- Robins, J. D. 1971. A study of Henslow's Sparrow in Michigan. Wilson Bull. 83:39-48.
- Smith, R. L. 1963. Some ecological notes on the Grasshopper Sparrow. Wilson Bull. 75:159-165.
- Sutton, G. M. 1934. Notes on the birds of the western panhandle of Oklahoma. *Ann. Carnegie Mus.* 24:1-50.
- Verser, D. W. 1990. Henslow's Sparrow in northeast Oklahoma. Bull. Oklahoma Ornithol. Soc. 23:9-12.
- Whitmore, R. C. 1979. Short-term change in vegetation structure and its effect on Grasshopper Sparrows in West Virginia. *Auk* 96:621-625.
- Zimmerman, J.L. 1988. Breeding season habitat selection by the Henslow's Sparrow (Ammodramus henslowii) in Kansas. Wilson Bull. 100:17-24.

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## **GENERAL NOTES**

Swallow-tailed Kite in McCurtain County, Oklahoma.—While conducting field research on the Ouachita dusky salamander (Desmognathus brimleyorum) at Beaver's Bend State Park in southeastern Oklahoma on 7 June 1993, my assistant Mike Tiernan and I chanced to see an adult Swallow-tailed Kite (Elanoides forficatus) soaring over the roadway adjacent to the Broken Bow Reservoir spillway. In size and flight behavior, the bird was similar to a Mississippi Kite (Ictinia mississippiensis), but differed in having a deeply forked tail and black trailing edges on the primary and secondary feathers. Otherwise, the plumage appeared to be light gray. We consulted a National Geographic Society field guide (1987, Washington, D.C.) to rule out other species.

We watched the kite from about 1400 to 1405 in good light from approximately 200-300 m, using Minolta 7 X 35 binoculars. It was a humid, partly cloudy day and the temperature was 23°C (67°F).

Schaefer (Bull. Oklahoma Ornithol. Soc. 21:29-30, 1988) summarized the few records for this species in the state. Twentieth century sightings other than that reported herein have been made in Oklahoma, Caddo and Texas counties.—Doyle L. Crosswhite, Department of Zoology, Oklahoma State University, Stillwater, Oklahoma 74078, 12 June 1993.

Attacks by adult Least Terns on chicks.—Within the city limits of Tulsa, Tulsa County, northeast Oklahoma, Dorthy Norris and Aline Romero watched in astonishment as an adult Least Tern (Sterna antillarum) attacked a tern chick for two or three minutes on 29 June 1991. The observers, watching from near 15th Street and Riverside Drive in Tulsa, witnessed the attack on a sandbar in the Arkansas River. The young bird was apparently killed, as Norris, watching through her binocular, could detect no subsequent movement by the chick.

Two days later, on 1 July, I observed similar behavior by two adult terns nearby: the location was also within the city limits of Tulsa, on a man-made island in Zink Lake, a body of water formed by the Arkansas River. That day I saw one adult tern peck viciously several times at a 3 or 4 day-old chick, then pick the chick up and carry it a few steps before dropping it; this sequence was repeated several times and continued for one or two minutes before the first adult tern flew away. The other adult, which had been standing nearby, then approached the chick and repeated the same actions. During these attacks, the chick flapped its wings and kicked desperately, attempting to flee its assailants. After the second adult took wing, the chick did not move; whether or not it was dead, I could not say. The day this occurred was sunny and warm (75-80°F). I watched these events through a 30-power telescope and an 8-power binocular from about 200 yards away.

During 1991, 29 pairs of Least Terns hatched 62 chicks on the island in Zink Lake. To my knowledge, no other birds were nesting there. Even though I have monitored these terns for the past 15 breeding seasons for at least two hours a day, I have never before observed such bizarre behavior.—Fred R. Pianalto, 1501 Kirsten, Apartment A, Springdale, Arkansas 72762, 29 September 1991.

