THE HISTORY AND BIRD LIFE OF LAKE FAYETTEVILLE

WITH A LIST OF PLANTS, MAMMALS AND REPTILES

H. David Chapman



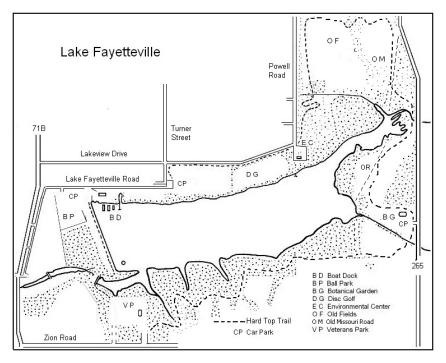
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INTRODUCTION

This text describes the history of Lake Fayetteville Park, its birdlife, and other components of its fauna and flora. The history of Lake Fayetteville, both before and after its establishment as one of the premier parks in the region, was described in an article published in 2011 in Flashback, the journal of the Washington County Historical Society¹. Copies were donated to the Mullins library at the University of Arkansas and the Fayetteville library. A separate report of the birdlife of Lake Fayetteville, with information on plants and other animals has also been donated to the Mullins and Fayetteville libraries and an updated version is included here.

Lake Fayetteville comprises 449 acres of land surrounding 194 acres of water and, although originally intended as a municipal water source, today the lake and surrounding parkland are used for educational and leisure activities. Its facilities are utilized by thousands of people all year round and its ready access and variety of habitats have made it one of the premier places in the state for watching birds. Lake Fayetteville and its environs have no unique or unusual features that cannot be found elsewhere in northwest Arkansas but its present day diversity, comprising open water, wetland, mature forest, old fields, and grassland, provide valuable habitat for birds during migration and other times of the year. The Park has changed dramatically over the years as overgrazed pasture has given way to regenerating scrub and woodland. Today Lake Fayetteville Park is an island of semi-natural habitat surrounded by an ever increasing sea of urbanization. The park has undergone constant change since its inception and this continues to the present day. It is to be hoped that any future developments do not compromise its present role as a "green lung" for the citizens of Fayetteville and Springdale.



PREHISTORY AND SETTLEMENT

Archeological Surveys

There have been several archeological investigations at Lake Fayetteville that were conducted prior to the commencement of potentially damaging activities such as trail construction. In 1999, the Arkansas Archeological Survey conducted an investigation at the request of Donna Porter, then director of the Botanical Garden Society of the Ozarks². Areas studied were the present day botanical garden and the old fields to the north and south of the stream that enters the lake (identified as sites 3WA1124 and 3WA1123 respectively). Both sites yielded chert flakes and fire-cracked rock but, in addition, site 3WA1123 produced ground stone tools. No diagnostic artifacts were found at either location. The approximate location of prehistoric sites is shown on the Google Earth map illustrated.



In May, 2008, John Keig discovered a new site (3WA1436) along the bicycle trail north of the iron bridge (Copperhead Crossing) across Clear Creek (referred to as the "Jacob Site"). The site was revisited by Aaron Linglebach, Aden Jenkins, and Keig a week later and a light to medium density lithic scatter was found extending 150 meters along the trail. The base of a Smith Point (Reed Springs), two possible scrappers (Burlington, and Reed Springs), a possible engraver (Reed Springs), and a broken blade were collected. The site was visited once more on July 7, 2009 because of the imminent construction of the paved trail, and a Shovel Test was positive revealing 20+ secondary flakes suggesting the site had a long history of occupation. Another site (3WA1458) was

identified further to the north on the west side of the Butterfield trail (referred to as the "Zoe Site"). A large broken corner notched point base, a broken biface, two flakes, and a White River Sidenotched point were discovered. It was concluded that this site was occupied from at least the Middle-Archaic to the Late-Archaic / Transitional Woodland periods. The site was destroyed when the paved trail was constructed and no further work was recommended. Photographs of artifacts from sites 3WA1436 and 3WA1458 are included in the site documentation submitted to the Arkansas Archeological Survey.

Various artifacts collected from this area of Lake Fayetteville are held by Connie Edmontson, Director of the Fayetteville Parks and Recreation Department. A sandstone tool is approximately 8 x 7 x 3.5 cm in size, smooth and has a shallow depression on both sides. Jerry Hilliard considers it a sandstone / groundstone object, perhaps what is referred to as a "nutting stone". The other tools range in size from 4.7 cm in length to 2.3 cm. According to Hilliard these are hafted bifaces comprising local Ozark cherts of various types from the Boone formation.



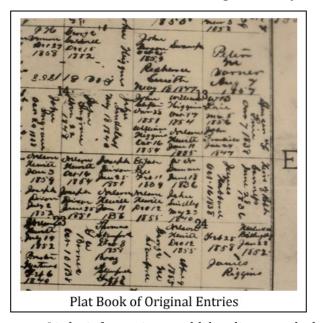
From left to right they are:

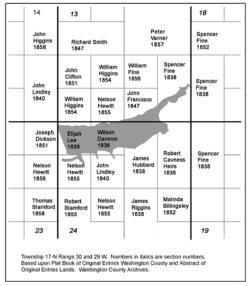
- 1) A Smith type knife or perhaps broken dart from the Late Archaic to Woodland period.
- 2) A contracting stemmed point either Hidden Valley or Langtry/Standlee type.
- 3) A Jackie Stemmed or Rice Lobed from the Early Middle Archaic.
- 4) A corner notched variety perhaps Kings type of the Late Archaic to Woodland period.
- 5) A possible Scallorn type arrow point, Late Woodland all the way through the Mississippi period, ca. A.D. 700 up to 1500 A.D.

The most recent survey was conducted in 2012 in anticipation of the proposed extension of the paved trail south of the lake from Veterans Park to the extant paved trail south of the botanical garden³. Surface searches of the network of eroded paths at Site 3WA1117 revealed a widely dispersed lithic scatter. Intensive shovel testing to the west failed to discover any evidence of cultural resources.

Early Settlers

The first recorded settlers to occupy land that is now Lake Fayetteville Park were Wilson Damron (1836), heirs of Robert Cavness (1836), James Hubbard (1838), Spencer F. Fine (1838), and Elijah Lee (1839). Other early landowners were John Lindley (1840), John Francisco (1847), Joseph Dickson (1851), and Nelson Hewitt (1855). Their landholdings, and those of others nearby, are illustrated in handwritten entries in the Plat Book of Original Entries⁴ and the Abstract of Original Entries Lands⁵ held in the Washington County Archives.

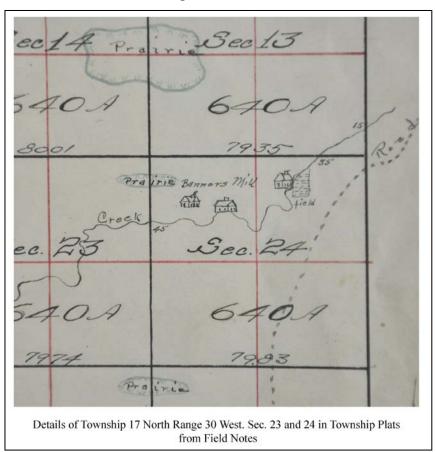




Little information could be discovered about these landowners. Fine had the largest landholding who was granted property in the northern and eastern sections of the park including the old fields east of Powell Road and west of Old Missouri Road. His obituary states that he was one of the pioneers of Washington County and was at one time one of the best known and wealthiest men in it⁶. Business reverses and bad health took his fortune away and for two years he was forced to subsist on the public bounty (Fayetteville Democrat, July 4, 1890). He died in the County Poor house at the age of 86. Research by Judith Woltjen has established that on July 27, 1869, Spencer F. and Jane Fine sold 520 acres to Norman Miller who on March 11, 1871 sold 458 acres for \$3000 to Thomas Henson. Nelson Hewitt was another early settler who lived to the age of 76. His obituary states that 'his course through life has been the most consistent for honesty and fair dealing --- his death is a great loss to the community. None stood higher in the respects of the people and the death of no one could have been more sincerely mourned' (Fayetteville Democrat, January 7, 1887). In "Early mills of Washington County⁷" Lynch writes that the Miscellaneous Record Book in the Washington County Clerk's Office lists registered names of early millers. This included a Nelson Hewitt who was miller of Hewitt's Mill on October 11, 1859. This maybe the same person who held several land patents in the area now Lake Fayetteville and who had an interesting adventure during the civil war (see section Civil War Veterans)?

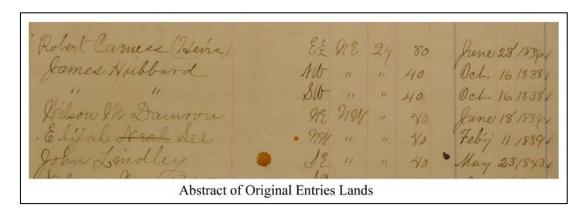
DAMERON'S MILL

One of the earliest mills in Washington County existed north of Fayetteville on Clear Creek. The mill is identified in a map of Township Plats from Field Notes of Washington County⁸ (Township 17 North Range 30 West Sec. 24) dated from the 1830s. It shows Clear Creek, prairies, an old road to the southeast, a field and other buildings.



The mill can also be seen on the Langtree map of Washington County⁹ dated 1848 (published in 1866). A recent map drawn by Brotherton shows the "road to Dameron's Mill", now Turner Street, running south from Caudle Street in Springdale¹⁰. According to Lynch, the mill is described in field notes dating from surveys conducted from 1831 to 1834. The field notes state that the mill lies "east on a random line between Sec. 13 and 24, a house to the right, Damern's mill to the right about 15 chains on Clear Creek and house to the right about 15 chains small field east of the house." Based upon these coordinates, Duane Woltjen believes that the mill was located on property about one third to one half of the lake's length east of the dam.

The mill is identified as "Banners Mill" in the Township Plat map but Lynch believes this to be a copy error and that the correct name is Dameron. This may be so but it also seems plausible that Banner could be the name of a previous owner. Different spellings of Dameron are recorded in various documents. Thus in the Plat Book of Original Entries and the Abstract of Original Entries Lands the name is written as Wilson N. Damron or Dameron. The 1829 Sheriff's Census of Washington County lists a Wilson N. Damson but in the Index this is spelt "Damron"¹¹. Family Maps of Washington County spells the name Damrow¹². In yet another spelling, Lynch states that in 1838 Wilson N. Damon and his wife Jane sold the property at NE of NW of Sec. 24, Twp. 17, R. 30 to their neighbor, Elijah Lee. Lee was a farmer and miller, and one of the first members of Shiloh (Springdale) Baptist church. The log church was burnt in the civil war¹³.



In 1894 and 1908, T. J. Bridenthal owned this land. He was the son of D. A. Bridenthal who owned property further to the west. Lynch records that Frank Johnson remembers the mill being known as Breidenthal mill; "when Johnson was a boy, his father took him to the mill site and part of the foundation was still there, sometime after 1900 the mill was allowed to deteriorate". The mill was not identified on the 1894 Atlas map of Washington County¹⁴. This site, now inundated by the lake, has been assigned state site number 3WA1127 by the Arkansas Archeological Survey.

