tion to the bird's smallness and expressed his belief that it was a Mexican Cormorant (*P. olivaceus*). After comparing it recently with several female *auritus* and *olivaceus* he has identified it as the latter. Its bill measures only 45 mm. (base of culmen across to tip); its tail, 161. Only seven of its rectrices are of full length, but otherwise it seems to be in full breeding plumage. Since the bird I saw with this female appeared to be of about the same size, I think it must have been a Mexican Cormorant too. The species has not heretofore been reported from Oklahoma.—KENNETH J. STARKS, *Department of Zoological Science, University of Oklahoma, Norman.*

Great Blue Heron killed by Bobcat.—While ascending the Colorado River in an outboard motor boat, at Devil's Elbow in Havasu Lake National Wildlife Refuge on January 8, 1951, Leo K. Couch and I saw a Bobcat (*Lynx rufus*) catch a Great Blue Heron (*Ardea herodias*). At about five o'clock in the afternoon, when the canyon was already in shadow, the heron flushed from the Arizona side and flew across to the California side. It began struggling as it alighted on the rocky bank, as if its foot had been caught in a trap. At this juncture, the motor ran out of fuel and the boat stopped, so we looked at the bird with our binoculars. To our surprise, we saw that a large Bobcat had grasped it by its under side at the lower end of the neck. The cat turned its head to regard us for a few seconds, then began dragging its prey up the bank. It had some difficulty in doing this, as it stepped on the outstretched wings. In less than a minute it reached the top of the bank and disappeared behind a ledge. We deduced that it had been in a small cavelike hideout along the bank and that it had sprung as the heron, wholly unaware of its presence, had attempted to alight. As far as I know, the capture of the Great Blue Heron by the Bobcat has not hitherto been reported.—GALE MONSON, *Fish and Wildlife Service, P.O. Box 1717, Parker, Arizona.*

Feeding behavior of young American Bitterns.—In the spring of 1950 not far from Ann Arbor, Washtenaw County, Michigan, I found the nest of an American Bittern (*Botaurus lentiginosus*) in a small marsh. There were four eggs. The bird at the nest, presumably the female, refused to leave, so I caught and banded her (Biological Survey No. 35541942). Then I set up a blind seven inches from the nest. During the period of my observations from this blind (June 10 to 25 inclusive) the banded bittern was the only adult to appear at the nest. She swelled out her feathers and growled like a broody hen when I approached or left the blind, and pecked with such speed and finesse that she brought the blood repeatedly while I was counting the eggs under her. As long as I stayed in the blind, however, she paid little attention to me.

The first chick hatched shortly before 6:30 a.m. on June 11. The second had hatched by 2:50 p.m. that same day. The third hatched on June 13. One egg did not hatch. The feeding behavior differed in some respects from that reported by Gabrielson (1914. *Wilson Bulletin*, 26: 64), who described the feeding of several-day-old bitterns large enough to swallow fish, frogs, mice, etc., as they were regurgitated whole by the parent.

When twenty-four hours to eight days old, the chicks I observed jumped at the parent's bill and attempted to seize it in the manner described by Mr. Gabrielson; but they could seldom cope with the large chunks of food which fell into their bills, so this food often dropped to the nest. After the parent had regurgitated her store of food animals, she re-swallowed those which the young would not manage to get down, and presented this food later when partial digestion had made it more acceptable. The period of waiting varied from twelve to forty-five minutes—depending on the eagerness of the chicks as well as on the size of the food items. On two occasions the hungry chicks squeaked and jumped at the parent's bill so persistently that she regurgitated food before it was 'done' and she had to swallow it again.

Table 1 lists all of the food I saw the parent bittern bring to the young during their first seven days. I could not spend much time in the blind, so what I saw the parent bring was

TABLE 1

FEEDING BEHAVIOR OF THREE YOUNG AMERICAN BITTERNS

Date	Observation Period	Activities at Nest	Success of Feeding
June 11	6:30–8:45 a.m.	Parent brooded chick	No food offered
	2:50–3:45 p.m.	At 2:55 parent arrived; chicks became restless and squeaked	No food offered
June 12	4:45–7:00 a.m.	Parent on nest; chicks quiet	No food offered
	3:13–4:30 p.m.	Chicks restless under parent until, at 3:44, she regurgitated 4-inch fish	Fish too large for chicks, so parent re-swallowed it
June 13	4:00–5:10 p.m.	Parent brooded chicks; chicks squeaked softly from time to time	Continuous rain probably led parent to continue brooding
June 14	10:50 a.m. to 12:32 p.m.	At 11:26 parent arrived and settled on restless chicks	No food offered
		At 12:10 parent regurgitated 7-inch salamander and 3-inch fish	Chicks could not swallow either salamander or fish so parent re-swallowed them
		At 12:22 parent regurgitated above-named items again	Chicks got them down
	3:45–5:10 p.m.	Chicks slept until parent returned at 4:40. At 4:48 she regurgitated 4-inch fish	Fish too large for chicks so parent re-swallowed it
		At 4:48, parent regurgitated two partly digested frogs	Two chicks each promptly swallowed a frog
		At 5:10, parent regurgitated 4-inch fish again	Fish still too large, so parent re-swallowed it
June 16	2:45–3:50 p.m.	At 2:45 parent regurgitated two frogs—one partly digested, the other entire	Partly digested frog stuck in chick's throat; whole frog also too large
		At 2:46, parent regurgitated shapeless gob, probably a much-digested frog	Chick swallowed gob; parent re-swallowed two frogs, taking one from chick with some difficulty
		At 3:29, parent regurgitated two frogs again	Chick promptly swallowed one frog; another chick failed to swallow second frog; parent swallowed this frog again
June 17	7:30–8:40 a.m.	Parent brooded restless chicks until 7:55, when she regurgitated a 4-inch fish and a jumping mouse	Fish too large for chick, but mouse promptly swallowed. Parent re-swallowed fish
		At 8:40, parent regurgitated 4-inch fish again	Fish promptly swallowed by chick
	8:10–9:10 p.m.	Parent brooding; chicks quiet	

