severe and widespread failure of cone crops following two or more years of large crops, during which the nutcracker population in general, and the breeding population in particular, apparently increases significantly as a result of abundance of winter food." The same authors, reporting on a 1961 irruption in California (1964, Wilson Bull., 76: 10-17), make the following statement: "It is concluded that food is the proximate factor underlying irruptions of the Clark's Nutcracker and that these irruptions are not invasion migrations triggered by the same proximate factors which trigger ordinary migrations."

STOVALL MUSEUM OF SCIENCE AND HISTORY, UNIVERSITY OF OKLA-HOMA, NORMAN, OKLAHOMA 73069, 11 JUNE 1973.

GENERAL NOTES

Apparent predation by Golden Eagle at Great Blue Heron colony.—On the afternoon of 16 March 1973, while taking photographs at a colony of Great Blue Herons (Ardea herodias) at the east of Lake Eucha (Upper Spavinaw Lake) in Delaware County, northeastern Oklahoma, I watched a Golden Eagle (Aquila chrysaetos) as it alighted on one of the heron nests and appeared to eat the nest's contents.

The 52 nests of the colony were all in one huge 100-foot sycamore (Platanus occidentalis). Upon my arrival, all of the herons flew to a bluff about a quarter of a mile away, where they perched while I set up my camera equipment and partly hid myself. After about ten minutes, the herons began to return. Presently all were back, some of them busy with nest-building, others squatting on what probably were eggs. The date was almost certainly too early for chicks. According to Force and Koons (1930, Wilson Bull., 42: 119), Mrs. A. E. Gilmore collected a set of four eggs on 15 March 1923 in Tulsa County, but no data at hand make clear that eggs ever hatch that early in Oklahoma.

After I had been at my post for about 30 seconds, a sudden hush fell over the entire colony. All of the herons, obviously alarmed, stood up on their nests, remaining motionless for about 30 seconds, then off they flew in various directions as a large raptorial bird appeared, made straight for and alighted on the highest nest in the tree.

Through the 4x telephoto lens on my camera I positively identified the bird as a Golden Eagle. The golden sheen of its hind neck was clearly visible; its tail feathers were crossed by light-colored bands; and its legs were completely feathered down to the toes. Seemingly unalarmed by my presence, it immediately began to eat. From my position on the ground I could not tell what it was eating, for it was facing away from me with its head down.

It is barely possible that the eagle had flown in with prey, though I saw nothing in its feet as it approached the nest. At any rate, it raised its head after eating, scanned the area, and took wing. After circling several times it flew eastward until out of sight. Soon after its departure the herons returned to their nests and resumed normal activities.— James W. Lish, Oklahoma Cooperative Wildlife Research Unit, 404 Life Sciences Bldg., Oklahoma State University, Stillwater, Oklahoma 74074, 6 April 1973.

Spring arrival of Little Blue Heron in Oklahoma.—According to Sutton (1967, Oklahoma birds, p. 30), the Little Blue Heron (Florida caerulea) is a summer resident in Oklahoma from 30 March to 17 October. Like the Snowy Egret (Egretta thula) it is definitely migratory, there being no late fall or winter record for either species. The Little Blue may, however, return from the south well before the end of March. According to data filed at the University of Oklahoma Bird Range, nine adults were seen in Tulsa County, northeastern Oklahoma, on 30 March 1956 (John S. Tomer); three white birds were seen on the Salt Plains National Wildlife Refuge in Alfalfa County, north-central Oklahoma, on 27 March 1971 (John Grula); and 30 adults (no white birds) were seen at a well established heronry in Tulsa on 26 March 1968 (Forrest Romero and his wife Aline).