CIVIL WAR VETERANS

Thomas Henson

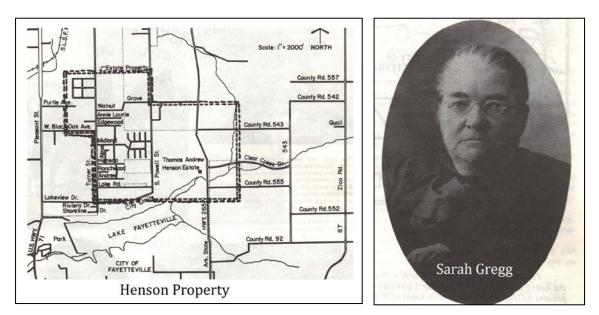
The Washington County Historical Society Journal "Flashback" and the History of Washington County¹⁵ have several articles concerning civil war veterans that came to live in the area that is now Lake Fayetteville Park. Rothrock describes the adventures of Thomas Andrew Henson (1832-1885), a civil war veteran who enlisted in the First Arkansas Cavalry of the Union army¹⁶. A photograph of Henson (the original is held in the Shiloh museum of Ozark history¹⁷) and a painting of him mounted on his horse is illustrated. The latter is reproduced from "Visiting the past Henson families in history" written by Harold Henson, a descendant of Thomas Henson.

During the war northwest Arkansas was infested with bands of bushwhackers and cutthroats; to escape this Henson sent his family from their home to the comparative safety of Missouri. In 1865 he brought his family back to northwest Arkansas, traveling on the stagecoach route known as Old Missouri Road. They passed over land where "the head" of Lake Fayetteville is now and his wife Sarah 'Callie' Henson said "I want this farm! --- I want to live here". "There was a big spring where the stagecoaches used to stop --- that became known as Henson Springs". Unfortunately, no source is provided for this romantic story which was presumably recounted to Rothrock by one of Henson's descendants, and the present location of Henson Springs is unknown.



The History of Washington County has a description of the Henson family written by Thomas Henson's Great-great-granddaughter, Linda Lilly (deceased). She writes that Henson was a good business man who traded in livestock. He bought the farm in 1871 and, over the years, added land so that by the time he died in 1885 he was a large landowner with 1700 acres. The Henson family history has a map of the estate; a black square, just north of Clear Creek at the far eastern end of the lake, is presumably the location of the family home although no trace remains today.

Research by Judith Woltjen has provided further details of the Henson family. At twenty five years of age Thomas 'Andy' Henson, already a widower, having lost his first wife Louisa Kennan, married Sarah Caroline Gregg. A photograph of her from the Henson Family History is illustrated. The Gregg and Henson families lived near Oxford Bend, located on the White river four miles east of Fayetteville. Both families were recent migrants, Henson being born in Tennessee and Callie's father, Albert G. Gregg, in Alabama. Albert Gregg was the first postmaster of Shiloh at Lynch's Prairie Post Office which was established in 1859. A photograph of the post office is reproduced in "Springdale; the courage of Shiloh"¹⁰. The post office was closed with the start of the civil war. Callie Henson lived on the farm on Old Missouri road with her son Solon and his wife (Naomi Sanders) until her death in 1927. Solon bought the farm from family members in 1922 and sold it in 1948.



John Bookout

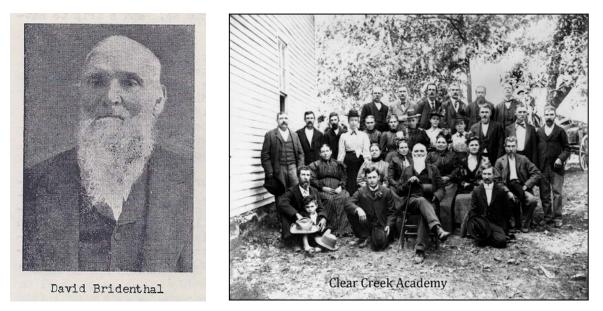
Dockery writes in the Washington County History about another civil war veteran John Solomon Bookout (1841-1921). About 1869 he moved with his family to northwest Arkansas and built a large house and blacksmith shop near the "excellent spring which fed Clear Creek". The 1894 Atlas Map indicates that his property was located between land owned by D. A. Bridenthal to the west and T. J. Bridenthal to the east. Farm houses can be seen on these properties north of Clear Creek. Bookout moved to this location because he had married Ada, the daughter of David Bridenthal, who was not a strong woman and needed help looking after the children. While a soldier, Bookout had learned the trade of a blacksmith and had travelled in northwest Arkansas. A photograph taken about 1911 shows the family standing outside a timber home located "near the N. W. Arkansas Mall on Clear Creek land, now under Lake Fayetteville"¹⁸. The original of this photo is held in the Shiloh museum of Ozark History. John Bookout is dressed in black and has a long white beard; his daughter Lola told of a cabin on the hillside where he stayed alone when his wife or children displeased him.



David Bridenthal

David Bridenthal (1823-1903) was another civil war veteran who had enlisted in the Confederate army in Cook's Regiment of Heavy Artillery, a Texas unit in which he was a corporal. He had graduated from Harvard with honors and joined Union University at Murfreesboro, Tennessee where he taught Latin and Greek¹⁹. Subsequently, he moved with his family to Texas. In 1866 he came to Washington County and purchased 800 acres of land four miles north of Fayetteville in the Clear Creek valley. Soon he founded a school, Clear Creek Academy, south of Lake Fayetteville near Mud Creek²⁰. Dr. E. F. Ellis remembers attending the Academy as a boy and carrying drinking water from Bridenthal Springs, a quarter of a mile north of Lake Fayetteville. Ellis said that Bridenthal was a great orator and the brightest old man he ever knew. Ellis evidently acquired part of Bridenthal's property because in 1942 he sold 112 acres to Med Cashion (Northwest Arkansas Times, January 13, 1953). Cashion paid "about \$100 an acre" which he considered not too high a price because the land had a "highway frontage, had several springs on it and was well situated". He then sold land to the city for construction of the dam.

The location of Bridenthal Springs is not known but a spring underlies a derelict building on private property near the amusement business Lokomotion which still pumps water today, and a spring with a spring house and water enclosure can be seen at the base of the hillside nearby. The Bridenthal and Henson families were connected by marriage since Maud Bridenthal, another daughter of David Bridenthal, married Alexander Byrd Henson (Thomas Henson's son by his first wife Louisa). A Clear Creek Academy reunion was held in 1899 and a photograph in Flashback (shown below) shows David Bridenthal with his students who, among others, included Dr. E. F. Ellis, Maude E. and Bill Henson, Tom Bridenthal, and James Skillern. Unfortunately, the caption to the photograph lists names but does not identify individuals. The original of this photograph is held in the Shiloh museum of Ozark History and is reproduced with their permission²¹.



William Cardwell

In his family history of the Cardwells, Plumlee writes that William Cardwell was a son of Richard Cardwell who migrated with his family to Washington County in the 1830s²². William owned at least 440 acres between Lake Fayetteville and the community of Zion. According to Plumlee, the land may have been purchased from grants allocated to veterans of the war of 1812. Although fortunes of the family declined, their descendants held onto the land until recent times.

Nelson Hewitt

An interesting civil war tale concerning Nelson Hewitt (assumed to be the same person previously mentioned in the section "Early Settlers") was published in Flashback in 1960²³. The author was A. B. Lewis, or "Uncle Gus" of Fayetteville, stepson of Hewitt. Apparently, on December 12, 1862, in six inches of snow, Hewitt was camped two miles west of Charleston (near Fort Chaffee), about a mile west of three wagons that were foraging for supplies for the regiments of General Spaitt. Hewitt was on his way to Texas having under his charge some "Negroes". The following morning a band of outlaws led by the Hart brothers, who had already carried out several murders in the area, captured Hewitt and stole the wagons and Negroes. As they entered a farmhouse near Big Creek Bottom he was able to make an escape. After the war, in 1867, Hewitt told Lewis that he was carrying a money belt with gold pieces and confederate money which if found would have resulted in his death. A week after the incident, the outlaws were captured by a battalion led by Captain Reiff, court-martialed, and executed.

BUTTERFIELD TRAIL

From 1858-1861, the Butterfield Overland Mail Route connected Fayetteville to the Missouri State Line running along the Old Missouri Post Road (also known as "Old Wire Road" and "Old Stagecoach Road"). Much has been written about this trailblazing route which operated between St Louis and San Francisco and passed through Fayetteville three times a week^{24,25,26}. J. H. Van Hoose recounts that the well-known "toot toot" of Charlie Butterfield's stage horn was heard at the upper end of College Avenue as the big Concord coach, drawn by four large steeds, entered town (Fayetteville Daily Democrat, June 28, 1894). Its route is evident on the 1830s map of Washington County and can be seen in the 1894 and 1908 maps (illustrated in the section "Early Maps"). The Lake Fayetteville section is among a very few surviving segments of the original trail. The Butterfield Overland Mail Route, Fayetteville segments Historic District was listed in the National Register of Historic Places on June 18, 2009.

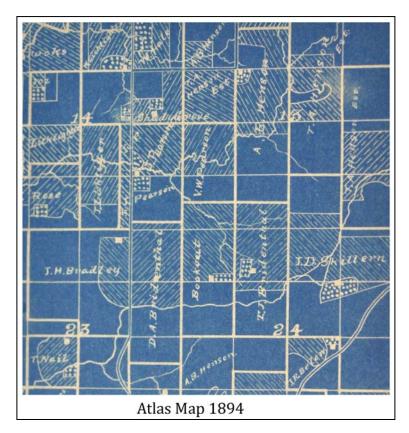


In March 2010, the city restored the northern section of the trail by removing overgrowth and brush and erecting a wagon wheel plaza with a commemorative plaque. The two wagon wheel chairs were donated by the Wells-Fargo Company. On April 11, 2012 a public meeting was held in the Fayetteville city administration building to obtain local opinion on a proposal by the National Parks Service to create a Butterfield Overland Mail Stage Route National Trail.

In fall of 2012 the trail was further cleared down to the lake edge. The overgrown section south of Clear Creek is visible but has not been cleared of vegetation. The report of the archaeological survey conducted in 1999 recommended that the roadbed be measured and undisturbed segments preserved. The roadbed has been assigned state site number 3WA1125 by the Arkansas Archeological Survey.

EARLY MAPS

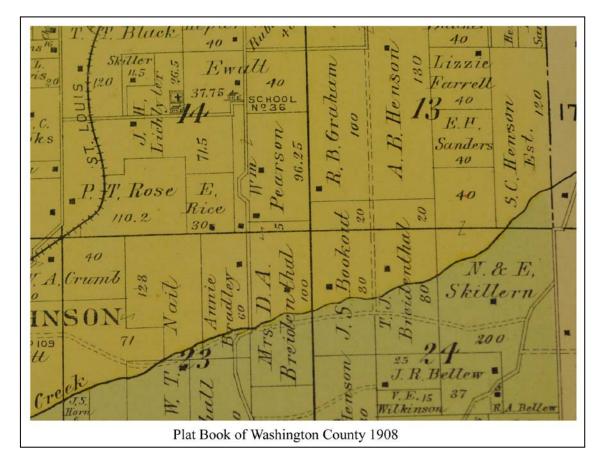
The earliest map of Washington County dates from the 1830s and was illustrated in the section Dameron's Mill. The 1894 Atlas Map of Washington County, a copy of which is held in Special Collections at the University of Arkansas library, was drawn up by Gordon V. Skelton based upon work done in 1892.



