

A LIST OF THE BIRDS OF THE CAMPUS OF THE UNIVERSITY OF OKLAHOMA

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The original prairie of the campus of the University of Oklahoma was radically changed in so far as its relation to birds was concerned by the first president—David R. Boyd, who had trees planted over a large portion of it in the early nineties; on account of this admirable activity, this place became a paradise for nesting birds.

Norman, the seat of the University of Oklahoma, is situated in Cleveland County near the center of the state, about lat. 35° 15' and long. 97° 30'; its elevation is 1170 feet, its average rainfall varies from 30 to 35 inches. It is in the austro-riparian life zone. The campus consists of 167 acres of level land, forty of which were given by the people of Norman in 1892 and twenty in 1902; the sixty acres south of this original tract were obtained in 1914 and forty-seven acres further to the south purchased in 1925. On the first sixty acres the trees, which are mainly elms and locusts, were planted in groves; a small piece of unbroken prairie—two or three acres—is still in existence in the northwest corner; each spring this glows with color from the native flowers. The second sixty acres belonged to President Boyd and were planted by him at the same time as the other area; a double row of trees was placed around the tract and three quadruple rows across from north to south; these are elms, locusts and silver maples. In the southeast portion there was a wet weather pond near where the stadium now stands; this was largely filled up in 1916. After the University acquired this land, the west quarter was planted with young trees of many kinds and much shrubbery set out near the greenhouse in the northwest corner.

The last forty-seven acres is used for outdoor military instruction and a polo field; it contains a number of scattered trees and a very small pond at the southeastern corner. Almost no bird study has been conducted on this tract.

There is the most lamentable lack of records as to the former bird life of the University campus. From the accounts of explorers who passed through Cleveland County a hundred years ago—Long, Abert and Washington Irving—we can imagine what birds must have frequented this tract of prairie: the eagles, vultures and ravens that followed the buffalo and antelope, the cranes and herons, plover and curlew that must have rested by the pond. It seems probable that the nesting birds in those days and until the settlement of the land were Upland Plover, Killdeer, Prairie Chickens, Mourning Doves, Nighthawks, Horned Larks, Cowbirds, Meadowlarks, Grasshopper Sparrows, Lark Sparrows and Dickcissels.

"In 1892 all the area in and around Norman was treeless," according to information given me by Dr. Boyd. "There was not much tall grass, i. e., blue stem. The quarter section on which the University was located had been partly 'broken out' and had some crops which furnished cover for the bobwhite." "When we set out the first trees (in 1893) there were no woodpeckers to get the insect enemies and they could hardly survive

the borers. Finally I thought of the plan to haul a number of large dead trunks of cottonwood trees—beginning to decay and full of insects, and I 'planted' them in different locations. It was not long till the woodpeckers and other birds discovered them and they soon dug into the old trunks of trees and found food and made cavities for nests and inside of a year several nested; they soon settled the borers and other insect enemies."

"By 1901," Mr. C. D. Bunker of the University of Kansas wrote me, "the trees on the campus were hardly large enough for the nesting of Robins and Mourning Doves, as they were mere saplings and the entire ground under and among them was cultivated the year around. A few Orchard Orioles nested there, but I do not believe that Robins stayed through the summer at that time."

Twelve years later when we first came to Norman the trees had grown large and there was a wealth of summer bird life in consequence. Unfortunately I took few notes until August 1919.

In April and May 1919 Dr. H. H. Lane's class in ornithology made a census of the bird nests found on the 120 acres that then constituted the campus. The results of two of these were as follows: Bobwhite, 1; Mourning Dove, 200; Yellow-billed Cuckoo, 1-3; Scissor-tailed Flycatcher, 1-2; Blue Jay, 3-5; Baltimore Oriole, 2-4; Bronzed Grackle, 40; English Sparrow, 7-26; Lark Sparrow, 2; Dickcissel, 1; Bell Vireo, 6-10; Yellow Warbler, 1; Mockingbird, 8-9; Catbird, 1-3; Brown Thrasher, 10-14; Robin, 16-19; Bluebird, 1; a total of 17 species and 327-368 individuals. This list covers two months and hence, in many cases must have recorded two or even three nests (where there were failures) of the same pair. It also seems probable that many dove nests were recounted.

So far as I know such a comprehensive census has not been repeated since then. In 1922 on June 14, 17, and 21, Dr. E. D. Crabb and his class in ornithology made a count of all the occupied dove nests on the 120 acres except on the grounds about the greenhouse; they found 59.