On 18 March 1970 William A. Carter, several members of his ornithology class at East Central State College, Virgie Fly, and I saw an adult Little Blue Heron on the Tishomingo National Wildlife Refuge in Johnston County, southeastern Oklahoma. Judging from the fact that all of these March sightings save the last are for the northern part of the state, and also from the fact that during my several years of residence in Johnston County prior to 1970 I never saw the species before 1 April, I suspect that most Little Blue Herons return directly to heronries in northern Oklahoma without stopping in the southern part of the state. Apparently there are no well established heronries in southeasternmost Oklahoma at this time.—Jenna Jo Hellack, Department of Zoology, University of Oklahoma, Norman, Oklahoma 73069, 15 November 1972.

Early spring date for Mississippi Kite.—On the afternoon of 9 April 1972, Preston Engle, his wife Anne, my wife Moryne, and I observed (without binoculars) a Mississippi Kite (Ictinia missisppiensis) flying near a grove of willows just back of the Ward Mall Shopping Center in Duncan, Stephens County, southwestern Oklahoma. The bird was moving in wide circles perhaps two hundred feet above the ground. The day was pleasant, there being very little wind. Sutton (1967, Oklahoma birds, p. 97) gives 18 April as the date of spring arrival for this species in Oklahoma. According to a summary of data filed at the University of Oklahoma Bird Range, W. M. Davis et al. saw a single bird just northwest of Norman, Cleveland County, central Oklahoma on 18 April 1961 (1961, Audubon Field Notes, 15: 422); that day the wind was from the south and strong.

I suspect that this kite nests close to Duncan, for several members of the Stephens County Audubon Society have reported sightings in this general area for the past several years.—John R. Craythorne, P.O. Box 745, Duncan, Oklahoma 73533, 9 October 1973.

Ground Dove specimens from Sequoyah, Kay, Noble, Major, and Jackson counties, Oklahoma.—The Ground Dove (Columbina passerina), a species said to be an "accidental visitant from the south and west" in Oklahoma (Sutton, 1967, Oklahoma birds, p. 235), appears to have invaded the state in some numbers in the fall of 1972, for I know of five specimens taken at widely separate localities in Oklahoma during that period. The earliest of these was shot during the first week of September about 8 miles southwest of Blackwell, Kay County, north-central Oklahoma, by a hunter who was after Mourning Doves (Zenaida macroura). The specimen (probably a

male, but sex organs too badly decomposed for recognition; weight 44.3 grams; gizzard, crop, and gullet packed with tiny black seeds; UOMZ 7422) was exceedingly fat. The second, a male, was shot by Charles Swank on 21 September in Noble County in the Lake McMurtry Hunting Area about 6 miles west and 5 miles north of Stillwater, Oklahoma. Mr. Swank now has this specimen in his possession. The third, a male (weight 38.4 grams; no fat; testes considerably enlarged; stomach filled with tiny black seeds; UOMZ 7421) was found dead in mid-October under a picture window at a farmhouse 10 miles west of Fairview, Major County, northwestern Oklahoma. Through the courtesy of Verne Broyles, Special Agent in Charge, Division of Law Enforcement, U.S. Fish and Wildlife Service, and of Keith McCartney, U.S. Game Management Agent, two of the above-discussed specimens were donated to the University of Oklahoma.

The fourth specimen, a female (weight 35.6 grams; no fat; ovary unenlarged; stomach, crop, and gullet filled with small seeds; UOMZ 7423), I collected the morning of 27 October while duck hunting along the Arkansas River 3 miles downstream from Robert S. Kerr Lock and Dam in Sequoyah County, eastern Oklahoma. The collection site was a large sandy "spoil area" formed during McClellan-Kerr Navigation System dredging operations and sparsely vegetated with willow (Salix spp.) and cockleburr (Xanthium pennsylvanicum). Among the willows much driftwood and other debris had been strewn by high water flows.

The fifth specimen, a male (Cameron College Museum of Zoology 361), was collected by Victor Heller 4 miles south and 2 miles west of Eldorado, Jackson County, southwestern Oklahoma, on 27 November. It was prepared by John Ault. I learned of it through Jack D. Tyler of the Department of Biology at Cameron College.