The key to the map identifies public roads (parallel lines), cultivated land (dashed and solid diagonal lines), and small orchards often with buildings. A public road to the west of property owned by D. A. Bridenthal and J. Pearson runs from north to south following the route of present day Highway 71B. Further east Old Missouri Road can be seen running in a northeasterly direction. This follows a road shown on the earlier 1830s map. Turner Street is not illustrated but it must have existed as it led to Dameron's Mill. Clear Creek is shown running in a southwesterly direction crossing Highway 71B. A tributary of another stream is shown meandering to the northwest. This appears to flow against gravity since north of Clear Creek the land rises to a ridge along present day Lake Road.

Property along Clear Creek from west to east was owned by D. A. Bridenthal, J. S. Bookout, T. J. Bridenthal, J. D. Skillern, Mrs. E. C. Cardwell, and J. H. Riggins, and to the north by V. W. Pearson, A. B. Henson, T. A. Henson, H. Eidson, and J.H. Riggins. The map indicates that T. A. Henson owned

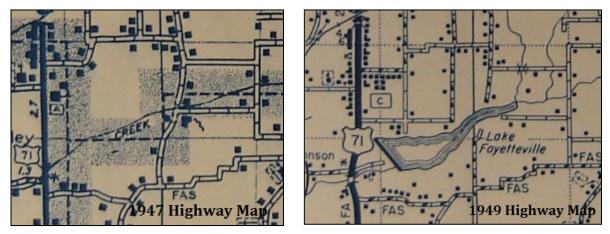
units of the area currently being restored to prairie and fields west of Old Missouri Road. Alexander Byrd Henson owned property along present day Turner Street. No building is shown on the T. A. Henson landholding either west or east of Old Missouri road. The Henson family had taken up ownership in 1871 and so a building might be expected. The Plat Book of Washington County dated 1908 also identifies property owners and their landholdings²⁷.



Two major roads are shown, one following Highway 71B to the west and the Old Missouri Road to the east. Another route, illustrated as parallel dashed lines, follows present day Turner Street in a north/south direction to the east of property owned by R. B. Graham and J. S. Bookout. This route connects with Zion road which suggests it must have gone over the hillside. An aerial photograph taken in 1941 also shows a connection between Turner and Zion but little trace of such a road is evident today, the area having reverted to forest.

By 1908, the Henson properties had passed on to one of his sons Solon C. Henson Est., Lizzie Farrell²⁸ (Sarah Elizabeth Farrell) and Eli H. Sanders²⁹. Lizzie Farrell (formerly Lizzie Arnold) was the sister of Julia Arnold who married Jonathan F. Henson a son of Thomas and Callie Henson. Eli Sanders had come with his parents to Arkansas in 1873. He married Clarissa Arnold another sister of Lizzie Farrell. Thus many of these families were related by marriage. The Skillern property had passed on to N. & E. Skillern. Note that Bridenthal is now spelt Breidenthal.

The Lake Fayetteville section of the General Highway maps for Washington County³⁰ dated 1947 and 1949 are illustrated. In 1949 Zion had been upgraded from the "graded and drained" category to "gravel or stone". Turner Street, not shown in 1939 or 1947, appears in 1949 as does Lake Fayetteville and Powell Road. In the 1949 map, the eastern portion of the lake is shown interrupting Old Missouri Road. A building is visible to the north of the lake on the property once owned by T. A. Henson.



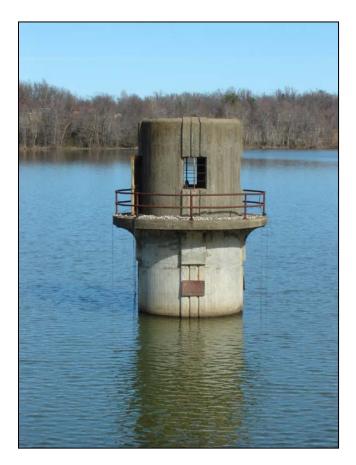
SURVIVING STRUCTURES

The remains of several old buildings, walls, and concrete remnants can be found scattered around Lake Fayetteville Park and on neighboring property. An old Well in the woodland on the northeast side of the Butterfield trail (near the trail plaza) may originally have been part of the Henson property but apart from a nearby deep depression in the ground no other surface structures can be seen. Daffodils nearby indicate that this was once a homestead site. The remains of a concrete pad of an old building can be seen near the hard top trail north of the botanical garden. At the time the land was sold for construction of the lake it was owned by N & R Ivey and previously by Henry Eidson.



An old underground root cellar is visible at the southern end of the trail route, near the new hard top trail and boundary of the park. Irises mark this site which was mentioned by Donna Porter when she requested a survey by the Arkansas Archeological Survey. The Survey site identification number is SWA1126. By 1949, this was on the property of A. & N. Williams. About 200 meters further along the trail in a westerly direction the remains of linear concrete walls can be seen. This area also has large beds of day lilies, daffodils, irises, and a solitary Walnut tree. Guendling suggested that the concrete walls may have functioned as a check dam to prevent erosion of the head of the nearby ravine³. An old brick wall is present on the hillside above Lokomotion.

A derelict building, last occupied in the 1970s, still exists near Lokomotion, propped up by timbers. It is being pumped to keep the basement, which is below ground level, free of water. Also shown is the spring house at the base of the hillside near Lokomotion. This can be seen beside the new hard top trail that leads to highway 71B. A short distance to the west, remains of a semicircular wall about 10ft high is built into the hillside. Its function is obscure. Another structure east of the spring house is a small building with a coffer dam, with columns and a pond in front. Nearby, a pavilion has been built on private property overlooking Clear Creek. Lake Fayetteville's most recognizable structure is the water tower, constructed in 1949.



LANDSCAPE BEFORE THE DAM

Much of the area now occupied by Lake Fayetteville Park was once an "oak barren" defined as grassland with interspersed trees and brush. The earliest map⁸, dating from the 1830s, shows Clear Creek, a few buildings, a cultivated field and scattered prairies. The Langtree map, drawn up in

1848, also shows scattered prairies north of Fayetteville. The Arkansas Champion Black Oak once found north of the small creek to the north of the environmental center, had a 14 foot girth and a plaque (recently removed) claiming it is the largest specimen of this species in the State. Unfortunately, this magnificent tree did not survive the summer drought of 2011. Its shape, an inverted open umbrella shape with enormous horizontal limbs, indicated that it matured in an open prairie type of country.



An impression of the Lake Fayetteville area prior to construction of the dam can be obtained from an aerial photograph dated November 26, 1941³¹. This shows Clear Creek and its tributaries fringed by trees and a forested hillside to the northeast. Various farm buildings can be made out, but otherwise the landscape is open fields and the occasional orchard. Highway 71B (opened in 1930) followed the line of an earlier route and the Johnson exit can clearly be seen. Turner Street can be followed from north to south where it crosses Clear Creek and passes over the hill to Zion road. Little trace of this latter route is now evident. A section of Old Missouri Road running in a north-south direction to the east can be seen. South of Clear Creek there is a road following the route of present day Zion. In 1941, Lake Fayetteville Road, Lake Road, and Lakeview Drive did not exist and Powell Road was a farm track. It is clear from the photograph that Lake Fayetteville inundated the gently sloping fields to the north of Clear Creek. The photograph is covered with various handwritten numbers and the names of a few landowners.

The old fields north of the environmental center are also shown in the photograph and contain remnants of prairie grassland that, for purposes of restoration, the Fayetteville Natural Heritage Association (FNHA) has designated Units 1, 2, and 3 from west to east respectively. Research undertaken by Judith Woltjen has established the ownership of these tracts of land. Originally owned by Stephen Fine, by 1871 all three units were owned by T. Henson. The Henson family owned this property until 1948 when Units 1 and 2 were sold to J. McCoy, W. R. & V. Sanders. The area that includes the Butterfield trail was sold to B. B. Brogdon. In recognition of over 80 years of continuous ownership by the Henson/Sanders families, in October 2012 the Fayetteville City Council passed a resolution that the prairie restoration area be known as "Callie's Prairie".

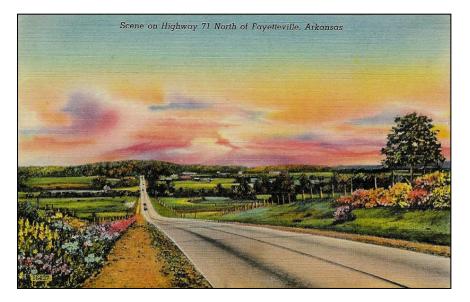


Aerial photograph of Clear Creek dated 11/26/41 (Special Collections, University of Arkansas Libraries, Fayetteville)²⁰. Bottom left - detail showing Veterans Park, and Dellinger farm. Bottom right - detail showing old fields north of the Environmental Center

Photographs of Clear Creek, taken some time before construction of the dam (kindly provided by Dick Linglebach, grandson of George Linglebach) show a shallow rock strewn stream and were likely taken from the property owned by G. & N. Linglebach now under the lake.



A general impression of the area before completion of the lake can be obtained from a postcard printed in the 1940s that shows a view looking south on highway 71 near the entrance of the present day Mall. It shows a rural scene of farmland and woodlots, a far cry from the five and six lanes of traffic in the present day commercial district.



WATER MATTERS

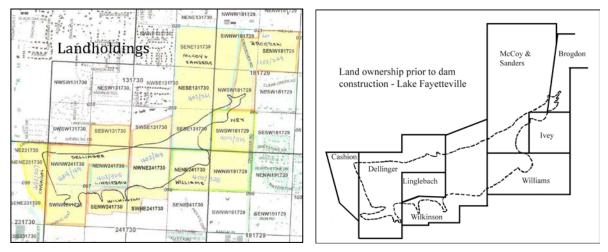
The Fayetteville water supply

The development of the Fayetteville water system has been documented in the Fayetteville Daily Democrat and Northwest Arkansas Times, and reviewed in a series of articles by Fred Coggan in the latter and more recently by Steve Erwin in Flashback³². The original source of water for Fayetteville was the West Fork of the White river where an extraction plant had been constructed in 1894, nevertheless prolonged droughts regularly reduced the flow of the West Fork, and the pumping station was without water.

Clear Creek had long been considered an important potential water source for Fayetteville. In October 1907, Professor J. J. Koch tested the water supply from Clear Creek and found the water clear and pure; the flow rate was 800,000 gallons per day (Fayetteville Daily Democrat October 23, 1907). At that time, there was no means to connect this source to the city reservoir on Mount Sequoyah. This problem was solved by laying an eight inch main from Clear Creek to the city distribution system. A steam pump was relocated to Clear Creek, at the site of the Johnson pumping station and filter plant and in 1909 an auxiliary pump was authorized. That year, Superintendent Duggans said there was enough water to supply the town for ten days but after that wells and springs would have to be requisitioned. In the following years lack of an adequate water supply would continue to plague the city. The West Fork pumping station and the Clear Creek emergency pump enabled the city to get through a drought in 1929, the city missing running out of water by one day.

In 1935 it was proposed to create a 30 to 40 acre recreational lake (subsequently 90 acres) west of Highway 71 on land to be donated by the Lewis brothers. This envisaged construction of a dam across Clear Creek and two roads to provide public access. The project received Presidential approval in 1936 but was never carried out.

