text on the species, mentions the colony at Dry Tortugas, but *not* in his discussion of range. In "Birds of Georgia" (Odum, Stoddard, Tomkins *et al.* 1945: 43) there is listed but one occurrence in the state, this a late fall specimen. In "Birds of Alabama" (Howell, 1924) the species is not included in any way. In "The Bird Life of the Gulf Coast Region of Mississippi" (Burleigh, 1944) the species is likewise omitted entirely; there are no records. In "Bird Life of Louisiana" (Oberholser, 1938: 295) there is a record of a single bird, the only one for the state. Peterson's revised "Field Guide" (1947) gives the best indication of range, as he states that the species breeds "in widely separated localities from Nova Scotia to Texas." None of these authorities mention the Dry Tortugas in their "range" when, as a matter of fact, it is the *only* locality between Virginia and Texas where