three episodes of nest predation on eggs and young by Western Meadowlarks, when weather and food availability were almost certainly favorable, and Terres (1956) saw an Eastern Meadowlark in New York "pull off and eat bits of flesh" from the carcass of another meadowlark recently killed by a passing vehicle in July, 1939. Perhaps meadowlarks have a greater propensity toward predation and scavenging than is commonly recognized. The picture may become clearer when sufficient data have been published.

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600 E. 24TH ST., PO. BOX 8, TISHOMINGO, OKLAHOMA 73460, 31 AUGUST 1990.

GENERAL NOTES

First documented occurrence of Clark's Grebe in Oklahoma. — The two color morphs of the Western Grebe (Aechmophorus occidentalis) have recently been split into two distinct species (American Ornithologists' Union, 1985, Auk 102: 680–681). The dark morph was retained as A. occidentalis, the Western Grebe; the light form was designated as Clark's Grebe (A. clarkii), both as originally described by G. N. Lawrence (1858, in Baird, S. F., J. Cassin, and G. N. Lawrence, Reports of Explorations and Surveys... for a railroad from the Mississippi River to the Pacific Ocean, Vol. 9, pp. liv, 892, 894-895). Studies by J. T. Ratti (1979, Auk 96:573–586) and G. L. Nuechterlein (1981, Auk 98:335–349) had demonstrated a high degree of assortative mating. The two forms are sympatric, but the Clark's Grebe becomes rare in the more northerly breeding populations. Eastern vagrants appear to be mostly or entirely of A. occidentalis, though data are scarce (American Ornithologists' Union, 1985, loc. cit.).

The two forms differ in a number of characteristics. The Clark's Grebe is

paler with the white of the throat often extending up to the crown, surrounding the eye and including the lores. Its bill is a bright yellow or orange-yellow. The Western Grebe is darker in general coloration, with black (or gray) on the lores and surrounding the eye of most individuals. Its bill is greenish-yellow with substantial suffusion of horn on the culmen and mandibular rims.

Because distinctions between the two morphs were not made at the specific level before, the status of the two in Oklahoma is uncertain. The two specimens of "Western-type" grebes in the bird collection of the Oklahoma Museum of Natural History at the University of Oklahoma are both A. occidentalis, the Western Grebe. Recent observations attempting to discern the species of the "Western-type" grebe in the state have been exclusively of the Western Grebe.

Thus, it was of interest that an observation of a suspected Clark's Grebe was made by Webster on 25 October 1988 at Lake Hefner, in Oklahoma City, Oklahoma County, Oklahoma. Two Western Grebes were also present on the lake, but not always in association with the Clark's.

Webster notified several persons of his find. On 26 October 1988, between 1630 and 1700 hours, he and Grzybowski located the Clark's Grebe near and among some Gadwalls (Anas strepera) and American Wigeons (Anas americana) out from the western shore of Lake Hefner. It was carefully studied in the late afternoon sunshine. The long, pointed orange-yellow bill and the white in the lores and around the eyes were noted. Very little horn coloration was present on the culmen. The black or gray of the crown and face extended down to the eye, or slightly above it — but definitely not below it.

Direct comparisons were not made with the Western Grebes, but they were soon located on another part of the lake. The differences in bill color and facial pattern were contrasted with the Clark's Grebe noted only a few minutes earlier.

Both the Clark's and Western grebes remained until about 10 November. A number of observers saw them, including John G. Newell, Mitchell Oliphant and Phil Pearce. However, the birds were usually well out on the lake, and could not be well studied.

The observations provided here represent the first known occurrence of Clark's Grebe in Oklahoma. A written description, and a drawing made in the field, was accepted by the Oklahoma Bird Records Committee. However, because the grebe remained far out on the lake, identifiable photographs were not obtained. Thus, A. clarkii is placed in hypothetical status on the list of Oklahoma bird species. Observers are encouraged to examine "Western-type" grebes for the possible occurrence of Clark's Grebe in the future. — Joseph A. Grzybowski, 1701 Lenox, Norman, Oklahoma 73069, and Jeffrey D. Webster, 3131 North 1st St., H-2, Durant, Oklahoma 74701, 3 October 1990.