In 1947, an engineer, Max Mehlburger, was employed as a consultant by the city and he advised that improvements to the water supply were needed. At a breakfast meeting in the Blue Moon cafeteria that year, sponsored by the Fayetteville Chamber of Commerce, a project to increase the water supply either by construction of a dam across Clear Creek, or by running a twenty inch main to the pumping station in Johnson, was presented. A dam committee was formed and in January 1948 at an open forum the chairman, J. K. Gregory, proposed building a road around the reservoir and provision of home sites that might help pay for the project. A swimming pool could be built between the dam and the highway. These developments did not materialize. At a meeting held on November 9, 1948 the city council voted seven to one to locate the proposed reservoir east of Highway 71. An alternative site at Johnson Springs was rejected because of possible sewage overflow from Fayetteville and drainage from Johnson, at such a location the lake would be shallow and have a lower water capacity. A bond for \$800,000, part of which was for the reservoir, was proposed and justification for the expenditure presented in an article in the Northwest Arkansas Times. The bond issue was approved by electors on November 17, 1948 and the following year negotiations began to purchase the land required. The City of Fayetteville Engineering Department



map of landholdings at the proposed site of Lake Fayetteville is illustrated³³.

Land purchase and dam construction

Rather than start condemnation proceedings, the city bought 641.37 acres from eight landowners for \$159,500, at greater cost than originally anticipated. Property holders were (from west to east), M. & M. Cashion (32 acres), S. & E. Dellinger (121 acres), G. & N. Linglebach (22 acres), H. & B. Wilkinson (103.6 acres), A. & N. Williams (81.27 acres), and N. & R. Ivey (41.5 acres). To the north property was purchased from J. McCoy, W. & V. Sanders (162.5 acres), and B. & K. Brogdon (77.5 acres). The farms were said to be on good land that had been improved by the property owners.

The first property owners to sell were the Williams who received \$10,500 for their acreage that included a house and outbuildings south of the botanical garden. Samuel Dellinger sold his 121 acres which cleared the way for dam construction. Dellinger was one time head of the Zoology Department at the University of Arkansas, and Curator of the University museum. M. Cashion sold the land that includes the present ballpark. Jesse H. McCoy, W. R. Sanders, and his wife Viola, had purchased 162.5 acres from Solon C. and Naomi Henson on August 31, 1948, less than one year before selling their land to the city. Theirs was the largest landholding that is now part of the lake, the environmental center, and old fields now managed as prairie. The Brogdon property includes the northern section of the Butterfield trail and the field east of Crossover Road. The Ivey property is currently being developed as a botanical garden. The city subsequently sold 2 acres to the United Way of Washington County and 1.5 acres to Peace at Home Family Shelter leaving a net acreage of 637.87 for Lake Fayetteville Park. Acreage east of Crossover Road is currently undeveloped.

Evidently, there was some question whether the city had overpaid for the land acquired. In an interview for the Northwest Arkansas Times in January 1952 Dellinger contested this point and described his property. In addition to a home there were several out buildings including a spring house, a hen house, and a grade A milk house all concrete floored with steel roofs. The land was permanent pasture with three acres of irrigated land given over to strawberries. He had a Black Angus herd, swine, and poultry which had to be sold at a loss when the farm was sold to the city. After it became known that city planned to purchase the lake area he was flooded with offers from speculators who hoped to buy up the land and make a quick profit. On one 20 acre section covered with White Oak trees he was offered from \$55-\$100 an acre by men who planned to lay out the section in lots thus increasing its value against the time the city took action. A photograph of the Linglebach family (kindly provided by Dick Linglebach) is illustrated. This shows Dan, Nora, and George Linglebach outside their house on Clear Creek prior to dam construction. A photograph was also taken of an old style chicken house with nine week old laying pullets grazing outside.





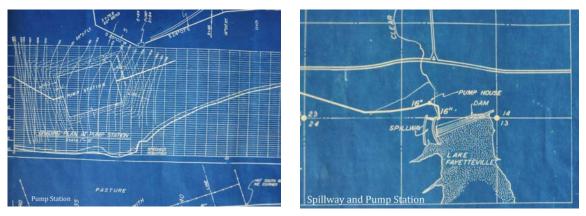
Dam construction

The contract to build the dam was awarded to S. E. Evans Company of Fort Smith for \$202,775. On August 11, 1949 the Northwest Arkansas Times showed a photograph of Mayor Rhea signing the contract. Two months later the Times published a photograph of the earth embankment under construction and the concrete tower through which water would flow to the city. The dam was closed for filling in early December 1949 and water first started flowing over the spillway following local floods on May 10, 1950. Regulations governing fishing and boating were adopted and J. Shackleford was named the first manager. The lake opened for fishing on July 15, 1949 for 50 cents a day.

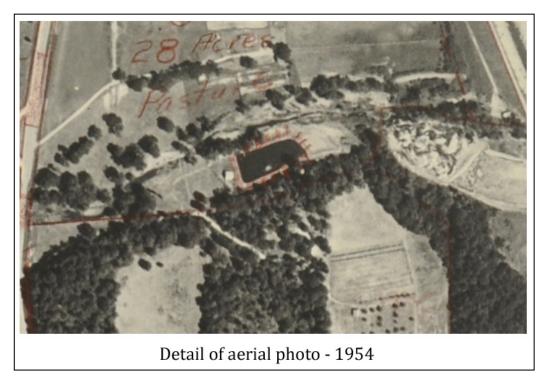
The history of Fayetteville's water supply and plans for the future were discussed at a meeting of the Exchange Club by L. M. McGoodwin, a consulting engineer involved in yet another survey of the water needs of the city (Northwest Arkansas Times, November 20, 1952). It had been estimated that over a million dollars would be required to build the dam and provide a pump, filter plant, and transmission lines. Of the original \$800,000 bond only \$580,000 was available and as a result the filter plant was not built. He recommended that a remote control pump station be installed plus a sixteen inch transmission line to Mount Sequoyah. A month later the city approved a second bond issue for \$450,000 to finance the water line and the pumping station and in July 1953 the city began pumping water to the filter plant on Mount Sequoyah (Northwest Arkansas Times July 31, 1953).

Plans of these water-work improvements, dated January 1953 show details of the pump station and the sixteen inch pipe starting just below the spillway, following Clear Creek a short

distance downstream, and crossing to the south side where it enters the pump house³⁴. The pipe then proceeds in a southerly direction to Mount Sequoyah.



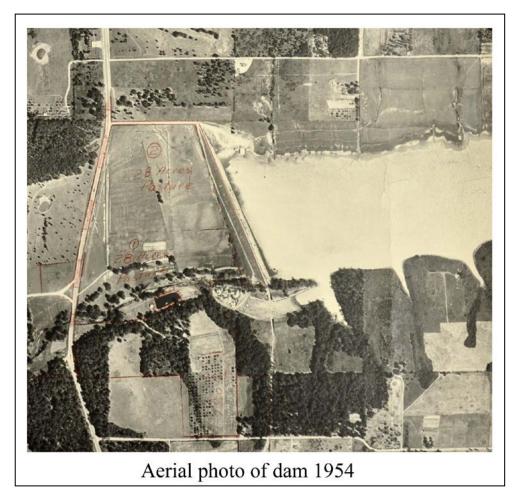
An aerial photograph was taken in 1954 and a detail shows the rocky spillway, an oblong shaped lagoon downstream, and what may be a small building that may have been the pump house³⁵. No trace of this structure or the sixteen inch pipe remains.



Water shortages

Within a short time it became clear that although Lake Fayetteville was thought to have adequate capacity, the distribution system could not satisfy demand. It was still necessary to depend upon the West Fork of the White River for water. The western end of Lake Fayetteville in the 1954 aerial

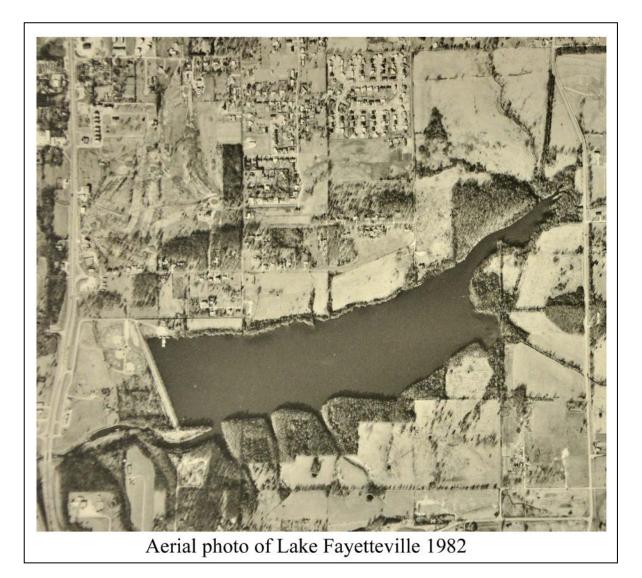
photograph is shown on the next page. The lake immediately above the spillway was dry and the low water level had exposed the northern shoreline which was then open pasture with no tree line.



In 1955, the Superintendent of the Water Department, W. C. Smith, said that 'the city's use took about half the volume of Lake Fayetteville cutting the lake's level some six and one half feet to seven feet. In November that year the lake was five feet below the spillway. In January 1960, the lake was lowered 2-3 feet by opening valves in the lower part of the tower in order to clean out the water (Northwest Arkansas Times, January 21, 1960). Superintendent Carl Smith explained that the water at the lower level did not move much and when the city started pumping from the lake the water had a stale taste and odor. The following summer when the new source from Lake Sequoyah was available the city planned to clean out three fourths of the supply allowing the lake to refill with fresh water. Problems with the water supply continued. Thus, in July 1970 Fayetteville was faced with a critical shortage following an extensive dry spell when only thirty five days' supply was left in Lake Fayetteville. Fortunately, a solution was at hand because in 1959 the cities of Fayetteville, Springdale, Rogers, and Bentonville had created the Beaver Water District and by 1971 water could be obtained from Beaver Lake. It is interesting to note that a committee had been

formed to work toward construction of Beaver dam as early as 1948 but at that time the main purpose was flood control and power generation (Northwest Arkansas Times, December 22, 1948).

An aerial photograph in 1982³⁶ shows that the new Highway 265 had been constructed (extreme right on the photo) and the section of Old Missouri Road, or Butterfield trail, can be followed north of Clear Creek and for a short distance to the south after which it peters out. The bluffs along the southern shore are now reforested and a narrow tree line exists along the northern shoreline. The old fields currently being managed as prairie were open fields in 1982.



CITY PARK AND ENVIRONMENTAL CENTER

Lake Fayetteville was retired as a water source in 1971 and the city proposed selling the property. Samuel Dellinger³⁷ was chairman of the "Save Lake Fayetteville Committee" and spoke actively in support of its being preserved as a public park. At a meeting of the Women's Civic Club in June 1971 he pointed out that many cities were setting aside natural areas for educational and recreational purposes, that the Lake Fayetteville area was already publicly owned and natural for this type of development. His speech was quoted in the Northwest Arkansas Times (June 2, 1971):

"We have entirely too many honky-tonks, too much concrete and too much bulldozing. We need something in keeping with the highest aspirations of our people. Fayetteville should adopt the ideal of beauty and education".