The Ground Dove has now been recorded in Oklahoma on eight occasions—first on 1 December 1956, when a male specimen was taken near Greenfield, Blaine County, central Oklahoma (Sutton, op. cit.); again on 26 March 1967, when one was seen in Lawton, Comanche County, southwestern Oklahoma (Halloran and Halloran, 1968, Bull. Oklahoma Orn. Soc., 1: 18-19); again on 20 December 1970, when one was seen near Okay, Wagoner County, northeastern Oklahoma (Norman, 1971, Bull. Oklahoma Orn. Soc., 4: 34); again on each of the five occasions discussed above. According to Sutton (op. cit.), there are no records for Arkansas. The collection site of my Sequoyah County, Oklahoma, specimen is only about 15 miles from the Arkansas state line.

Agent McCartney has requested that I inform readers that Oklahoma's dove season is for Mourning Doves only. Taking of Ground Doves is, therefore, in violation of both federal and state laws.—Jerry C. Sturdy, Route 4, Sallisaw, Oklahoma 74955, 28 May 1973.

Pileated Woodpeckers desert nest after encounter with Black Rat Snake.—
On 8 April 1971, while conducting a field research project on the nesting birds of the George and Flora Carter farm, 7 miles northeast of Ada, Pontotoc County, central Oklahoma, James T. Godwin found the nest of a pair of Pileated Woodpeckers (Dryocopus pileatus) in a dead stub about 30 feet up in a large living sycamore (Platanus occidentalis) near a tributary to Muddy Boggy Creek. Between 8 April and 18 May, Godwin and I visited the nest on 16 dates, seeing

at least one adult at the nest-hole on each visit. At no time, however, did we ascertain what was in the nest.

On 18 May I went to the nest-tree by myself. I approached cautiously, hoping to photograph one or both of the adult birds. When about 30 yards away, I noticed that the male woodpecker was moving excitedly about the nest, sometimes on the upper side of the stub, sometimes on the lower, but always within 3 to 10 feet of the nest-hole. The bird's attention seemed to focus on a sort of cavity on the under side of the stub about 1½ feet below the nest-hole and on an opening directly opposite from this cavity. As I watched, the bird flew down to the cavity below the nest-hole, rapped the wood there sharply, moved out of sight around the stub, called several times, reappeared at the top of the stub (about 4 feet above the nest-hole), and flew back down to the opening opposite from the cavity below the nest-hole. The stub must have been somewhat hollow at that point.

For about 20 minutes the bird remained in this position. Believing that I might get a photograph, I tried moving closer. Suddenly the bird shifted position a little, at the same time driving his bill through the opening on the upper side of the stub, when out of the cavity below him fell a Black Rat Snake (Elaphe obsoleta) about 3½ feet long. The snake dropped from branch to branch through a tree that grew under the sycamore, lower, lower, under constant attack from the woodpecker—finally from the lowest branch to the ground, a fall of 8 feet. Intent on driving the snake off, the woodpecker flew to a fencepost near the ground, calling loudly. I tried to catch the snake, which disappeared in a tangle of roots overhanging the creek. My rush forward frightened the woodpecker, which flew off cackling. As if in response, the female bird popped from the nest-hole and also flew off, following her mate. I had seen the snake well enough to identify it and to ascertain that there were no lumps in its body.