## Possible excavations in mesquite by Downy and Red-bellied woodpeckers.—

Mesquite (*Prosopis juliflora*) is well known for its hard wood. Preston (1961, North American trees, Iowa State Univ. Press, Ames, p. 271) describes it as "very heavy; hard; close-grained..." It is interesting therefore that the Ladder-backed Woodpecker (*Picoides scalaris*) excavates nest cavities in it regularly. The hardness of mesquite normally prevents clawing mammals such as the raccoon (*Procyon lotor*), opossum (*Didelphus virginianus*) and domestic cat (*Felis catus*) from enlarging nest entrances, thereby limiting their depredations on eggs, young or adults.

During the early 1980's, we spent several years studying a small population of Ladder-backed Woodpeckers in mesquite stands in Kingfisher and Canadian counties of central Oklahoma. Harden developed a light-and-mirror apparatus which we could place inside Ladder-back nest cavities to determine contents. On 4 May 1982, we located a fresh nest-hole that was too small to admit our apparatus. We eventually determined that it was occupied by a Downy Woodpecker (*P. pubescens*) with five young. From the foregoing evidence, we concluded that the occupant species had dug this cavity. Because of the tough quality of mesquite wood, we were surprised at this finding, as was Dr. George M. Sutton of the University of Oklahoma, whom we later consulted.

About 2015 on 17 April 1993, Shackford was investigating a dense stand of mesquites about a mile northeast of the Lake Altus dam in Kiowa County, southwestern Oklahoma, when an exceptionally large tree caught his attention. Of the several trunks, one in particular looked promising as a potential nest site for Ladder-backed Woodpeckers. It was more than eight inches in diameter at chest height, sloped outward and downward at that level, and offered an unobstructed flyway. These characteristics had proven useful earlier in predicting where a Ladder-back might build a nest. As Shackford approached the trunk, a male Red-bellied Woodpecker (*Melanerpes carolinus*) bolted from a cavity 12 feet up in one of the other trunks. Within seconds, a Downy Woodpecker shot out of a hole five feet high in yet another trunk! The Red-belly returned about 10 minutes later and reentered the hole, where it apparently had a nest. Shackford carefully identified it to make certain that it was not a Golden-fronted Woodpecker (*M. aurifrons*). The

entrance appeared fresh and was noticeably larger than typical for a Ladder-back's nest. The obvious conclusion was that a pair of Red-bellies had dug out this cavity either partially or entirely, perhaps by enlarging an old Ladder-back hole.

Because the light was waning, Shackford did not remain to see whether or not the Downy Woodpecker returned. The opening from which it had flown, however, neither appeared to be recently formed nor of appropriate size (i.e., small enough) for that species. It more closely resembled an old Ladder-back cavity.

Therefore, in addition to Ladder-backs, both Downy and Red-bellied wood-peckers appear to be physically able to penetrate mesquite wood when digging nest-holes. This surely requires a great deal of energy, some of which could be conserved if the Red-bellies merely enlarged an old cavity.—John S. Shackford, 6008-A Northwest Expressway, Oklahoma City, Oklahoma 73132, and Warren D. Harden, 2136-A West Brooks, Norman, Oklahoma 73069, 4 August 1993.

Conspecific harassment of a leucistic Barn Swallow.— Leucism is a condition in which all pigments in a bird's plumage are severely reduced. Leucistic birds appear very light in color but not so white as albinos, which lack pigment entirely. Birds exhibiting this and other forms of aberrant plumage coloration, such as albinism or melanism, are often the target of harassment by others of their own species (Nero 1954; Terres 1980; Elliott 1981; Harris 1983).

On 23 September 1993 we observed a wholly leucistic Barn Swallow (*Hirundo rustica*) being harassed by conspecifics in a large flock of migrating swallows at a commercial turf farm near Porter in Wagoner County, eastcentral Oklahoma. We observed the bird, both perched and in flight, from 1750 to 1805.

This swallow's overall color was very light beige or creamy white. Its nearly pure white primaries were brighter than the rest of the bird, as were the rectrices, insofar as we could tell. Slightly darker than the underparts were the back and head. The throat showed a very faint orangish color, noticeable while the bird was perched or flying close by. The bird's identity as a Barn Swallow was evident from its slim body, flight behavior and deeply forked tail.