Samuel Dellinger

A subsequent article pointed out that at a time of steadily shrinking green space, Fayetteville and Springdale had a never to be repeated opportunity but unfortunately this would cost money (October 2, 1971):

"As with most opportunities, there is a catch --- to create a lasting and protected park will cost money – money which Fayetteville doesn't have. Such a recreational project calls for camping areas, nature trails, access roads, park rangers, sanitation, water systems and the dozens of other things necessary to success and popularity".

The article showed several photographs of the lake including the original sign listing banned activities that included hunting, picnicking, swimming, and ice skating! The Save Lake Fayetteville Committee prepared petitions, and after a rally and public hearings, the property was transferred from Water and Sewage to the Parks Division. By 1974-1975 its principal use was for recreational fishing and boating.

Environmental center

Lake Fayetteville environmental center was founded at the initiative of Tom Jenkins a biology teacher at Fayetteville High School. Jenkins had been contacted by Frances James, Curator of the University of Arkansas Museum, who was concerned that the lake would be sold off for private development. An undated proposal written by Jenkins argued the case for establishment of what

was referred to as the Lake Fayetteville Nature Center³⁸. This received the support of Harry Vandergriff, Superintendent of Fayetteville Public Schools, who wrote:

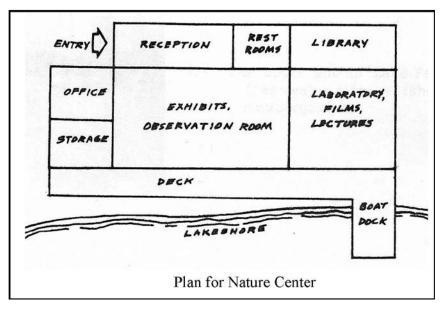
"With education being one of the avenues for improving environmental quality, an educational nature center for the public schools and the public in general would benefit all. Also, the establishment of the Lake Fayetteville Nature Center would represent a positive action for environmental education, an example for other areas of the state".

Jack C. Kreie, Science Coordinator, Fayetteville Public Schools wrote:

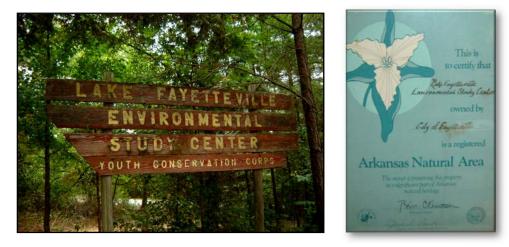


"Considering the urgency of educating youngsters to ecological relationships, we must find a large natural area close to our schools. Population influx is rapidly pushing suitable places out of our reach by distance and price".

The initial proposal was ambitious and envisaged approximately 300 acres of land encompassing the upper end of the lake. A building was proposed with an observation room, interpretive exhibits, laboratory space, library, and deck combined with a boat dock along the lakeshore³⁹. On the building however it is named the "Springdale-Fayetteville Center for study of Aquatic Resources". According to Tom Jenkins, reference to water was important to obtain support for funding the Center.

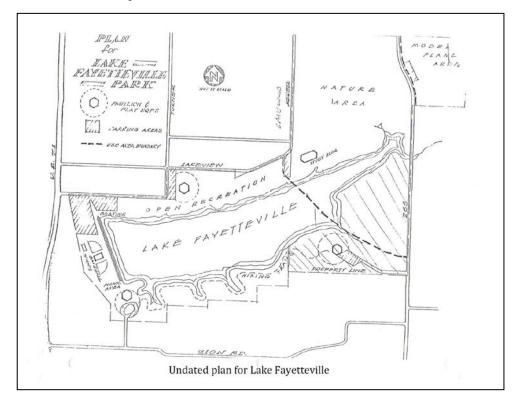


On April 17, 1973, the Fayetteville Board of Directors passed a resolution that the eastern portion of the lake be reserved in its natural state as a nature study area for at least fifty years. The environmental center was created with the aid of federal funds from the Elementary and Secondary Education Act. The original grant was obtained as a cooperative effort between Tom Jenkins and Bill Merrifield of Springdale Schools. Funding ceased in 1977 and since then the Fayetteville and Springdale Public School systems have taken responsibility for running the center. In the entrance lobby a framed certificate signed by Governor Bill Clinton states that the environmental center is a registered Arkansas Natural Area. Thousands of local school children have utilized this resource. An undated memorandum for Fayetteville Schools sets out some of the activities of students in the early days. These included the study of limnology, ecology, water quality, aquatic and sylvan resources, and hydrology. Facilities were available for orienteering and climbing and there was a sensory trail for the visibly impaired, a pier with wheel chair access, and self-guided nature trails. Students were involved in planting fir trees around the perimeter of the park and installing nest boxes for Wood Ducks (colonized by a Flying Squirrel population). Curricula were available for kindergarten, fifth, eighth, and tenth grade students. Cooperative efforts were undertaken with the University of Arkansas, the Boy Scouts of America, Audubon Societies, the Arkansas Game and Fish Commission, and the Arkansas State Department of Education. Many of these activities continue today.



Use of the land for nature study was not without controversy, the tract of land being described as "an unsightly waste" by one member of the Parks and Recreation Advisory Board. Evidently there were other threats. On behalf of the Fayetteville Public schools the memorandum asks:

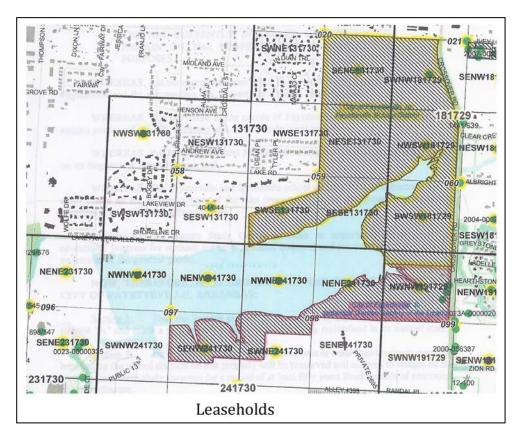
"Will the public trust be preserved? Or will one or a few wealthy people take over parts of the Lake Fayetteville Environmental Center for their personal, private use? The school district requests the reduction of the 1973 resolution to a contractual instrument binding both parties to the terms of the agreement for the stated period of the agreement – fifty years, not fifteen". As late as 1993, the city of Fayetteville was still considering selling land around Lake Fayetteville and other local parks for development but thanks to the intervention of the Ozark Society their importance for recreation was recognized (Judith Woltjen, pers. comm.). On the 20 June 1995, the Mayor of Fayetteville signed an Ordinance (No. 3898) that renewed the 1973 resolution. Thus the eastern portion of Lake Fayetteville be maintained in its natural state for fifty years and any structures intended for nature study purposes be preserved and allowed to remain for that period. An early undated plan for Lake Fayetteville Park designates the extensive area intended for nature and open recreation.



RECREATIONAL COMPLEX

In 1979, the Northwest Arkansas Regional Planning Commission classified Lake Fayetteville as a large recreational complex that provides a large area of open space and a natural environment⁴⁰. Its function was to "provide citizens contact with nature and provide an environment in which a larger number of activities may take place". The design "should give special attention to the utilization of natural features" and "take advantage of sites that provide interesting and varied landscapes such as woodland, open meadows, and valleys. Access to vistas and vantage points may be accomplished through paths, roads and hiking and bridle trails". A long list of other features, such as "archery ranges, nature trails, bandstand, golf course, bridle paths, zoo, botanical gardens, museum, and lakes with fishing, boating, and swimming facilities" might be available in such a complex. Some of these features have come to pass but fortunately, other proposals for development (housing on the north shore, selling land to Springdale to build a lift station, a BMX dirt bike track, and RV park) have not occurred.

An undated map produced by the city Engineering Department shows the leases held by the Fayetteville school district and the botanical garden society of the Ozarks. Most of the northeastern portion of the lake property, including fields now developed for disc golf, was allocated to the school district. The botanical garden lease extended along much of the southern shoreline.



In recent years the city has extensively developed Lake Fayetteville for recreational purposes. The area west of the dam provides a softball facility that is extensively used during the summer months. This was constructed in 1975, extended in 1981, and has had numerous improvements since. In 2001, a playground was installed near the softball facility for \$44,950 and in 2006/2007 the Rotary Club donated a new scoreboard. A new boat dock building was constructed in 1976 by Martin Johnson Construction Company for the sum of \$10,997; repairs were undertaken in 2000 for a further \$7,068. A new restroom was added in 2006. A sand volley ball court was completed in 1983 and extended in 1985. Model airplane use on land next to Hwy 265, approved in 1972, was relocated to Combs Park in 1985. Veterans Memorial Park was dedicated in 1996 and a pavilion constructed with a grant from Arkansas Department of Parks. Major expenditure has included \$149,621 for construction of an 800 square foot restroom and vehicle parking lot (1998). In 2000 a flag raising ceremony was held in Veterans Park following a donation of a flag pole from Woodmen of the World. The 18-hole disc golf course at Gulley Park was relocated to the north shore of Lake Fayetteville in 2005. This is immensely popular and used all year round. Informational kiosks were installed at three locations with a grant from the Arkansas Highway and Transportation Department. From 1970 to 2003, \$889,408 was spent on improvements to Lake Fayetteville (Parks and Recreation Department).

The Parks and Recreation Department hosted a public meeting at the environmental center on November 28, 2000 to discuss trails at Lake Fayetteville. A GIS map had been prepared and distributed to different user groups for their input. This public consultation was the start of the development of a new trail system that continues today. In 2005 the dam was given a hard surface and a pedestrian bridge completed across the spillway to provide easier access to Veterans Memorial Park. A grand opening of the bridge and trail project was held the same year. This project cost \$877,709. In 2007 the Parks Department was awarded Outstanding Facility by the South west region of the National Recreation and Parks Association. The same year, a hard top trail was constructed from the car park at Lake Fayetteville road eastwards to the environmental center; in 2009 this was extended around the old fields and southwards to the botanical garden. This involved the construction of a second iron foot bridge (Copperhead Crossing) across Clear Creek. An earlier wooden bridge, constructed with the involvement of Eagle Scouts, was washed away in recent floods. In 2011 the vehicular entrance to Veterans Memorial Park from Zion road was relocated and in 2013 the hard top trail completed thus providing a complete circuit around Lake Fayetteville Park. In 2014, a major engineering project was completed involving an extension of the trail across highway 71B to the city trail system.

ENVIRONMENTAL ORGANIZATIONS AND BOTANICAL GARDEN

LFWP

In 2002, an informal group led by Ron and Jennifer Michaels, Floyd Watson and Kevin Bennoch were instrumental in founding the Lake Fayetteville Watershed Partnership (LFWP). This is a nonprofit volunteer group committed to maintaining the water quality of the lake and its watershed. The mission statement is to promote, preserve and enhance the integrity of the Lake Fayetteville watershed through scientific evaluation, educational programs, and volunteer cooperation. A major activity has been the organization of "clean-ups" with the help of high school students that has involved removing tons of trash much of which enters the lake from the watershed and fishing debris. Grants have been received for a sediment study, interpretative signage, and brochures.

FNHA

The Fayetteville Natural Heritage Association (FNHA) was formed in 2003 with the mission to identify and protect Fayetteville's most important natural areas. Grass species characteristic of prairies can still be found in the old fields north of the environmental center and so FNHA initiated a prairie restoration project in 2009 in collaboration with the city of Fayetteville Parks and Recreation Division. This has involved physical removal of invasive species such as Eastern Red Cedars by volunteers followed by controlled burns to remove rank vegetation. Three units of the old fields are currently being restored. The project has involved FNHA volunteers and students from the University of Arkansas recruited for "Make A Difference Day".