By 18 May, Godwin and I had had the nest under observation for 40 days. The incubation period of Dryocopus pileatus is said to be 18 days (Burns, 1915, Wilson Bull., 27: 284; Hoyt, 1957, Ecology, 38: 246), the fledging period 22 to 26 days (Reilly, 1968, Audubon illustrated handb. Amer. birds, p. 272). Had the nest contained large young on 18 May, and had the snake eaten one or more of them, the snake's body would surely have had at least one noticeable lump in it. Perhaps the cavity below the nest-hole was the snake's retreat. Perhaps, governed by instinct, the snake was waiting for a time when neither parent bird would be at the nest. Kilham (1959, Wilson Bull., 71: 191) discussed a snake of this species that "remained close to the nest of a pair of Pileated Woodpeckers . . . over a period of five days" in Maryland. He stated that on one occasion "the male woodpecker had his head and neck well out [of the nest-hole as if trying to see the snake a foot away and around the curvature of the stump. Neither animal appeared to be excited. The snake moved with great slowness, taking 28 minutes to descend to the ground where it disappeared in the vegetation before I could catch it. Subsequent observation indicated that the Pileated Woodpeckers were successful in raising their young." Kilham expressed his belief that such a snake might not attempt to enter the nest while it held eggs or small young, for at that stage in the reproductive cycle the nest contents would be guarded continuously, but that when the young

were older and the parent birds away gathering food, the snake "might be more dangerous."

Whether the rat snake ever actually entered the Pontotoc County Pileated's nest or not, the woodpeckers deserted it. We did not see the big birds in that particular area again all summer, though we did see a pair from time to time in lowland woods along a stream not far away. In this new area we had not seen a Pileated Woodpecker before.

Dryocopus pileatus is known to be resident in Pontotoc County (East Central College Field Notes; notes of W. A. Carter et al.), but the above-reported observations are the first on the species' breeding in the county. This is surprising in view of the fact that bird students have seen the fine species in the county during every month of the year.—William A. Carter, Department of Biology, East Central State College, Ada, Oklahoma 74820, 14 February 1972.

Say's Phoebe in Oklahoma in February.—In late afternoon on 14 February 1973 (air temperature about 50° F., north wind 10-15 mph), while driving back to the section-line road after gathering pellets of Barn Owls (Tyto alba) in an abandoned farm house 5 miles south and ¼ mile west of Headrick, Jackson County, southwestern Oklahoma, I noticed a flycatcher on a fence-post just ahead of me. Stopping the car, I inspected the bird, whose rusty underparts and black "wagging" tail instantly declared it to be a Say's Phoebe (Sayornis saya).

I observed the bird for about 15 minutes. Four times it sallied out over the field of cotton stubble, hovered a bit, caught an insect, and returned to the fencepost. The insects it caught were flying; it did not pick anything up from the ground. I did not hear it call.

The date is exceptionally early. On 18 March in 1927 and on 20 March in 1926 R. C. Tate recorded Say's Phoebe at Kenton, Cimarron County, far western Oklahoma (Nice, 1931, Birds of Oklahoma, p. 120). On 20 March 1958 L. L. Byfield saw a Say's Phoebe near Wakita, Grant County, north-central Oklahoma (1958, Audubon Field Notes, 12: 365). On 22 March 1958 G. M. Sutton collected a molting male specimen with unenlarged testes along Cave Creek 4 miles south of Reed, Greer County, southwestern Oklahoma. The species has not heretofore been reported from Jackson County.—Brad Carlton, 5949 N.W. 27th St., Oklahoma City, Oklahoma 73127, 18 March 1973.

Prothonotary Warbler at Tulsa in September.—On 3 September 1972 I saw a Prothonotary Warbler (Protonotaria citrea) near Yahola Lake in Mohawk Park, Tulsa, Tulsa County, northeastern Oklahoma. The date was erroneously reported as "September 31" (!) in American Birds (1973, 27: 81). In view of the fact that only three other fall sightings of the species for Oklahoma are on record—male in first winter feather (UOMZ 4301) collected along Illinois River near Watts, Adair County on 1 September 1960 by J. D. Ligon; three seen in Mohawk Park, Tulsa on 15 September 1934 by Edith R. Force; one seen at Sapulpa, Creek County on 19 September 1936 by Edith R. Force—the sighting for 3 September 1972 should be reported in full and the "September 31" sighting corrected.—Anne Reynolds, Box 45486, Tulsa, Oklahoma 74145, 29 March 1973.