Raptors catching objects in midair. — Near noon on 30 August 1978, at the Public Service Company Lake 7 miles southeast of Lawton, Comanche County, southwestern Oklahoma, the senior author was lying upon the ground watching ducks through a spotting scope. All at once, he heard the scream of a Red-tailed Hawk (*Buteo jamaicensis*) overhead. Rolling over onto his back, he saw three Red-tails about 100 feet up, flying toward the southwest. A breeze

from the northeast was blowing at about 10–15 mph. Two of the birds were flying side by side, the other trailing. One of the lead birds veered toward the other, causing it to drop a small stick about four or five inches long and perhaps an inch in diameter. The aggressor swooped halfway to the ground and effortlessly caught the stick with its talons. Clemons could distinguish the two lead birds because one was missing a central tail feather. The hawks resumed their original heading when suddenly, the bird that had earlier released the twig turned sharply toward the one now bearing it. The stick fell free once more, only to be snatched up by the intruder: the roles of the two had been reversed. This action was repeated once more before the birds disappeared from view toward the southwest. The trailing hawk did not participate in this "stick catching" behavior, but maintained its distance from the other two. This entire sequence of events happened within only two or three minutes. All three birds were marked alike in "typical" adult red-tail plumage. In the diffuse but bright sunlight, the brick-red of their tails shone through clearly.

In three separate incidents in the northwest section of the nearby Wichita Mountains Wildlife Refuge, Tyler and others watched eagles behaving in similar fashion. On 23 January 1975, an airborne subadult Golden Eagle (Aquila chrysaetos) swooped down and broke a small branch from a tree. Twice it flew high up, released the stick, then stooped to catch it in midair. One of these incidents occurred near Buffalo Springs, the other about 2 miles to the southeast, just south of Black Bear Mountain. On 17 December 1977, between 1455 and 1510, Tyler observed an adult Golden Eagle flying above Pinchot Peak repeatedly drop a twig about a foot long and catch it before it had fallen very far. The stick finally fell too far for the big raptor to pursue. The temperature was about 50°F and a light south breeze was blowing. In late January about 1982 (day bright and calm but very cold), Claudine Daniel saw a subadult Bald Eagle (Haliaeetus leucocephalus) engage in this behavior near Hollis Pond.

Shortly before noon on 23 May 1976, Tyler was studying a Common Black Hawk (Buteogallus anthracinus) as it soared at eye level high above Copper Canyon in the Sierra Madre Occidental of southwest Chihuahua, Mexico. The elevation here is more than 8000 feet above sea level. An object assumed to be prey this hawk held tightly in its feet. Closer inspection, however, revealed that it was a pine cone, which the bird several times let go, then plummeted down and retrieved in the thin air as Tyler watched, spellbound. — Mike K. Clemons, Rt. 1, Box 128, Cache, Oklahoma 73427, and Jack D. Tyler, Department of Biology, Cameron University, Lawton, Oklahoma 73505, 20 April, 1990.

A pair of Pileated Woodpeckers in the Wichita Mountains Wildlife Refuge, Comanche County, Oklahoma. — On 11 June 1990, Charles Clemons and Jim Malinowski reported to personnel at the Wichita Mountains Wildlife Refuge Headquarters in Comanche County, Oklahoma, that they had seen a Pileated Woodpecker (*Dryocopus pileatus*) immediately to the west, along Headquarters Creek. On 12 June, assistant refuge manager William McCoy saw the woodpeckers in the same area, and notified me of them.

On 13 June, while fishing this stream about 2030, I flushed a Pileated Woodpecker from a grove of black walnut trees (Juglans nigra) growing in a mature postoak (Quercus stellata)—blackjack oak (Q. marilandica) forest with numerous deadfalls. I watched it fly upstream in swooping, woodpecker-like fashion. Because of its large size and dark color, I first thought it was an American Crow (Corvus brachyrhynchus), a common resident of the refuge. However, as it took flight again, I saw the characteristic whitish bases of the primaries as it flew into a stand of oaks about 200 yards away. After it alighted, I heard its loud drumming and the diagnostic wuk-wuk-wuk call. Shortly afterward, two Pileateds flew out of the thick canopy and disappeared from view, but I was unable to distinguish the sex of either. Because I am a native of southcentral Nebraska, the Pileated Woodpecker was a new bird for me.

At 0945 on 14 June, I again saw both birds flying upstream to the walnut grove, this time only about 20 yards away. Again, they were impossible to sex in flight. It was the last time I saw them together. I felt strongly that they were a mated pair, so I spent several hours searching the heavily forested creek bottom for a nest-hole. During this time I neither observed nor heard them.