When discovered, the leucistic swallow was perched on a cable attached to one of the sod farm's massive sprinklers. Resting nearby along the same cable were roughly 150 other Barn Swallows, 20 Cliff Swallows (*Hirundo pyrrhonota*), three or four Bank Swallows (*Riparia riparia*), and three Tree Swallows (*Tachycineta bicolor*). Several hundred other swallows were milling about. A neighboring Barn Swallow snapped once at the leucistic individual, throwing it off balance and forcing it to flap its wings to stay perched.

After 20 to 30 seconds on the cable, the leucistic bird, along with many of the other swallows, took flight and remained airborne for 15 minutes. It was repeatedly chased by from one to five other Barn Swallows which followed it for a time, then let it escape, only to have other swallows resume the chase. Pursuits lasted from a few seconds to half a minute or so. Some of the harassing birds made casual passes while others trailed close behind the odd bird, snapping at it. Although the white swallow appeared to be chased by conspecifics almost 50 percent of the time, we observed no physical contact. Possibly because of the sheer numerical preponderance of Barn Swallows, we saw no other swallow species harass this bird.

Among published accounts, harassment of birds with abnormal plumage has been documented in Barn Swallows with striking frequency. Evenden and Strong (1950), De Balsac (1951), Terres (1980), and Ellis (1981) all described wholly or partially albino Barn Swallows subjected to attacks by swallows with normal plumage. In addition, such outstanding individuals may face other disadvantages, such as increased conspicuousness to predators, weakened feather structure and loss of potential breeding partners (Campbell and Lack 1985).

Aberrant plumage among Barn Swallows does not appear to be highly unusual. A search through indices of *The Zoological Record* for the past 20 years revealed 20 published records of albinism and partial albinism and six accounts of leucism in *Hirundo rustica*. Only two of these were from North America, with most of the remainder from Great Britain. In his compendium of avian albinism in North America, Gross (1965) listed 67 records for the family Hirundinidae out of a total 1,847 records. In Britain, Sage (1963) found that this family contained more instances of albinism than all except two others. However, Hanebrink (1985) did not include the Barn Swallow among 156 albinistic individuals of 33 species recorded in Arkansas from 1968-1985. There is one other published record of albinism among Oklahoma Barn Swallows: in 1968 a pure albino was collected near Willis, in Marshall County, south-central Oklahoma (Page 1969).

## LITERATURE CITED

Campbell, B., and E. Lack, eds. 1985. A dictionary of birds. Buteo Books, Vermilion, South Dakota.

De Balsac, H.H. 1951. Comportement d'oiseaux normaux envers des mutants. *Alauda* 19:225-226.

Elliott, G.D. 1981. Albinos harassed by own species. Brit. Birds 74:266.

Ellis, N. 1981. Albinos harassed by own species. Brit. Birds 74:266.

Evenden, F.G., Jr., and R.M. Strong. 1950. Albinistic barn swallow in Benton County, Oregon. Murrelet 31:11.

Gross, A.O. 1965. The incidence of albinism in North American birds. *Bird Banding* 36:67-71.

Hanebrink, E.L. 1985. Reports of albino birds in Arkansas since 1968. Arkansas Acad. Sci. Proc. 34:124-128.

Harris, R.D. 1983. Albinistic red-breasted sapsucker. Western Birds 14:168.

Nero, R.W. 1954. Plumage aberrations of the redwing (Agelaius phoeniceus). Auk 71:137-155.

Page, R. 1969. An albino barn swallow. Bull. Oklahoma Ornithol. Soc. 2:22-23.

Sage, B.L. 1963. The incidence of albinism and melanism in British birds. Brit. Birds 56:409-416.

Terres, J.K. 1980. The Audubon encyclopedia of North American birds. Alfred A. Knopf, New York. 1109 pp.

—James H. Withgott, Department of Biological Sciences, University of Arkansas, Fayetteville, Arkansas 72701, and Jeri A. McMahon, 311 Bayou Road, Fort Gibson, Oklahoma 74434, 23 October 1993.