We have been able to add 11 species to the list of nests found by Dr. Lane's class: Hairy Woodpecker, Red-headed Woodpecker, Western Kingbird, Wood Pewee, Cowbird (i. e. eggs), Red-winged Blackbird, Orchard Oriole, Cardinal, Migrant Shrike, Texas Wren, and Plumbeous Chickadee. This makes a total of 28. The Painted Bunting undoubtedly nests, the Meadowlark used to, other species probably do. Of these 30 birds that we know have nested on the campus, 23 must be new acquisitions since the planting of trees and shrubs. The Robin is an entirely new breeder in the region during the last twenty years; the Western Kingbird first nested in Norman in 1923.

About 1920 the campus probably supported the largest population of nesting birds; since then the pruning of many of the trees, the removal of others and also of shrubbery, the cutting down of most of the osage orange hedge, and the building of a dormitory on the site of the greenhouse garden, have materially reduced nesting places and also cover for migrating birds. The chief compensation lies in the young grove of trees planted about 1914 on the southwest portion of the original 120 acres; at present this attracts the largest number both of transient and breeding birds.

As to changes in the bird life during the last eight years, Bobwhites have entirely left the campus and doves have decreased in numbers, (they

nest around town more than they did in 1920-21). Other species have also become less common because of lack of nesting sites. On the other hand, two new breeding species appeared in 1922—the Wood Pewee and Painted Bunting.

In order to make the campus more attractive to birds, more shrubbery should be planted particularly berry-bearing kinds, trees should be left alone, more sources of water should be provided and bird boxes erected. The worst enemies of birds on the campus are cats, for many nests and young birds are destroyed by these marauders. They could be trapped in box traps baited with fish or catnip.

My own data on the campus was obtained from a few trips in 1917 and many expeditions mostly in the nesting season, from August, 1919 through May 1927, also in a brief visit May 27 to 29, 1929. In the finding and examination of nests I have been greatly aided by my daughters, especially Constance. In the following list the records are my own with the exception of seven species: four ducks, Wilson Snipe, Screech Owl and Rusty Blackbird. No birds have been collected for scientific purposes on the campus, consequently the list is smaller than it should be, because in many cases two or even three subspecies have undoubtedly occurred.

In trying to divide the 113 birds according to their manner of occurrence, it was often difficult to decide where to classify certain species, particularly several that nest in the region, but have not been proved to do so on the campus, although found there in summer. My tentative arrangement is as follows: 13 residents, 27 summer residents, 9 winter visitants and 65 transients. If someone would make a special study of the campus throughout the year—preferably for a number of years, perhaps taking censuses every week or oftener over some definite portion, a great deal of additional information could be gained in regard to the bird life of this area.

In three instances birds seen on the campus constitute my only record for these forms in central Oklahoma: Gambel Sparrow, Gray-headed Junco and Red-breasted Nuthatch.

My aim in giving here all the information I have been able to gather on the avifauna of the University campus up till June 1927 has been three-fold: first, to stimulate others to continue the records, making additions and noting changes; second, to call attention to the wonderful laboratory for nesting studies afforded in this place where nests are easy to find and certain birds breed in astonishingly large numbers; third, to encourage those in authority to make the campus an even better bird haven, especially in fall and winter.

Annotated list of the Birds Recorded on the University Campus. An asterisk before a species indicates that a nest has been found.

Franklin Gull (*Larus franklini*) Transient. Eight were seen flying over the campus April 6, 1920. Dr. R. D. Bird reported a flock in May and also on June 1, 1929.

Least Tern (*Sterna antillarum*) Transient. One seen flying over the pond on the polo field May 27, 1929.

Mallard (*Anas platyrhynchos*) Transient

Green-winged Teal (*Nettion carolinense*) Transient

Blue-winged Teal (*Querquedula discors*). Transient.