For another week or so, I occasionally observed one of the woodpeckers in a dead oak snag near the little bridge over Headquarters Creek just northeast of headquarters. A few times, I heard one of them drumming. Twice, I saw a secretive male Pileated in the walnut grove. It was his custom to fly into this grove in the evening, call once, then fly upstream (southwest) toward Sunset Campground before returning again to call briefly. This behavior was repeated several times at 15 to 20 minute intervals. I last heard the call on 20 June.

This eastern species was first reported from the Wichitas by James H. Gaut (1904, Reports of birds observed and collected in the Wichita Forest Reserve 11 March-28 May 1904... U.S. Natl. Mus. records, Wash., D.C.) who collected a female (USNM 195664) on Mount Scott in February 1904. He noted that it was "scarce about the Wichita Mountains but a small number are found in the oak timber and along Medicine Creek." It was next recorded by Laura W. Brown on 26 October 1952, who saw three in the southeast corner of the Wichita Refuge (Brown, 1972, Bull. Oklahoma Ornithol. Soc. 5:20-21). It has nested in the state as far west as Woodward County (Hobbet, S., and R. Hobbet, 1988, Bull. Oklahoma Ornithol. Soc. 21:11-12). The breeding record closest to the refuge was in northeastern Stephens County (McGee, L. E., and F. Neeld, 1972, Bull. Oklahoma Ornithol. Soc. 5:5-7). — David C. Ely, Rt. 1, Box 26, Superior, Nebraska 68978, 23 August, 1990.

Breeding pair of Vermilion Flycatchers in Cimarron County, Oklahoma. — On 17 May 1990, while searching for birds about ½ mile southeast of Watson's Crossing, located 8 miles east of Kenton in northwest Cimarron County, Oklahoma, I happened upon a pair of Vermilion Flycatchers (Pyrocephalus rubinus). About 1830 that day, what I thought was a male Vermilion Flycatcher flew by me, but I didn't positively identify him until he landed in a nearby cottonwood tree (Populus deltoides). It was then that I noticed the female perched nearby. The pair chased each other about for a short time, then

the female disappeared. I left soon thereafter, when the light began to fail.

The following day, I returned to the area but was unable to find the flycatchers again during an hour and a half of searching. A strong northwest wind, at times blowing in excess of 40 mph, hindered my search.

On 25 May 1990, ten persons from the Oklahoma City Audubon Society traveled to Cimarron County for the weekend. Thula Parkhill, who had heard of my sighting through John Newell of Oklahoma City, alerted the group to the presence of the flycatchers, although she did not know their exact location. The following morning, Nancy Vicars independently discovered the male Vermilion Flycatcher. While attempting to show this bird to others, she and Ron Rosser spotted the female. The partially-completed nest was soon located when the group saw the female bird carry nest material to a dead cottonwood limb about 20 feet up. The male remained nearby. Later that day, Steve Metz, who had learned of the pair's presence, also saw them at the nest. During the next two days, Mitch Oliphant photographed them.

The following week, a dozen people, most of them biologists with the Oklahoma Natural Heritage Inventory, visited the Black Mesa country. Several of them were able to observe the flycatchers between 1 and 3 June. On 1 June, the female was seen to stand above the nest, apparently shielding the eggs from excess solar heat. Within the next two days, however, she began incubating them. Darrell Pogue, David Certain, Steve Sheffield and John Shackford observed courtship behavior by the male as he flew skyward above the nest-tree on 3 June. With much flapping of wings — but little forward progress — he rose from about 15 feet to 50. But, instead of settling earthward, he hovered directly above the cottonwood for 8 or 10 seconds, only then folding his wings and dropping swiftly into the tree.

On 20 June, Shackford and John E. Skeen, nongame biologist for the Oklahoma Department of Wildlife Conservation, returned to the nest and found the flycatchers, now with three half-grown young in the nest. Shackford noted that for the female, the time between landing at the nest and depositing food into a nestling's mouth was usually remarkably brief, less than a second, as opposed to several seconds for the male. On one occasion, food the male brought was refused altogether. Food items observed being brought to the nest included an inch-long lepidopteran and a large fly. The female settled over the young at 2048 and was still there at 2103, apparently on the nest for the night.