Tree Swallows nesting in Stephens County, Oklahoma.—On 28 May 1993, John and Moryne Craythorne and I discovered a pair of Tree Swallows (*Tachycineta bicolor*) utilizing a cavity in a black willow snag at Lake Humphreys, northcentral Stephens County, southcentral Oklahoma. The snag was in the water about 8-10 feet from shore near a well-used road that leads to the fishing house. We observed the birds again on 3 June. An Eastern Bluebird (*Sialia sialis*) was perched on one of the snags as though competing for the same hole. On 13 June, three members of the Oklahoma City Audubon Society and 10 members of the Stephens County Audubon Society watched the swallow pair going and coming from the nest hole. On 19 June, my husband Ernest and I saw the swallows feeding nestlings. Several wide-open mouths were waiting whenever a parent bird returned with insects. On 26 June, heavy rain clouds were gathering and we observed a dozen or more Tree Swallows, some flying, others perched on overhead powerlines, dead tree limbs nearby, even on the road beside our car. The cloud produced a heavy downpour as we left.

On 27 June, the Craythornes observed four fledgling Tree Swallows perched on an overhead wire that were fed three times by adults. Near noon on 14 August, they estimated that a flock of swallows in the area contained 200 or more birds. Most appeared to be Tree Swallows. They did not hear swallow chatter, although the dead trees were full of birds. No Tree Swallows were subsequently seen.

J.G. Newell (1979, Bull. Oklahoma Ornithol. Soc. 12:24) reported the first nesting of this species in Oklahoma from Lake Carl Etling in Cimarron County on 29 June 1979. He and others watched a pair carry food to, and fecal sacs from, a cavity in a large dead cottonwood standing in the lake.

There are a number of nesting records for this species at the Sequoyah National Wildlife Refuge, Sequoyah County, eastcentral Oklahoma. On 30 April 1983, Dr. Fred M. Baumgartner and members of the Oklahoma Ornithological Society watched several Tree Swallows carrying food into the cavity of a snag in Robert S. Kerr Reservoir on the refuge. Dennis E. Prichard, then Outdoor Recreation Planner for the refuge, observed a pair taking food into this cavity throughout the second week of May. By the end of May, however, all activity there had ceased. Adult Tree Swallows were observed in the area toward the end of May, but no immature birds were detected. Contacts with local birders led Pritchard to believe that Tree Swallows had nested on the refuge during previous years.

Jeri A. McMahon, James and Marion Norman, Ron Sullivan, Bernice Jackson, Jerry Sisler, David Gill, Tom Roberts and Laura Hunnicutt have recorded Tree Swallows on the Sequoyah Refuge; near Vann's Lake in Wagoner County; and at Fort Gibson Dam in Cherokee County; on the following dates: 1 June 1988; 27 May and into June 1989; 5 March 1991; 9 May 1991; and 8 November 1991. Dates in 1992 included 8 March, 18 April and 19 December. Tom Roberts found them near Vann's Lake on 18 March 1993.

Members of the Dogwood Trails Audubon Society in Fort Smith, Arkansas, erected 43 nesting boxes for Tree Swallows on the Sequoyah Refuge prior to 1990. These were mounted on steel posts that were driven into old stumps. Almost all of the boxes were used, most by Tree Swallows, but two were taken over by Prothonotary Warblers (*Protonotaria citrea*) and one by a Tufted Titmouse (*Parus bicolor*).

Nesting Tree Swallows in Oklahoma may be more prevalent than generally believed. They should be looked for in summer near impoundments throughout the state.—Frances Neeld, 1219 Elder, Duncan, Oklahoma 73533, 21 September 1993.