- Pintail (*Dafila acuta tzitzihoa*). Transient. All these ducks have been shot by Mr. Ben G. Owen on the pond there used to be about where the south end of the stadium now stands. Mallards were the most common.
- Canada Goose (*Branta canadensis canadensis*). Transient. A flock of thirty were recorded flying over the campus October 28, 1922.
- Great Blue Heron (*Ardea herodias subsp?*). Transient. One was seen flying over the campus October 16, 1923.
- Sandhill Crane (*Grus mexicana*). Transient. A flock of fifty were seen and heard as they passed over the campus March 25, 1921.
- Wilson Snipe (*Gallinago delicata*). Transient. Mr. Owen has shot a few by the pond south of the stadium.
- Pectoral Sandpiper (*Pisobia maculata*) Transient. A flock of forty-two were seen around a pool after a rain May 14, 1921; eleven noted May 29, 1929 around the pond southeast of the polo field.
- White-rumped Sandpiper (*Pisobia fuscicollis*) Transient. Two were noted May 29, 1929 by the pond on the polo field.
- Semipalmated Sandpiper (*Ereunetes pusillus*) Transient. A flock of seven were observed March 30, 1927 along with a dozen Killdeer on the field west of the Armory; it was a foggy, drizzly morning and the ground was wet, but there was no pool to attract them. One was seen May 27, 1929 on the southeast corner of the polo field.
- Lesser Yellow-legs (*Totanus flavipes*). Transient. Two were observed May 29, 1929 by the pond on the polo field.
- Solitary Sandpiper (*Tringa solitaria solitaria*). Transient. A single bird was noted July 23, 1919 by the remains of the pond south of the stadium.
- Upland Plover (*Bartramia longicauda*). Transient. Its tri-syllabic cry is often heard in August and early September as it flies over in migration.
- Spotted Sandpiper (*Actitis macularius*). Transient. One was seen by the pond on the polo field May 27 and 29, 1929.
- Killdeer (*Oxyechus vociferus*). Transient. Occasionally seen on the campus, most often in March and April. A summer resident in Cleveland County. There was a pair on the polo field May 27 and 29, 1929; perhaps it will be found nesting there.
- *Bob-white (*Colinus virginianus virginianus*). Former resident. A common resident in 1892 according to Dr. Boyd; they were trapped in great numbers at that time. A nest was found on the south campus in 1919 by Mr. Chester M. Hughes. Our only record since then is one bird heard August 25, 1920.
- *Western Mourning Dove (*Zenaidura macroura marginella*). The most abundant summer resident on the campus. Five hundred and sixty-six nests have been found by us on the 120 acres. In 1920 and 1921 I made a special study of these birds† and located 122 and 118 nests in these two years respectively. The height of the nests has ranged from one found on the ground (in 1917) to 35 feet; the average height of 491 nests was 13.5 feet. One hundred and twenty nests have been known to have raised young; 109 to have failed. Of the successful nests, two young were raised in 77 nests, one young in 42 and three young in one nest; hence in 35 per cent of the nests one of the

†Auk. XXXIX, 4, 1922. pp. 457-474, and XL, 1, 1923; pp. 37-58.

- brood came to a premature end. In five cases there were three eggs in one nest—one in 1917, two in 1921, two in 1923. Only once have eggs been found before April; on March 22, 1921 a nest contained a full set. In 1919 we found 28 occupied nests in September; 14 in 1920; 8 in 1921; 12 in 1922; 8 in 1923; 44 in 1925 and 22 in 1926. Three years there have been occupied nests in October; three on October 1, 1919, one October 6, 1922 and one October 5, 1926. Doves arrive on the campus in March and leave in September and October.
- Turkey Vulture (*Cathartes aura septentrionalis*) Transient. One was seen sailing above the campus April 22, 1921.
- Marsh Hawk (*Circus hudsonius*) Transient. One was noted flying over the campus March 28, 1927.
- Cooper Hawk (*Accipiter cooperi*) Transient. Single birds have been seen September 8, 1920 and August 25, 1922. Resident in the county.
- Red-tailed Hawk (*Buteo borealis borealis*) Winter visitant. Occasionally seen in winter over the campus.
- Swainson Hawk (*Buteo swainsoni*) Transient. Two noted flying over on April 28, 1920. Summer resident in the county.
- American Rough-leg (*Archibuteo lagopus sancti-johannis*) Winter visitant. Occasionally seen in winter over the campus.
- Pigeon Hawk (*Falco columbarius columbarius*) Transient. An adult was sitting quietly in an elm on April 6, 1927; it was tame, allowing a close approach. I have only one other record of this rare bird in Cleveland County.
- Desert Sparrow Hawk (*Cerchneis sparveria phalaena*) Transient and winter visitant. Occasionally one takes up its post on the Administration Building in winter; I have a record for January 30, 1921 and also for December 1926 and January 1927. Two were seen October 2, 1920.
- Aiken Screech Owl (*Otus asio aikeni*) Winter resident. Two were seen by Richard Roys in April 1927. Resident in the county. R. D. Bird found one wintering in a hollow tree on the University campus in the latter part of February 1930.
- *Yellow-billed Cuckoo (*Coccyzus americanus americanus*) Summer resident: arriving the latter part of May; one was noted as late as September 15, 1925. A nest with three eggs was found in an elm June 16, 1920.
- *Hairy Woodpecker (*Dryobates villosus villosus*) Uncommon resident. In 1920 a pair nested in a locust ten feet from the ground. The young were heard squealing on April 18; on April 21 from 10:57 to 11:18 A. M. the female made four trips with food and the male, one.
- Southern Downy Woodpecker (*Dryobates pubescens pubescens*) Recorded at all seasons on the campus; probably nests.
- *Red-headed Woodpecker (*Melanerpes erythrocephalus erythrocephalus*). Summer resident. A nest was found on the campus May 14, 1921; a pair probably nested there in 1926.
- Red-bellied Woodpecker (*Centurus carolinus*) Transient. Recorded on the campus September 8, 1920 and June 16 and July 13, 1926. Resident in woods in the region.
- Flicker (*Colaptes auratus auratus*) Recorded at all seasons. June 18, 1926 a young bird was seen.