Botanical garden

Donna Porter was Founder and Director of the "Botanical Garden Society of the Ozarks" who served on a volunteer basis from 1993 to 1997. Thanks to a grant from the Stanley Smith Horticultural Trust Porter was able to serve as a paid Director until her departure in 2001. The garden was incorporated as а non-profit organization in January 1994, the lease was renewed in 1997. Porter was also instrumental in producing a trail guide for the south shore that identifies many tree species (kindly provided by Bob



Caulk). The second edition of the guide was funded by the Ozark Society Foundation. Her pioneering contributions were recognized on May 10, 2008 with the opening and dedication of the Founders Garden and a fountain.

Donna Porter was followed by Carl Totemeier, Vice President Emeritus of the New York botanical garden, who served as a volunteer Director until his death in 2004. A Master Plan for the botanical garden was approved by the City in 2003 and the lease agreement revised to give permission to use the site for this purpose for 100 years. A timber framed Horticultural Center, named in honor of Carl Totemeier, was constructed, and various plant collections displayed in order to promote public awareness of the vital role played by plants in the ecosystem. The garden is organized around various exhibits supported by local organizations, such as the Master Gardeners of Washington County, the Kiwanis club, Companies, and various other benefactors. Whimsical bronze statues were provided by the Tyson family.



In July 2004, the Fayetteville City Council approved a grant of \$750,000 to be used to complete construction of the parking area. Grants from various sources have helped sustain botanical garden activities. The Carl A. Totemeier Horticulture Center and Phase 1 gardens were dedicated on October 6, 2006 with retired U.S. Senator Dale Bumpers providing the keynote address.

On April 24, 2013, the botanical garden put forward plans at a public meeting to develop much of the southern shoreline. This led to considerable opposition from organizations such as the off-road cyclists and others, who fear that such development will spoil the natural environment of Lake Fayetteville.

LAKE FAYETTEVILLE ART

Permanent examples of artistic expression can be seen in the fine bronze statuettes in the botanical garden but there have also been examples of art forms which, because of their transient presence, should also be included in an article concerned with the history of Lake Fayetteville Park. The first is the "Spiral Wetland" a 129 foot long eco-artwork constructed by Stacy Levy in 2013. This comprised a temporary floating structure designed to hold aquatic plants and improve water quality that was anchored close to the dam. Unfortunately the plant growth on this structure was disappointing and the spiral wetland was dismantled after a year. The second are examples of a stone balancer's craft erected by North Watt. He quotes Goethe: "Stones are mute teachers: they silence the observer, and the most valuable lesson we learn from them we cannot communicate".





HISTORICAL BIOGEOGRAPHY

In 1956, Hulsey gave a detailed description of physical and bio-geographical features of the reservoir and its environs⁴¹. Aquatic plants were in little evidence and consisted almost entirely of only one genus (*Radicula*, water cress) that grew in the bay formed by the spring in the northeast corner of the lake. Parts of his description are quoted here:

"The elevation of the bottom in the deepest part of the lake is 368.19 meters (1208 feet) above sea level. The lake has a maximum depth of 12.19 meters (40 feet) and covers an area of approximately 687,861 square meters (170 acres). The lake is bordered on the southwest and the northeast by steep hills covered with an oak-hickory forest, while the rest of the shore is bordered by gently sloping land covered with meadow grasses. The watershed embraces an area of approximately 25,086,688 square meters (6200 acres), 2,601,732.32 (643 acres) of which are city owned. All property bordering the lake is owned by the city. The watershed, other than city property, is principally taken up in small farms, comprised of wood lots, orchards, broiler houses, pastures, and some row crops such as tomatoes, corn, beans, and strawberries. When the land was flooded, it covered parts of three such farms. The bottom of the deeper areas of the lake was composed of bedrock during the early days of impoundment. This finally silted in and became a mixture of dark gray mud and trash. The bottoms of the shallow areas varied from wave washed gravelly material to tight sod where pasture or meadow had previously been."



By the late 1970s, silt had reduced the maximum depth of the lake to 10.5 meters with a median depth of 4.3 meters. In 1977, Jackson took photographs at three sampling stations, two by the lake edge along the north shore, and one from the northeast corner of the lake (opposite the present day environmental center)⁴². Photographs from Station I and II show a mature tree line, a feature absent in the aerial photograph taken in 1954. There is an extensive zone of aquatic vegetation in the shallow water along the lake edge. At Station I the dominant aquatic plant was *Nelumbo* spp. which almost completely covered the water surface. At station III a shallow mud flat was present

but did not develop rooted aquatic vegetation.

In 2004, Stephen Boss, and colleagues carried out a bathymetric and sedimentation survey of Lake Fayetteville. The lake was deepest along the southern shore and by the dam (approximately 32 feet), and shallowest along the northern shore and the south-eastern part of the lake (up to 12 feet). He found relatively little change in the reservoir volume over the last 54 years (a capacity of 2,507 acre-feet). Sediment was accumulating at the rate of 0.2 inches a year, a value considered low compared with other lakes in northwest Arkansas. Maximum sediment thickness (about 3 feet) was found in the center of the south-eastern part of the lake, opposite the environmental center. Studies by Thad Scott, conducted in 2010, indicated that the lake has a high phosphorus load and is highly eutrophic, no doubt due to run off from the watershed.



Lake Fayetteville at dawn

FLORA

The aerial photographs taken in 1941 and 1954 and the description provided by Hulsey (1956) indicate that the area surrounding Lake Fayetteville was once farmland comprising open fields, grassland, and pasture and the occasional plantation. Clear Creek and the immediate steep hillsides and dry draws were lined with trees. As today, forest was present on the hillside northeast of the environmental center. Much of the present day flora was therefore introduced or colonized the park following its establishment.

In the late 1970's Donna Porter identified trees and shrubs along the trail that once led along the southern shore and a leaflet was prepared indicating their locations. These were: American Elm, American Sycamore, Bitternut Hickory, Black Cherry, Black Gum, Black Oak, Black Walnut, Black Willow, Bur Oak, Carolina Buckthorn, Dogwood, Eastern Redbud, Eastern Red Cedar, Green Ash, Honey Locust, Mockernut Hickory, Northern Red Oak, Ozark Chinkapin, Persimmon, Post Oak, Red Maple, Red Mulberry, Sassafras, Shortleaf Pine, Silver Maple, Slippery Elm, Southern Hackberry, Sugarberry, Winged Elm, and White Oak. Unfortunately, this trail became badly eroded as a result of off-road cycling and it has now been blocked by those developing an alternative route. Some of the trees on the old trail still show the signs erected by Porter.

The flora of the upland areas is characteristic of steep slopes and dry draws characteristic of acidic chert woodland and mesic hardwood slope forests. Like other wooded areas of the park, major ecological stresses include fire suppression, non-native plant species, deer pressure, bank erosion, and human disturbance.

In October 2012 the botanical garden commissioned a riparian enhancement plan which focused on streamside vegetation. A few native and alien species were recorded. Native plants planted in the garden are not included in this report. An area of rough grassland south of the botanical garden contains a few relict tall grass prairie species but this is now being redeveloped.

During the spring and fall of 2013, Karen Willard identified many plants at Lake Fayetteville. David Oakley provided records and photographs as did Neil Nodelman and Judy Woltjen. Theo Witsell and Brent Baker at Arkansas Natural Heritage identified some plants based upon my photographs. A list of plants recorded at Lake Fayetteville is included at the end of this report. They are presented in alphabetical family order but separated as Ferns, Rushes, Sedges, and Grasses, Trees, Shrubs, and Vines, and Wildflowers (Hunter, 1988, 1995^{43,44}). For each record I give the specific name, common name, family, and whether native or alien. Alien refers to non-native species that may have been accidentally or deliberately introduced.

The flora of Lake Fayetteville is principally that of alien and native species characteristic of woodland, grassland, wetland, old fields, disturbed ground, edges of trails, and old homestead sites. Some locations are dry (steep slopes overlooking the lake) whilst others are wet (northern shore and base of dam). In addition to chert and mesic woodland, plant communities include those characteristic of riparian forests, stream beds and marsh, lakeshores, and disturbed areas.

Lake Fayetteville has a history of plant introduction, mostly unrecorded, which is described in the section Management. Unit 1 of the prairie restoration project was seeded in 2012. About 25

species of the 36 introduced appeared in 2013 and 2014; these are shown in the Table "Wildflowers seeded at Lake Fayetteville". On April 9, 2013, a colony of Prairie Trout Lilies was relocated from a woodlot under threat from the development of Old Wire road. They were planted on the hilltop by the environmental center and in a grove of Post Oaks along the old fence line by Unit 1 in the prairie.

The Arkansas Champion Black Oak had a 14 foot girth and a plaque claiming it to be the largest specimen of this species in the State. Unfortunately, this magnificent tree did not survive the summer drought of 2011 and was removed on February 8, 2013. Its shape, an inverted open umbrella shape with enormous horizontal limbs, indicates that it matured in an open prairie type of country. Some flowers found at Lake Fayetteville are shown below.



HABITATS

Lake and shoreline

Most of the lake comprises open water but at the eastern end there are several shallow, sheltered bays and creek inlets. The cove in the southeastern part of the lake is particularly attractive for wildfowl and often holds hundreds of ducks in winter and during migration. In view of plans by the botanical garden to develop this area this may not be so in the future. Clear Creek enters the lake from the northeast and frequently floods during heavy rain; this has resulted in gravel bars that divide the shallow waterways. These inlets support some marshy habitat. Elsewhere, however, aquatic vegetation is largely absent and in many places mature trees grow down to the lake edge. For example, on the northeast shore and by the spillway, rocky cliffs and steep slopes adjoin the water edge with little transitional vegetation. These exposed rock faces are of ancient origin comprising light chert and dark limestone of the Boone Formation. Edge habitat comprises trees from which in many places understory has been removed. These areas are often disturbed, especially along the northern shore that has partly been cleared for the disc golf course. Substantial disturbance often occurs when fishing boats are present and due to the heavily used trails that run close to the shoreline. Marsh vegetation is scarce at Lake Fayetteville but the rank, tussocky grass and reeds at the base of the dam may hold sparrows and occasionally Marsh Wren, Sedge Wren, and Sora.



Forest

Mature forest comprising Black Oak, Shumard Oak, White Oak, and Post Oak, with a limited understory of Dogwood, Serviceberry, American Plum, and Red Mulberry occurs on the hillside northeast of the lake and north of the botanical garden. Many of the large, mature trees were damaged during the 2009 ice storm. Birds are generally scarce but chickadees and titmice are typical residents; woodpeckers and the occasional owl utilize the many cavities in dead limbs and trunks. Forest is also found along the southern shore where understory is well developed. Barred and Great Horned Owls nest here and Acadian Flycatcher can be heard in the summer months. A low lying secondary woodlot is present beneath the dam. Bottomland forest at the east end of the lake has a few Bald Cypress and Willows. The hard top trail runs through another reforested area north of the environmental center. This area has been colonized by Red Maple trees which have grown up over about a dozen prairie mounds.