American Crow predation on nestlings in Carter County, Oklahoma.—At about 1100 on a mild morning in June 1992, I heard the insistent food-begging calls of a juvenile American Crow (Corvus brachyrhynchos) in woods not far from my farm home in Milo, Carter County, southcentral Oklahoma. One of the parent crows appeared to be frantically searching in all directions and from tree to tree for food in order to feed this young bird. Occasionally, the other parent helped. When they found nestlings of other species, they were quick to snatch them up and fly to their offspring, which would temporarily quiet down after consuming these live tidbits. Soon the young crow would begin its squawking anew and this hunting behavior would be repeated. I watched the parent crows feed several nestling American Robins (Turdus migratorius), Scissor-tailed Flycatchers (Tyrannus forficatus) and even Mississippi Kites (Ictinia mississippiensis) to their voracious youngster over the course of about two weeks. In the previous four years, not a single American Robin had fledged on my property. I suspect that this was at least partly due to crow predation.

On one occasion, I watched the Mississippi Kite pair "dive-bombing" the area from which I could hear the crow's food-begging calls. As I approached, the young crow circled closely overhead, making loud alarm cries, while both parent birds remained about 100 feet away. I could see that the young crow's plumage still retained some down among the contour feathers. The kites left that same week.

While considering the above episode, I recalled that crows raided a Green Heron's (*Butorides striatus*) nest east of my house sometime in the 1970s. In their wake, they left several broken eggshells and one embryo on the ground.

During several years of close surveillance, I have made the following observations about the crows in my area. They begin to nest around mid-April, but only after the emergence of enough foliage to offer concealment. When returning to their nests, they approach with stealth, apparently to avoid attracting potential nest predators. Hatching occurs during the last two weeks of May. Raids by parent crows on nestlings of other species do not normally occur until only one or two pre-fledgling young remain in the nest. It is difficult to approach mature crows closer than about 100 yards. I have been able to do so only by 1) using an owl decoy, or 2) staking live cats in the open, or 3) having another person leave a parked vehicle while I remained inside.

During the fall of 1934 and 1935, near Chickasha in Grady County, central Oklahoma, I watched flocks of crows flying six to eight abreast that stretched from horizon to horizon as they flew to roosts between 1530 and 1730. A major well-known roost near Fort Cobb is less than 40 air-miles to the northwest of Chickasha and the Washita River winds along this route. At this time of year, I assumed that the crows fed primarily on corn and maize as well as pecan and cotton insect pests.—Jack Freeman, Box 95 HCR, Springer, Oklahoma 73458, 17 April 1993.

First House Finch nests for Cleveland County, Oklahoma.—On 29 April 1992, I discovered a pair of House Finches (Carpodacus mexicanus) feeding four recently fledged young on the campus of the University of Oklahoma, Norman, Cleveland County, Oklahoma. The birds were approximately 6 m up in a large eastern redcedar tree located just east of the Oklahoma Museum of Natural History Bird Range. This represents the first documented House Finch nest for this central Oklahoma county.

The young birds were incapable of sustained flight and, although they could flutter weakly from one branch to the next, they preferred to hop or climb. Whenever a parent bird arrived with food, all four fledglings began begging loudly while trying to approach the parent. During one observation, the adult male fed a young bird almost continuously for over 90 seconds. The male seemed to be stuffing food from his own gullet down the fledgling's throat. He would pause briefly, quickly wipe his bill once or twice on a branch, then resume cramming food deep into the gaping mouth. Whenever the male stopped, the fledgling again begged and wing-fluttered. The female seemed much less attentive to the young, feeding them only about once for every four times the male did so.

The next day, I again observed the House Finches feeding their fledglings. One of the young birds flew from the cedar tree to a nearby highline wire (approximately 6 m away), landed safely, then returned almost immediately. The other fledglings were also flying more proficiently from branch to branch.

A search of the cedar tree and an adjacent pine whose branches intertwined with it revealed what I believed to be the finch's nest. It was approximately 4 m up in the pine, bulky, somewhat dilapidated, and composed of grass, dry leaves, and a piece of ribbon.

At least three other adult House Finches (a male and two females) were in close proximity to the family group, sometimes even perching in the same tree. The second male consistently sang within 10 m of the parent male. Only once did I notice hostility between any of them. A male landed within a meter of a singing male on a highline, and the latter immediately flew up into the air, swooped down toward the newcomer, and pursued it over a nearby roof. I continued to see three to nine House Finches around the museum buildings through July.