- Red-shafted Flicker (*Colaptes cafer collaris*). Transient. One was seen January 25, 1924. Winter visitant in the region.
- Howell Nighthawk (*Chordeiles virginianus howelli*) Summer resident. A few individuals are seen in May; flocks fly over in August, September and October—most commonly in September. June 22, 1920 an adult was seen perched on a branch; June 23, 1923 a young bird that could fly well was found near the greenhouse.
- Chimney Swift (*Chaetura pelagica*) Probably nests on the campus; seen constantly from its arrival in late April or early May till its departure in September.
- Ruby-throated Hummingbird (*Archilochus colubris*) Possible summer resident. Noted occasionally from its arrival in early May till its departure in late September or early October. Our latest record is October 6, 1921 around the scarlet sage.
- *Scissor-tailed Flycatcher (*Muscivora forficata*) Summer resident. Nested on the campus in 1919; seen there every summer.
- Eastern Kingbird (*Tyrannus tyrannus*) Possible summer resident. Occasionally seen in summer; should be found nesting. A pair was seen on the polo field May 27 and 29, 1929.
- *Western Kingbird (*Tyrannus verticalis*) Summer resident. Recorded only once by me on the campus—a single bird August 26, 1919, until May 29, 1929 when I found a pair building a nest twelve feet up in a locust east of the stadium.
- Crested Flycatcher (*Myiarchus crinitus crinitus*) Possible summer resident. Recorded occasionally from May to August; would doubtless nest if provided with boxes or if cavities were left in trees.
- Phoebe (*Sayornis phoebe*) Transient. Seen October 28, 1922, October 16, 1923 and March 28, 1927.
- *Wood Pewee (*Myiochanes virens*). A summer resident since 1922; also recorded May 19, 1920 and May 20, 1921. In 1926 a bird was seen building her nest for the second brood July 8, and 9, twenty feet from the ground on a branch of a locust.
- Yellow-bellied Flycatcher (*Empidonax flaviventris*) My only campus record for this rare transient was a single bird May 9, 1921.
- Desert Horned Lark (*Otocoris alpestris leucolaema*) Resident. Seen May 27 and 29, 1929 on the south 47 acres; occasionally found there in flocks in winter. This is the breeding form in the region; the Prairie and Saskatchewan Horned Larks (*O. a. praticola* and *O. a. enthyimia*) doubtless occur also in the flocks.
- *Blue Jay (*Cyanocitta cristata cristata*) Summer resident. A common breeder on the campus, but not recorded in winter. A nest with six eggs was found May 9, 1920. In 1922 three nests were seen from May 18 to 22 from 12 to 20 feet from the ground. Young recently out of the nest have been noted June 22, 1920, June 12, 1922, June 9, 1923, and July 20, 1926. Once only have I seen a Blue Jay eating a bird on the campus—on May 25, 1927 one captured a young English Sparrow. Prof. H. C. Roys saw one kill a young Mourning Dove.
- Crow (*Corvus brachyrhynchos subsp?*) Transient. Occasionally seen flying over the campus. Resident in the county.
- *Cowbird (*Molothrus ater ater*) Summer resident, arriving in late February or early March. Flocks have been seen from the middle of Au-

gust to the middle of September, flying over the campus and at times roosting in the trees. Cowbirds' eggs have been found in a Cardinal's, Lark Sparrow's and Bluebird's nest on the campus; a pair of Yellow Warblers and one of Bell Vireos were seen feeding Cowbird young July 11, 1922.