Old fields and grassland

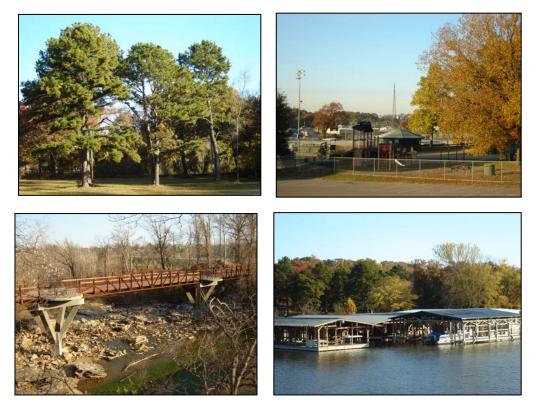
Old fields north of the environmental center and near the botanical garden show a variety of successional plant communities; a suite of birds that occur in such habitats including Field Sparrow, Eastern Towhee, Yellow-breasted Chat, American Goldfinch, and Indigo Bunting may be found. Painted Bunting, Prairie Warbler and Bell's Vireo are sometimes seen but Northern Bobwhite and Grasshopper Sparrow are no longer present. These old fields are being restored to prairie. Restoration has involved removing cedars followed by controlled burning; it is too early to know whether this will have any effect upon grassland birds but early results are encouraging with records of Vesper, Harris's, Lark, Clay-colored Sparrow and Painted Bunting.



The field south of the botanical garden holds species such as Le Conte's Sparrow and occasionally Savannah Sparrows and Eastern Meadowlarks. This field is slated for development by the botanical garden. Regularly mowed fields occur along the north lakeshore and alongside route 71B west of the softball park. The former was once a good site for Palm Warbler but is now a disc golf course and is heavily disturbed by human activity. During heavy rains this low lying land is subject to flooding and provides feeding opportunities for robins, starlings, and the occasional flock of Rusty Blackbirds.

Public use areas

The fences and floodlights of the ballpark are often a good place to find finches, blackbirds, sparrows, and bluebirds. The small grove of mature pine trees by the boat dock may have Pine Warbler, Yellow-throated Warbler, kinglets, finches, and occasionally Pine Siskin and Red-breasted Nuthatch. Red Crossbills were found in 2013. Yellow-throated Warbler, Louisiana Waterthrush, and Winter Wren can be seen from the iron bridge crossing the spillway and Yellow-rumped Warbler is very common at this location during spring migration.



MANAGEMENT

Lake Fayetteville is managed by the Fayetteville Parks and Recreation Division. The multiplicity of different uses makes management of this resource a complex and expensive undertaking. The original trail that winds around the park periphery is used extensively by off-road bikers and has suffered substantial erosion. This has been replaced by other trails which are suffering a similar fate. Human activity, particularly fishing and boating, causes considerable disturbance to wildfowl on the lake, and extensive trail use must impact land birds and other wildlife. Nevertheless during spring migration it is still possible to see 70-80 species in a day and at other times of year 40-50 species may be encountered.

Management has principally involved trail and facility maintenance. From an environmental perspective, sympathetic management is critical to maintaining the quality of Lake Fayetteville. Several developments, such as the creation of a disc golf course that has entailed removing shrub and understory vegetation from parts of the northern shore, have had a negative impact. Plans by the botanical garden to develop the southern shore may also have a negative impact in the future. In recent years, however, there have been encouraging signs. Thus the completion of the new hard top trail may reduce pressure on other less resilient trails in the park. Many hundreds of people utilize the trails and, despite the lack of trash cans, litter has not so far been a problem. The same cannot be said for the lakeshore and Clear Creek which constantly accumulate rubbish left by fishermen and boaters, and debris washed in from the surrounding watershed. Fortunately a regular trash pick-up is organized twice a year by the Lake Fayetteville Watershed Partnership, a non-profit group of volunteers committed to maintaining the water quality of Lake Fayetteville. In one recent clean-up two truckloads of trash were collected from the area around Copperhead Crossing, mostly rubbish washed down during floods from the surrounding Clear Creek watershed.

Perhaps the most difficult issue is the rapid colonization of the old fields by non-native invasive plants and trees. The prairie and savanna plant community is badly degraded by a suite of invasive species including honeysuckle, tall fescue and sericea lespedeza. In the 1970s, conifers were planted around the perimeter by students from the environmental center and are gradually spreading. Native Eastern Red Cedars are replacing grassland communities.



In view of the substantial loss of prairie throughout northwest Arkansas, an ambitious restoration project has been initiated by the FNHA in conjunction with the Parks and Recreation

Division. For the purpose of restoration, the old fields north of the lake were designated Units 1, 2, and 3 (from west to east respectively) and in the fall of 2009, 2010, and 2011, cedars were cut down by volunteers in these areas. The following springs, controlled burns were carried out by private contractors hired by the city to remove rank grass and brush. In 2012, cedars were also cut down south of Unit 2. This area is mainly shrubby invasive vegetation with a few scattered Post Oaks. Controlled burns were carried out in 2013, 2014, 2015, and 2016 in an attempt to recreate a savanna type habitat.

In 2011 and 2012, herbicides were used in selected areas to eradicate sericea lespedeza, a procedure that was only partly successful. The northern most field of Unit 1 was tilled and in 2012 seeded with a wild flower mixture. No flowers appeared that year but in 2013 a colorful display, principally Black-eyed Susan, Mexican Hat, and Indian Blanket was evident. Unit 3 was seeded with Big Bluestem, Little Bluestem, Indian Grass, and Switchgrass in the spring of 2012 and herbicides (Remedy, Triclopyr, Plateau, and Imazapic) used in the fall to remove sprouting woody material.

On October 20, 2012 about 40 University of Arkansas students (volunteers for the Center for Community Engagement "Make a Difference Day") spent several hours clearing brush and tree limbs from Units 1 and 2. This event was repeated on October 26, 2013 when 80+ student volunteers cleared brush from the southern section of Unit 2.



The botanical garden is responsible for managing the area of the park currently under their leasehold. Some planting of native trees has been undertaken along the streamside (Hilton branch) riparian area, and in the field south of the garden proper. A report recommended introducing native plants but it is unclear if this was carried out.

BIRDING LOCATIONS

Birding can be good anywhere but the following areas are particularly worth visiting:

Boat dock, dam, spillway, Veterans Memorial Park

Pine trees by the boat dock attract species such as Pine Warbler that may be difficult to find elsewhere. The dam is the best location to observe water birds at the west end of the lake. The ditch at the base of the dam may have birds that favor wet habitat. The spillway by the iron bridge is excellent for migrants and Veterans Park provides access to mature deciduous woodland.

Northern shore, environmental center, bottomland woods

The environmental center is perhaps the best area for birding because anything can turn up, especially during migration. A short trail to a viewing platform provides an opportunity to observe water birds that frequent the eastern portion of the lake. It is possible to follow three trails in an easterly direction. One trail winds around woodland edge along the northern side of the hill east of the environmental center. Another goes directly over the hilltop and a third follows the edge of the northern shore. These connect with the hard top trail to the botanical garden and provide excellent views of the bottomland woods.

Old fields

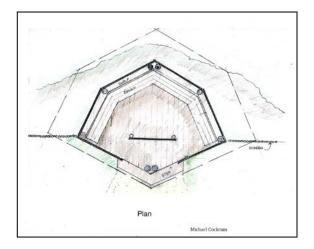
The hard top trail extends around the northern perimeter of the park and provides access to a drier type of habitat – old fields, prairie, and secondary regenerating shrub and woodland.

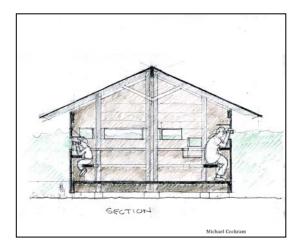


BIRD BLIND

A proposal to construct a bird blind on the southern shoreline of Lake Fayetteville was approved by the Parks and Recreation board on July 7, 2014. The blind is named in honor of Paige Mulhollan, an avid birder and one time director of the botanical garden. A committee comprising Kelly and Mary Bess Mulhollan, Joe Neal, Bob Caulk, Michael Cockram, and the author were involved in the planning and fund raising for this project. A conceptual drawing and plans were drawn up by Michael Cockram and are illustrated below. In November, 2014 approximately 40 students from the University of Arkansas helped move heavy construction materials and prepare the access path to the blind. The project was nearing completion in the summer of 2016.

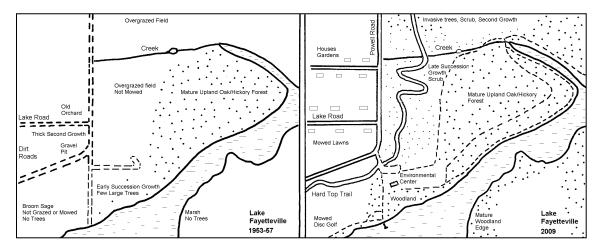






BIRDING PIONEERS

Douglas James and Bill Beall were the first observers to systematically record the birds of Lake Fayetteville. The earliest record is a field trip made by James on October 31, 1953 within a month of his arrival in Fayetteville. On that brief visit he recorded eleven species including seven ducks, a Double-crested Cormorant, American Coot, American White Pelican, and a Horned Grebe. His trips to the lake and surrounding farmland during November and December that year added greatly to the total. Beall also commenced birding at Lake Fayetteville in the fall and winter of 1953 but unfortunately his field notebook was lost in a canoe upset. From April 1954 to May 1957, Beall made 95 trips to the lake and recorded the birds he found. He meticulously documented start and finish times, temperatures, cloud cover, wind speed, wind direction, and the number of individuals of each species identified. Most of his trips involved a circuit commencing where the small creek crosses present day Powell Road, following it in an easterly direction, and then proceeding in a westerly direction along the northern shore. A full summary of Beall's records is included at the end of this report.



In 1987 Beall drew from memory a map of his route illustrating this with habitat descriptions. A comparison of this part of Lake Fayetteville in the 1950s, based upon his sketch, and as it appears today is illustrated. Habitat alteration from overgrazed pasture to secondary scrub/woodland is evident. Beall noted that the area around the present day environmental center comprised early succession growth with a few large trees and to the north fields divided by barbed wire fences. To the west (currently the disc golf course) fields were not grazed or mowed; no trees were present along the northern shore. The only unchanged feature is the small oak/hickory wood on the hillside east of the environmental center. The northern shore was open with weedy habitat where wading birds could be found. Today, it is no longer possible to walk along the line of the small creek since this is overgrown with brush and rank vegetation.

Many species described by James and Beall are now uncommon, rare, or absent. Some of these species are listed below. Most are waders or open country grassland birds, for which suitable

habitat is no longer present. A list of species seen by Beall, and their percentage occurrence, is included at the end of this report.

Some species recorded at Lake Fayetteville in the 1950s								
American Black Duck	Greater Yellowlegs	Red-headed Woodpecker						
Common Merganser	Lesser Yellowlegs	Bell's Vireo						
Northern Bobwhite	Upland Sandpiper	Horned Lark						
Northern Harrier	Semipalmated Sandpiper	American Pipit						
Least Bittern	Baird's Sandpiper	American Tree Sparrow						
Merlin	Pectoral Sandpiper	Grasshopper Sparrow						
Sora	Least Sandpiper	Harris's Sparrow						
Semipalmated Plover	Wilson's Snipe	Smith's Longspur						
American Avocet	Short-eared Owl	Dickcissel						

Roland Roth was another pioneer birder who made several trips to the lake in 1964 and 1965. His interesting records included Dickcissel, Northern Bobwhite, Greater Yellowlegs, and Blackbilled Cuckoo, all very uncommon today.