I had observed adult House Finches in the vicinity of the museum almost daily since 2 February 1992, foraging and roosting in pine and redcedar trees. At intervals throughout the day during February and March, males sang for long periods from the tops of trees, buildings, or poles. Several times during this period, I observed a male involved in courtship displays with one to two females as described by Ehrlich (1988, The birder's handbook, Simon & Schuster, N.Y., p. 646). These displays usually took place on the roof of the Mammal Range 30 m north of the Bird Range or on top of nearby pines.

In 1993, five to eight finches could be observed daily around the museum buildings. I found a nest containing three young birds on 2 May. By the 16th, all had fledged successfully.

Both the eastern and western populations of House Finches have recently moved into the central part of the state (Tyler, J.D., 1992, *Proc. Oklahoma Acad. Sci.* 73:33-35). Although it is impossible to determine which population these nestings represent, it may be just a matter of time before this species becomes a common

breeder in central Oklahoma.—Victoria J. Byre, Oklahoma Museum of Natural History, University of Oklahoma, 1335 Asp, Norman, Oklahoma 73019, 23 June 1993.

Henslow's Sparrow in Tulsa County, Oklahoma.—As a spring and summer project in 1993, the authors decided to explore several extensive tracts of tallgrass prairie in Tulsa County to determine whether or not breeding populations of Henslow's Sparrow (Ammodramus henslowii) were present. We first consulted with Donald W. Verser, who had earlier documented nesting in adjacent Osage and Washington counties (1990, Bull. Oklahoma Ornithol. Soc. 23:9-12). Then we compiled recent and historical records for the county. Baumgartner and Baumgartner (1992, Oklahoma bird life, Univ. Oklahoma Press, Norman, p. 414) listed five records between 1924 and 1940. Tulsa Audubon Society files contained two recent sightings: one on 26 October 1986 by J.D. Webster and D.A. King, another on 28 July 1989 by D.W. Verser, M. Droege and J.C. Hoffman.

We surveyed suitable habitat in the northern part of Tulsa County, then selected six large stretches of prairie for study. The criteria we used to define "suitable" were: those tracts containing at least 100 acres of relatively undisturbed native prairie vegetation (without structures and roads) that had not been burned or heavily grazed within the past two years. We decided to conduct the preliminary searches after dark because one of the best methods to detect Henslow's Sparrow is to simply listen for the weak, insect-like call of the bird after dusk. It is one of only a few prairie species in which the male sings after dark, often all night (Ehrlich, P., D. Dobkin, and D. Wheye, 1988, The birder's handbook, Simon and Schuster, Inc., N.Y., p. 568). The call, which sounds like "tis-slick" is all but obscured by the raucous songs of the other prairie singers, particularly Dickcissels (Spiza americana) during the day. After all the others have quieted at dusk, Henslow's are surprisingly easy to hear, particularly on windless nights.

After a few evening trips to our study areas, we heard our first Henslow's Sparrow on 31 May. We could discern at least two separate birds singing. The location was about 150 yards (135 m) west of the intersection of North Sheridan Road and 166th Street North. On 24 June, we recorded one of these individuals on cassette tape at about 2130. We revisited this site during the day on 26 June and counted ten Henslow's Sparrows, a few of which we photographed. The elusive birds frequently perched on tall stalks of grass or dock and were audible at close range. On 10 July, James W. Arterburn found one immature bird and 13 adults there.

At only one other location in Tulsa County did we discover Henslow's Sparrow. It was about ½ mile east of North Lewis Avenue near its intersection with 176th Street North. We counted five individuals there, but were only able to search from the road. Judging from our limited success, there are probably other small colonies present in some of the larger tracts of native tallgrasses in northern Tulsa County. Further investigation is warranted.—Patricia Seibert, 2145 S. Florence Avenue, Tulsa, Oklahoma 74114, and Jo Loyd, 6736 E. 28th St., Tulsa, Oklahoma 74129, 30 August 1993.