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*). Transient. A single male was seen by the small pond in the southeastern corner of the new tract September 29, 1925.

*Red-winged Blackbird (*Agelaius phoeniceus phoeniceus*) Summer resident. A nest with three small young was found July 23, 1919 in the weeds in the ditch at the southwest corner of the 47 acres. Several of these birds were seen in the same locality May 27, and 29, 1929.

Eastern Meadowlark (*Sturnella magna magna*) A common nester in 1892 according to Dr. Boyd. It is now seen in spring and sometimes in winter; found May 27 and 29, 1929 on the polo field.

Western Meadowlark (*Sturnella neglecta neglecta*) Winter visitant. Rather common on the campus in winter, arriving the middle of October and staying till the first week in April. On April 1, 1927 there were fully a hundred of these birds on the campus singing most beautifully.

*Orchard Oriole (*Icterus spurius*) A common summer resident arriving about April 22 and leaving in August. On June 22, 1920 a pair were seen feeding young.

*Baltimore Oriole (*Icterus galbula*) A common summer resident, arriving a day or two later than the Orchard Oriole; it remains as late as the middle of September. A nest was found May 24, 1922.

Rusty Blackbird (*Euphagus carolinus*) Recorded on the campus by Dr. Howard Cross; a late fall and winter visitant.

Brewer Blackbird (*Euphagus cyanocephalus*) Transient. Six were seen near the southeastern corner of the south 47 acres September 29, 1925.

*Bronzed Grackle (*Quiscalus quiscula aeneus*) Abundant summer resident, nesting in the tall trees. One brood is raised, the nests being built in April and the young leaving in late May or June. Young out of the nest were being fed June 22, 1920.

Purple Finch (*Carpodacus purpureus purpureus*) Transient. A single bird was recorded on the campus March 30, 1920. Winter visitant in the region.

American Goldfinch. (*Astragalinus tristis tristis*) Recorded at all times of the year; probably nests.

Pine Siskin (*Spinus pinus*) Transient. This bird was seen March 31, April 9, 19, and 21, 1923. Recorded by R. D. Bird, January 25, 1930.

*English Sparrow (*Passer domesticus*) Abundant resident on the campus, nesting on the buildings and also in bulky nests in the trees. Dr. A. H. Van Vleet informed us they were common here in 1898.

Vesper Sparrow (*Poocetes gramineus subsp?*) A spring transient; definite dates are March 30 and April 6, 1920 and about a dozen April 10, 1927. Probably both eastern and western subspecies occur.

Leconte Sparrow (*Passerherbulus lecontei*) Transient. A single bird was seen April 3, 1922.

*Western Lark Sparrow (*Chondestes grammacus strigatus*) Summer resident, arriving in late March or early April and staying till the third week in September. Six nests have been found on the campus, three