presumably only a small part of the total brought.—ESTHER (MRS. GEORGE) BYERS, *University of Michigan Museum of Zoology, Ann Arbor.*

Frigate-bird, Oystercatcher, Upland Plover, and various terns on the coast of Tamaulipas, México.—While studying and collecting vertebrates in the State of Tamaulipas, México from February 15 to June 15, 1949, we made three brief trips to the coast. From April 27 to 29 we visited the Barra Trinidad region, 8 miles north of the village of Morón. We could not stay longer because of lack of fresh water there. On April 25 and May 2 we visited the beach at Miramar, near Tampico. On May 9, Robins and Heed visited the village of Tepehuaje, some 20 miles south of Pesca and 80 miles north of Tampico (see World Aeronautical Chart No. 589, Tamiahua Lagoon Sheet, village of Tepehuaje de Arriba). Our base-camp at that time was 10 miles northeast of Zamorina, and the trip to the coast meant a 25-mile jeep ride over oil-prospecting trails.

Some of the birds we encountered on the coast are of special interest either because they have never actually been reported from Tamaulipas or because no one has found them breeding there. One of the latter category, the Willet (*Catoptrophorus semipalmatus*), George M. Sutton has already discussed (1950. *Condor*, 52: 135–136). The following also merit comment:

Frigate-bird, *Fregata magnificens*. Present in large numbers in the Barra Trinidad region. Most evident in the morning and in the evening dusk, when they did considerable soaring. During the afternoon they remained on the brush- and tree-covered shore of a large bar. They may have been nesting there, but we were unable to cross the lagoon to investigate. An immature male specimen taken at Tampico on April 23, 1923 (University of Michigan Museum of Zoology, No. 58976), has been identified by Pierce Brodkorb as *F. m. rothschildi*. Friedmann, Griscom and Moore (1950. "Distributional Check-List of the Birds of México," *Pacific Coast Avif.* 29) do not list Tamaulipas among the states from which this species has been recorded.

Oystercatcher, *Haematopus ostralegus*. Robins and Heed saw three Oystercatchers on the beach near Tepehuaje in company with Wilson's Plovers (*Charadrius wilsonia*), Black-bellied Plovers (*S. squatarola*), Willets, Turnstones (*Arenaria interpres*), and Sanderlings (*Crocethia alba*). Friedmann, Griscom and Moore (*op. cit.*, p. 89) state that this species is "to be sought in the lagoons of northeastern Tamaulipas."

Upland Plover, *Bartramia longicauda*. One was frightened by the approaching jeep from a grassy woodland road near a small village between our Zamorina camp and the coast, May 10.

Sandwich Tern, *Thalasseus sandvicensis*. Robins and Heed clearly saw two of these terns on the beach near Tepehuaje in company with one Royal Tern (*T. maximus*), several Black Terns (*Chlidonias niger*), and some Least Terns (*Sterna albifrons*). Near Barra Trinidad we saw ten Royal Terns on the beach and many more flying about the lagoon.

We wish to point out that, during the dry season at least, the coast from Pesca to Tampico is more easily accessible than is generally believed. At least one fishing company runs trucks regularly from Pesca to Tampico along a coastal route which we saw and used at Tepehuaje and, farther south, from El Sabino to Aldama.—C. RICHARD ROBINS, *Department of Conservation, Cornell University, Ithaca, New York;* PAUL S. MARTIN, *University of Michigan Museum of Zoology, Ann Arbor;* and WILLIAM B. HEED, *University of Texas Department of Zoology, Austin.*

Unusual water birds in Rockbridge County, Virginia.—In three previous papers in *The Wilson Bulletin* (1935, 47: 59–67; 1937, 49: 48–49; 1940, 52: 280–281) I listed 61 forms of water birds recorded in this Virginia mountain county. Two of these were supposed races of the Black Duck, but since 'Red-legged Black Ducks' are now believed to be merely highly colored individuals, only *Anas rubripes* should be listed. This brings the list to 60 forms, as of December, 1940.