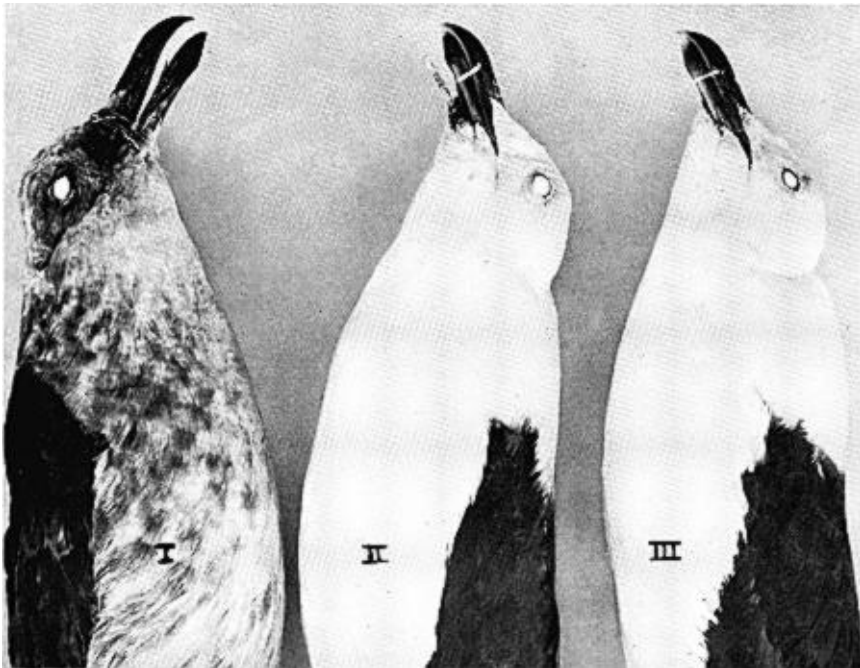


second year. It is unlikely that this species makes use of old nests which are not protected from the weather.—RALPH W. DEXTER, *Kent State University, Kent, Ohio*, 2 April 1962.

Injured Western Gulls.—While collecting nine specimens of Western Gulls (*Larus occidentalis*) to demonstrate the sequence of plumage change from the juvenile to that of the adult, we secured two gulls which evidenced odd circumstances involving the bill region. Gull I (Figure), a first year juvenile male, was collected on 30 August 1961, at Arroyo Burro Beach in Santa Barbara County. Upon examination of the specimen, we observed that the gull had a fish hook and line entangled around the head. The fish hook's barb is caught in the roof of the mouth penetrating the right maxillary palatine plate, with the shank of the hook circling the right side of the bill (Figure). The nylon leader is wrapped around the bill in a figure-eight pattern as follows: from the hook eye the line goes over the upper bill, from right to left, then through the mouth, wraps around the lower bill four times, passes over the upper bill again in reverse direction from left to right, into the mouth again, twists around two of the strands of leader already through the mouth 12 times, leaving two of the four strands free, out the left side and completely around the head passing below the eyes and across the nape and back into the mouth again, with a small piece hanging out the left side. The line has caused considerable injury to the sides of both the upper and lower portions of the bill. At the point where the right side of the mandible comes into contact with the arch of the fish hook the horny covering of the bill is fractured and broken away. The tongue was beginning to dry and as might be expected, the gull with its bridle was emaciated and



probably near death from starvation. Gull II, an adult female, was taken on 20 July 1961, at the Santa Barbara City Dump. When it was examined we found that the tongue protruded from under the bill through a round hole in the inter-ramal region, or the skin area between the fork of the lower bill (Figure). The hole is surrounded by thickened scar tissue and is an orifice through which the tongue probably moved back and forth to a limited extent when the bird used its bill. However, the distal half of the tongue is hard and dried from prolonged exposure, indicating that the gull probably could not withdraw its tongue into the mouth cavity, even though we were able to bend the tongue enough to move it back into the mouth and out again through the hole. There are no feathers around the opening. In spite of the externalized tongue the gull was in good body condition and also showed recent molt. From our examination of the specimen we believe that the external position of the tongue was not due to an abnormality in development, but the result of an old healed injury, perhaps a fish hook incident similar to that of Gull I. Gull III (Figure), an adult female, taken the same day and place as Gull II is a normal specimen for comparison.—JODI BENNETT AND MARY M. ERICKSON, *Department of Biological Sciences, University of California, Santa Barbara, California, 21 October 1961.*

A nesting of Amazonian terns and skimmers.—Once in about five years or so the River Amazon drops in the dry season (August to November) to abnormally low levels: 1961 was such a year. The Solimoes, or Upper Amazon above Manaus, carries a vast load of sand, silt, and mud, which is dropped on the bottom wherever the water is slack, and ultimately rises to water level. The river rises and falls some 40 feet, and in early September 1961 was already $2\frac{1}{2}$ feet below normal minimum and was falling at the rate of three inches a day. The M.V. *Venimos* went aground on a submerged bank at 8:30 AM 9 September, at the western end of Ilha Piranhas, the Island of "Cannibal Fish," about 500 land miles upstream from Manaus. A mile farther west an extensive sand bar had formed and was now above water level. A sizable colony of Large-billed Terns (*Phaetusa simplex*) and Black Skimmers (*Rynchops nigra*) had taken possession of it, and were beginning to nest there. Probably there were around 100 pairs of each species. Their "scrapes" were 3" to 4" deep and 8" to 10" in diameter. Indian women from a hut on the north bank, across the main channel of the Solimoes, took notice, and every morning at the streak of dawn were out on the island gathering the new-laid eggs. On 14 September they had gathered about 70 eggs of which 8 were skimmers' (*Cortaguas* or Cutwaters) and the rest terns' (*Gaivotas*, literally "gulls"). From this it seems probable that the skimmers were not yet in full production, and are normally behind the terns, a situation similar to that at Stone Harbor, New Jersey.

It would seem that, since the Amazon is virtually on the Equator, and the Ilha Piranhas is at Lat $2\frac{1}{2}^{\circ}$ S, Long $65\frac{1}{2}^{\circ}$ W, there is nothing to determine the nesting season except the behavior of the River. The birds nest while the River is falling, the sandbanks emerging and the time for rising water so far off that there is time to lay and incubate the eggs and to raise the young to the flying stage.

River pilots said this particular sand bar was not normally above water level and so far as they knew had never been seen before. The local Indians confirmed this. Thus the colony of skimmers and terns is a new one, and the birds had adopted it very promptly.

On 11 September, very early in the morning, four birds came aboard the stranded *Venimos*, and found the forecabin quiet and deserted. A large coil of rope covered with a tarpaulin seemed to them an acceptable substitute for the sand bar, from which pre-