- on the ground and three in trees, three or four feet from the ground. On June 17, 1919 a nest contained five eggs; on June 16, 1922 a nest had three eggs; on June 30 another contained three eggs; on June 5, 1923 a nest held one egg and a newly hatched bird; on May 21, 1924 a nest had three small young; on May 25, 1927 one contained three sparrow eggs and one Cowbird's.
- Harris Sparrow (*Zonotrichia querula*) Winter resident, arriving the first of November and remaining till the first week in May. They used to be rather common in the shrubbery by the greenhouse.
- White-crowned Sparrow (*Zonotrichia leucophrys leucophrys*) Spring and fall transient, recorded on the campus chiefly in April; other dates are November 20, 1923, May 4, 1921 and May 6, 1926.
- Gambel Sparrow (*Zonotrichia leucophrys gambeli*) My only records for this rare transient have been on the campus. Two birds were seen there April 24, 1922 and one May 6, 1926.
- White-throated Sparrow (*Zonotrichia albicollis*) This uncommon transient has been noted but once by us on the campus—April 27, 1924.
- Chipping Sparrow (*Spizella passerina passerina*) Common transient in April. The earliest record was March 30, 1920, the latest, May 4, 1921, May 6, 1926 and May 9, 1927. On May 29, 1929 I saw one of these birds in the grove of young trees in the southwest corner of the campus.
- Clay-colored Sparrow (*Spizella pallida*) Irregular transient, recorded on the campus during three seasons: April 28, 1920; April 24, 1923; and from April 26 to May 9, 1927.
- Field Sparrow (*Spizella pusilla pusilla*) Transient. Seen on the campus April 6, 1920; April 9, 1923; March 25 and April 13, 1924; April 21, 1926 and March 6 to 30, 1927. The March records may be of the western subspecies (*S. p. arenacea*) which winters here; the late April records must be of the eastern form which breeds in the county.
- Slate-colored Junco (*Junco hyemalis hyemalis*) Winter resident from late October till late April, most often seen on the campus in March. They used to frequent the shrubbery around the greenhouse.
- Gray-headed Junco (*Junco phoenotus caniceps*) Transient. The only record for this western bird in central Oklahoma is one individual seen by me on the campus April 20, 1927.
- Dakota Song Sparrow (*Melospiza melodia juddi*) Winter resident from the middle of October to late April; used to frequent the shrubbery near the greenhouse.
- Lincoln Sparrow (*Melospiza lincolni lincolni*) Regular spring and fall visitor to the campus, having been noted from October 16 to November 20 and from April 9 to May 9.
- Fox Sparrow (*Passerella iliaca iliaca*) Transient. Recorded by us only once on the campus—March 30, 1927. This is an unusually late date for this winter bird. On this occasion there was one Fox Sparrow among a number of Lark Sparrows; never before had I seen these typically winter and summer birds together.
- Arctic Towhee (*Pipilo maculatus arcticus*) Transient. Regularly found in spring and fall in the shrubbery on the campus; in 1921 one stayed as late as May 4.

- *Cardinal (*Cardinalis cardinalis cardinalis*) Resident, but not common on the campus because of the lack of sufficient shrubbery. Three nests have been found: one with young ready to leave, May 25, 1917; one with three eggs, June 8, 1917 and a third which was in process of construction April 13, 1921, contained one egg on April 21, two Cardinal eggs and one Cowbird's on April 26 and one Cardinal egg and Cardinal baby May 5.
- Indigo Bunting (*Passerina cyanea*) Transient. Recorded only once by us on the campus—a female October 17, 1922. Summer resident in the county.
- Painted Bunting (*Passerina ciris*) Summer resident. Not seen by us on the campus until 1922, since when there has been a pair each season among the young growth east of the greenhouse. I did not see nor hear it May 29, 1929.
- *Dickcissel (*Spiza americana*) Summer resident. Nested on the south 60 acres in 1919 and probably does so on the new addition at the present time.
- Purple Martin (*Progne subis subis*) Summer visitant. Nests in boxes near the campus and is often seen flying over.
- Cliff Swallow (*Petrochelidon lunifrons lunifrons*) Transient. On September 23, 1926 a mixed flock of swallows including some of this species was seen migrating south over the campus.
- Barn Swallow (*Hirundo erythrogastra*) Transient. A few were in the flock September 23, 1926.
- Tree Swallow (*Iridoprocne bicolor*). Transient. A few were seen flying over the campus September 23, 1926 and one individual April 19, 1927.
- Cedar Waxwing (*Bombycilla cedrorum*) Transient. Flocks were noted on the campus from April 13 to May 4, 1921 and April 13 to 27, 1924.
- *Migrant Shrike (*Lanius ludovicianus migrans*). Resident. Four nests have been found on the campus. On May 25, 1917 five young were perched near the nest. On April 2, 1922 a nest was finished; April 13 there were 4 eggs, May 2 five tiny young and one egg, May 22 the young were out of the nest but still near it. In 1923 the nest was being built March 22, on May 18 the young were out. April 21, 1924 the nest contained six eggs.
- Red-eyed Vireo (*Vireosylva olivacea*). Transient. Migrating birds have been recorded April 30, 1926, April 26, 1921, May 2, 1922; all three were singing. Summer resident in woods near the Canadian River.
- Warbling Vireo (*Vireosylva gilva gilva*) Transient. Singing birds have been noted June 10 and 22, 1926 and April 19 and May 9, 1927. These birds could not have represented breeding pairs since they were heard on no other dates. Sometime they may nest in the large elms. Local summer resident in the county.
- *Bell Vireo (*Vireo belli belli*) Summer resident. Common nester in the shrubbery on the campus, arriving from April 25 to May 2, the average date of seven years being April 28. July 11, 1922 parents were feeding a young Cowbird while one of their own young was found crushed in the nest; on July 13, 1923 and July 21, 1926 parents were seen feeding their young that had left the nest. From May 12 to July 5, 1926 I followed the fortunes of a pair that built three nests, every one of which

was destroyed by a cat. May 29, 1929 a pair was just finishing a nest in the oval.