The next day (21 June), Cimarron County game ranger Larry Green and Shackford observed the pair feeding young. That evening, at 1942, the female came to the nest and remained until Shackford left at 2002. Again, she appeared to have settled in for the night. Her arrival this evening was 20–30 minutes before sunset, perhaps due to high winds. Shackford spent several hours on this date and on the following morning photographing the adults, nest and young. Several photos reveal some grey feathers in the center of the male's red breast. For this reason, the bird was thought to be in first breeding plumage. Bent (1963, Life histories of North American flycatchers, larks, swallows, and their allies, U.S. Natl. Mus. Bull. No. 179, Wash., D.C., p. 305) states that "Probably... the fully adult [male] plumage is not assumed until the [first]

postnuptial molt [in the bird's second calendar year] . . ."

This was the last date on which the birds were observed. Although no one checked to verify fledging, Shackford believed the prospects were good when he last observed the nest. Nor did anyone return to the area to check for a second nesting by the pair, a not uncommon occurrence for this species (see Sutton, G. M., 1967, Oklahoma birds, Univ. Oklahoma Press, Norman, p. 350). The above apparently represents the sixth nesting for the species in Oklahoma. It has nested in Cimarron County on three previous occasions, at least two of which produced young; successfully once in Lincoln County; and unsuccessfully once in Major County (Tomer, J. S., 1983, Bull. Oklahoma Ornithol. Soc. 16:1-3; Grzybowski, J. G., 1986, Amer. Birds 40:136; Shackford, J. S., pers. comm.). Two other probable nestings are known where apparent family groups were seen, one in Bryan County, the other in Washington County (see Sutton, G. M., [1982], Species summaries of Oklahoma bird records, Oklahoma Mus. Nat. Hist., Univ. Oklahoma, Norman). This southwestern species has nested near Clayton, Union County, in northeasternmost New Mexico (Hubbard, J. P., 1978, Revised check-list of the birds of New Mexico, New Mexico Ornithol. Soc. Publ. No. 6, Albuquerque, p. 48), but Cimarron County is as far northward as the Vermilion is known to have bred in the United States. - Jeffrey D. Webster, 3131 N. 1st St., H-2, Durant, Oklahoma 74701, 5 September 1990.

Blue Jay kills nestling House Sparrow. — In our back yard in Lawton, Comanche County, Oklahoma, we have a Purple Martin (*Progne subis*) house containing 16 compartments. During the summer, martins occupy most of them, but in 1990, two cells were taken over by House Sparrows (*Passer domesticus*).

At about 1730 on 30 May 1990, while sitting on our patio watching the graceful aerobatics of the martins, my husband and I noticed that a Blue Jay (Cyanocitta cristata) had alighted in our sycamore tree (Platanus occidentalis) nearby. Suddenly, it flew to the martin house, landing on a lower ledge adjacent to one of the sparrow cubicles. The jay spread its wings, flared its tail feathers, and inserted its head into the nest-hole. We watched with amazement as it extracted a sparrow nestling and flew away, prey in beak. As the jay flew over our covered swimming pool, it dropped the baby sparrow to the pool cover, but quickly circled, landed on the cover, retrieved the chick, and retreated back to the sycamore tree. Within moments, we saw the chick's limp body fall to the ground. We hastened over to examine the tiny corpse, and found that it had been decapitated. My husband, recovering from the shock of this rather violent incident, picked up the sparrow carcass and deposited it in a trash can. We turned our attention again to the yard. The jay swooped down from the tree to our fence, where it looked about, obviously searching the place where the sparrow had landed. Not finding it, the jay flew back to the martin house, apparently intent on taking another chick. This time, however, we ran toward the bird house, shouting and waving our arms to frighten the jay away.

For the next two days, we kept the martin house under close surveillance. A Blue Jay attempted several more raids, but the Purple Martins thwarted each one. As many as six martins at a time circled the house, chattering and diving at the jay, causing it to retreat. We subsequently saw no more jays in our yard while nestlings occupied the martin house.

Blue Jays are famous for their depredations on the eggs, the young, and occasionally the adults of small birds. Johnson and Johnson (1976, Wilson Bull. 88:509) reported that a Yellow-rumped Warbler (Dendroica coronata) was killed by a Blue Jay in central Texas on 16 March 1975 during a warm spell when food or climatic stress were probably not contributing factors. In central Oklahoma, Jerry Redmond watched a Blue Jay attack and peck an adult House Sparrow to death on 14 May 1976 in Norman, Cleveland County. The time was about 0800. After the sparrow ceased struggling, the jay flew to a tree with its prey and decapitated it (1977, Bull. Oklahoma Ornithol. Soc. 10:13–14). — Chieko Tedford, 1613 NW 79th St., Lawton, Oklahoma 73505, 5 June 1990.

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