Orange-crowned Warbler (*Vermivora celata celata*) Transient. Seen on the campus April 26, 1921, October 10, 1922, April 24, 1923 and April 30, 1927.

*Yellow Warbler (*Dendroica aestiva aestiva*) A very common bird on the campus, arriving from April 16 to 22, the average of seven years being April 21. In March 1927 I found a curious thing, namely four nests of this warbler very near together, all looking as if built the previous season; they were from 15 to 18 feet from the ground, three in sycamores, one in an elm. Two pairs feeding young were seen June 22, 1920.

Myrtle Warbler (*Dendroica coronata*) Transient. Recorded on April 16 and 27, 1920, April 25, 1921 and April 24, 1923.

Mourning Warbler (*Oporornis philadelphia*) Transient. One of these birds was seen September 29, 1925 in the weeds near the southeastern corner of the south 47 acres.

Maryland Yellow-Throat (*Geothlypis trichas trichas*). Transient. Single birds have been seen on the campus May 24, 1921, May 2, 1922 and May 14, 1924. Summer resident in the county.

Long-tailed Chat (*Icteria virens longicauda*) Transient. Recorded only once by us on the campus—May 14, 1921. Summer resident in the county.

*Western Mockingbird (*Mimus polyglottos leucopterus*) Common summer resident on the campus, seen only once by us in the late fall—November 24, 1920, and once in winter—January 30, 1924. We have records of 15 nests. Nests for the first brood are built in late April. Our earliest record is four eggs, May 2, 1922; our latest, four young July 24, 1926. In seven cases there were four eggs or young in the nest, in four cases three. Five of the nests were at a height of 3 to 4 feet, five at 5 to 7 feet and one at 15.

*Catbird (*Dumetella carolinensis*) Summer resident arriving about May 1. Three nests have been found: one May 24, 1917 in the osage orange hedge; one with four eggs June 23, 1923; the third in process of construction May 1, 1927, ten feet from the ground in a mulberry.

*Brown Thrasher (*Toxostoma rufum*) Very common summer resident; we have records of 45 nests on the campus. The earliest dates have been 3 eggs on April 27, 1920; 4 eggs April 15, 1921; 4 eggs April 27, 1922 and 4 on April 26, 1927. Late dates: 3 young July 11, 1922; two young just out of the nest July 13, 1923. Five nests contained 3 eggs or young, eight nests 4 and four nests 5. Seventeen nests were found in osage orange, eight in elms, three in mulberries, four in different kinds of bushes, two in honeysuckle on fence posts and three in different kinds of trees. One nest was built on a high pile of boards back of the taxidermy shop; later this was deserted. Six nests were placed at heights of 3 to 4 feet, three at 5 to 6 feet, six at 8 to 10, one at 15 and two at 20.

Carolina Wren (*Thryothorus ludovicianus ludovicianus*). Transient. Occasionally seen in early fall near the greenhouse. Resident in the county.

- *Texas Wren (*Thryomanes bewicki cryptus*) Resident. Birds were seen building a nest in a shed March 18, 1920.
- Western House Wren (*Troglodytes aedon parkmani*) This transient has been recorded on the campus in the spring on the following dates: April 29, 1920, May 4 and 9, 1921, May 4, 1922, April 17 to 27, 1924. There is but one fall date, October 16, 1923.
- Brown Creeper (*Certhia familiaris americans*) Transient. Recorded only twice by us on the campus—March 31, 1921 and April 9, 1923. Winter visitant in the region.
- Red-breasted Nuthatch (*Sitta canadensis*). The only time I have seen this rare transient in Oklahoma was one individual on a tree near the Administration Building, May 13, 1920.
- Tufted Titmouse (*Baeolophus bicolor*). Transient. Although a common resident in woods in this region, this bird has been recorded only three times by us on the campus—March 23 and 31, and April 13, 1921.
- *Plumbeous Chickadee (*Penthestes carolinensis agilis*). Resident. On May 24, 1917 a nest with three young was seen in an iron pipe.
- Ruby-crowned Kinglet (*Regulus calendula calendula*) This transient has been noted three times by us on the campus—April 29, 1920, March 28, 1921 and October 27, 1923.
- Grey-checked Thrush (*Hylocichla aliciae aliciae*). Transient. Seen on the campus April 28 and 29, 1920 and April 24, 1923.
- Olive-backed Thrush (*Hylocichla ustulata swainsoni*). Formerly a rather common spring transient in the osage hedges; seen May 15, 1920; April 30, May 12, 1921; May 4, 1922; and April 24, 1923.
- *Southern Robin (*Planesticus migratorius achrusterus*). Increasingly common summer resident. We have records of 48 nests. In 1921 there were eight nests with complete sets before the end of March, the earliest being March 23; but most seasons the first eggs are found during the first week in April. The earliest date for a young bird that had left the nest was April 21, 1921. Datts for the second or third brood have been: a Robin building June 16, 1926; young just out of the nest June 23, 1923. In four cases there have been 4 eggs, in eleven cases 3. Seventeen elms have been chosen, two maples, two walnuts, one box elder and one apple tree. One nest was built at a height of 3 feet, two at 8, three at 10, one at 12, five at 15, three at 20 and three at 25, the average being 15 feet. Our earliest record for spring arrival on the campus is February 12, 1921.
- *Bluebird (*Sialia sialis sialis*) Resident. Four nests have been found in cavities in trees. In 1920 young of the first brood left their nest April 27; by June 1 there were four eggs. Another nest contained three eggs May 13 and two young May 24; on June 17 there were two eggs. In 1922 a nest in a locust held young May 16 and 22. The most interesting household of all was one in an elm; on May 2, 1922 there were two Bluebird eggs and one Cowbird's, on May 7 and 22 two Bluebird young. On June 6 the female was incubating; on the 29 there were five young. At our first two visits the parents flew away, but at the last three they both swooped at us in a threatening manner.

A list of the Birds of the Campus according to their Manner of Occurrence

Resident Species

Bobwhite
Hairy Woodpecker
Southern Downy Woodpecker
Flicker
Desert Horned Lark
Eastern Meadowlark
American Goldfinch

English Sparrow
Cardinal
Migrant Shrike
Texas Wren
Plumbeous Chickadee
Bluebird

Summer Residents

Western Mourning Dove
Yellow-billed Cuckoo
Red-headed Woodpecker
Howell Nighthawk
Chimney Swift
Ruby-throated Hummingbird
Scissor-tailed Flycatcher
Eastern Kingbird
Western Kingbird
Crested Flycatcher
Wood Pewee
Blue Jay
Cowbird
Red-winged Blackbird

Orchard Oriole
Baltimore Oriole
Bronzed Grackle
Western Lark Sparrow
Painted Bunting
Dickcissel
Purple Martin
Bell Vireo
Yellow Warbler
Western Mockingbird
Catbird
Brown Thrasher
Robin

Winter Visitors

Red-tailed Hawk
American Rough-leg
Desert Sparrow Hawk
Western Meadowlark

Rusty Blackbird
Harris Sparrow
Slate-colored Junco
Dakota Song Sparrow

Transients

Least Tern
Franklin Gull
Mallard
Green-winged Teal
Blue-winged Teal
Pintail
Canada Goose
Great Blue Heron
Sandhill Crane
Wilson Snipe
Pectoral Sandpiper
White-rumped Sandpiper
Semipalmated Sandpiper
Lesser Yellow-legs
Solitary Sandpiper
Upland Plover
Spotted Sandpiper
Killdeer
Turkey Vulture
Marsh Hawk
Cooper Hawk
Swainson Hawk
Pigeon Hawk
Red-bellied Woodpecker
Red-shafted Flicker
Phoebe

Yellow-bellied Flycatcher
Crow
Yellow-headed Blackbird
Brewer Blackbird
Purple Finch
Pine Siskin
Vesper Sparrow
Leconte Sparrow
White-crowned Sparrow
Gambel Sparrow
White-throated Sparrow
Chipping Sparrow
Clay-colored Sparrow
Field Sparrow
Gray-headed Junco
Lincoln Sparrow
Fox Sparrow
Arctic Towhee
Indigo Bunting
Cliff Swallow
Barn Swallow
Tree Swallow
Cedar Waxwing
Red-eyed Vireo
Warbling Vireo
Orange-crowned Warbler

Myrtle Warbler
Mourning Warbler
Maryland Yellow-throat
Long-tailed Chat
Carolina Wren
Western House Wren

Brown Creeper
Red-breasted Nuthatch
Tufted Titmouse
Ruby-crowned Kinglet
Gray-checked Thrush
Olive-backed Thrush