Doug James and Bill Beall (photo by David Oakley 2011)

CHANGES IN BIRDLIFE – PAST AND PRESENT

The observations of James and Beall in the 1950's have already been noted. There are relatively few records from Lake Fayetteville during the 1960s and 1970s. In 1979 and 1983, Joseph Neal and Mike Mlodinow commenced active field work in the region submitting many records for Lake Fayetteville to the Arkansas Audubon Society. Mlodinow has kept detailed trip reports of species and their numbers. The frequency of occurrence of some open country birds based upon the field trips made in spring, fall, and winter of 1954-1957 by Beall is presented below and compared with recent data collected fifty years later (from 2004-2007) during the field trips of Mlodinow. A significant decline of open country species including Northern Bobwhite, American Kestrel, Redheaded Woodpecker, Loggerhead Shrike, Harris's Sparrow, Dickcissel, and Eastern Meadowlark is apparent. A similar decline in several of these species has been observed on the nearby AVOCA breeding bird survey route that runs in a north/south direction starting northeast of Rogers and finishing a few miles east of Lake Fayetteville.

% Occurrence of open country birds at Lake Fayetteville from 1954-1957 and 2004-2007								
Species	1	1954-1957		2004-2007				
	SP	FA	WI	SP	FA	WI		
Northern Bobwhite	50	23	38	0	0	0		
American Kestrel	40	29	33	25	25	10		
Red-headed Woodpecker	53	58	63	0	0	10		
Loggerhead Shrike	5	42	29	0	0	0		
Harris's Sparrow	30	13	54	0	0	0		
Dickcissel	50	10	0	0	0	0		
Eastern Meadowlark	100	61	79	0	25	19		
Number of trips	40	31	24	16	16	21		
Key: SP = Spring (Mar, Apr May), FA = Fall (Sep, Oct, Nov), WI = winter (Dec, Jan, Feb).								

While open country species have declined, species associated with wooded habitat have increased. Examples include Barred Owl which is now more common than Horned Owl. In the 1950s the reverse was the case. The percentage occurrence of selected warbler species is presented below. Data for transients and residents during May for the years 1954-1957 (based upon Beall's data) and 2001-2009 (based upon Mlodinow and Chapman data) are presented. In the case of Common Yellowthroat and Yellow-breasted Chat, species that prefer low shrub habitat, occurrence is similar but many warbler species have increased, reflecting the spread of woodland and woodland edge habitat.

Percentage occurrence of warblers at Lake Fayetteville from 1954-1957 and 2001-2009								
Species	1954- 2001- Species		1954-	2001-				
	57	09		57	09			
Tennessee Warbler	12	70	American Redstart	47	90			
Nashville Warbler	6	50	Prothonotary Warbler	0	90			
Northern Parula	6	100	Northern Waterthrush	0	50			
Yellow Warbler	29	65	Louisiana Waterthrush	6	35			
Chestnut-sided Warbler	0	75	Ovenbird	0	42			
Magnolia Warbler	12	70	Kentucky Warbler	0	55			
Yellow-rumped Warbler	12	45	Mourning Warbler	0	50			
Yellow-throated Warbler	6	40	Common Yellowthroat	88	75			
Blackpoll Warbler	18	45	Wilson's Warbler	24	85			
Black-and-white Warbler	6	75	Yellow-breasted Chat	88	60			
% occurrence in 1954-1957 and 2001-2009 based upon 17 and 20 field trips respectively								

Habitat change at Lake Fayetteville Park provides one explanation for the differences in occurrence of certain bird species over the last sixty years. Thus the spread of secondary woodland and scrub at the expense of open farmland has been accompanied by a decline and disappearance of open country grassland species and the spread of woodland birds. In early years the lake was the municipal water source and water level fluctuated in response to human demand. This resulted in exposed shoreline, especially in late summer and during times of drought, and provided habitat for shorebirds that is no longer present. Changes in bird populations have also resulted from the enormous increase in disturbance caused by human activity due to the recreational use of the park. Examples of such activities include boating, fishing, cycling, walking, and disc golf, all of which disturb water and land birds. Finally, several species of bird are in decline regionally and nationally. This decline has also occurred at Lake Fayetteville.

Meeting of the Northwest Arkansas Audubon Society on October 31, 2012 to celebrate sixty years of birding at Lake Fayetteville by Douglas James.



Back left to right: Joe Neal, Roland Roth, Kimberley Smith, Kelly Mulholland, Bill Beall, Sara Caulk, Bob Caulk, Joy Short, Jeff Short. Front left to right: Carol Bierwagen, Gretta Vowel, Doug James, Liz Adam, David Chapman. Photo by Thilak Rathinam.



Author and Doug James

BREEDING BIRDS AT LAKE FAYETTEVILLE

Evidence of recent breeding has been obtained for 70 species. Of these, 66 are confirmed, 2 are probable, and 2 are possible breeding species.

	Breedi	ing bir	ds at L	ake Fayetteville			
Species	PO	PR	CO	Species	PO	PR	C0
Canada Goose			FL	Tufted Titmouse			FL
Mallard			FL	White-breasted Nuthatch			FL
Green Heron			FL	Carolina Wren			FL
Cooper's Hawk			ON	House Wren			FL
Red-shouldered Hawk			FL	Blue-gray Gnatcatcher			FL
Red-tailed Hawk			FL	Eastern Bluebird			FL
Mississippi Kite			CO	American Robin			FL
Killdeer			FL	Gray Catbird			FL
Eurasian Collared-Dove		РС		Northern Mockingbird			FL
Mourning Dove			FL	Brown Thrasher			FL
Yellow-billed Cuckoo			FY	European Starling			FL
Great Horned Owl			ON	Cedar Waxwing			FL
Barred Owl			ON	Northern Parula			FL
Ruby-throated Hummingbird			ON	Yellow-throated Warbler			FL
Red-bellied Woodpecker			FL	Pine Warbler			FL
Downy Woodpecker			FL	Black-and-white Warbler			FL
Hairy Woodpecker			ON	Prothonotary Warbler			ON
Pileated Woodpecker		PN		Kentucky Warbler			FY
Eastern Wood-Pewee			ON	Common Yellowthroat	PX		
Acadian Flycatcher			FY	Yellow-breasted Chat			FY
Eastern Phoebe			FL	Summer Tanager			FL
Great Crested Flycatcher			FL	Northern Cardinal			FL
Eastern Kingbird			FL	Blue Grosbeak			FL
Scissor-tailed Flycatcher			ON	Indigo Bunting			FL
White-eyed Vireo			FY	Painted Bunting			FL
Red-eyed Vireo			FL	Eastern Towhee			FL
Blue Jay			FL	Chipping Sparrow			FL
American Crow			FL	Field Sparrow			FY
Fish Crow	PX			Red-winged Blackbird			FL
Purple Martin			ON	Common Grackle			FL
N. Rough-winged Swallow			FL	Orchard Oriole			FL
Cliff Swallow			ON	Brown-headed Cowbird			FL
Barn Swallow			FL	House Finch			FL
Tree Swallow			ON	American Goldfinch			ON
Carolina Chickadee			FL	House Sparrow			FL
Key: PO, PR, CO = Possible, Probable, and Confirmed breeding. PX = species heard or seen in breeding habitat. PC = Courtship; PN = visiting a nest site; FL = recently fledged young; ON =							

occupied nest; FY = adult seen carrying food for young.

This list was prepared following criteria utilized by the Arkansas Breeding Bird Atlas (ABBA) for determining the breeding status of birds in Arkansas. For each species, the survey defines "safe dates" for records of breeding status. Possible breeding (PO) is a species observed or heard in breeding habitat. Probable breeding (PR) includes criteria such as courtship, and visiting a probable nest site. Confirmed breeding (CO) includes an occupied nest, fledged young, adult carrying food or fecal sac, or a nest with eggs.



Nesting birds at Lake Fayetteville. Blue-gray Gnatcatcher and Ruby-throated Hummingbird (David Oakley), Cooper's Hawk (Joe Neal)

Whereas for the ABBA each site in Arkansas was visited only a few times, for Lake Fayetteville an extensive data set is available. This creates difficulties for use of the PO category. Many species have been observed at least once during their safe date and could be listed as possible breeders although their rarity of occurrence in summer makes this unlikely. Examples include Northern Bobwhite, American Woodcock, Greater Roadrunner, Yellow-bellied, Alder, and Willow Flycatcher, Worm-eating Warbler, Prairie Warbler, Hooded Warbler, Wood Thrush, Clay-colored Sparrow, and Dickcissel. Others are not rare but infrequent in summer and unlikely to breed (e.g. Great Egret, Pied-billed Grebe, and Wood Duck). Broad-winged Hawks were very uncommon or absent during most years of this survey but were seen on several occasions in summer during 2013 and may have bred. Finally, some species (e.g. Great Blue Heron, Chimney Swift, and Common Nighthawk) are frequently observed in summer but likely breed elsewhere in the area. These species are not included. PO is necessary because for some species (e.g. those that are secretive nesters or have juveniles similar to adults) higher levels of evidence (PR, CO) can be difficult to obtain (e.g. Fish Crow, Common Yellowthroat).

In the 1950s, Bill Beall recorded nesting for several species not included in the list above. These include American Kestrel, Northern Flicker, and Red-headed Woodpecker. Mlodinow found a Baltimore Oriole nest in the 1990s.

BIRD RECORDS

All 259 species that have been reliably reported from Lake Fayetteville are described in the section "Bird Notes" that follows. The phylogenetic order follows that published by the American Ornithologists' Union check-list of North American Birds, 7th edition (2011). The common and specific name (in italics) of each species is included and breeding status where known. If sufficient information is available, extreme dates of arrival and departure are provided. Some species for which no clear seasonal occurrence is evident are listed as present "All year". All records refer to observations made at Lake Fayetteville and are listed in order of calendar month regardless of year. The percentage monthly occurrence (% MO) of 219 species, based upon the field trips of Mlodinow and Chapman from 2000-2012, is given for all months of year and is tabulated in the section "Percentage monthly occurrence of birds". Methods used to determine occurrence are described in the section given yestematic observations below. Finally, the median number of birds (calculated by excluding zero values) and the maximum number are provided. In some cases the maximum number recorded during the field trips of Mlodinow and Chapman is less than the maximum number ever recorded.

Abbreviations include: EC – environmental center; AAS – Arkansas Audubon Society; AR – Arkansas; nwAR – northwest Arkansas; BWAO – Birding in the Western Arkansas Ozarks (Neal & Mlodinow, 1985); BNWA – Birds in northwestern Arkansas an ecological perspective (Neal, 2009). A three letter abbreviation is used for month of the year.

Source of records

Records prior to 1986 have been obtained from card index files held at the University of Arkansas (courtesy of Douglas James and Joseph Neal). Early records have also been obtained from the field notes of Bill Beall and Douglas James. The principal source after 1986 is the online bird record database (version 1.1) of the Arkansas Audubon Society⁴⁵. Another source is the observations of Mlodinow and Chapman during the systematic field trips. The recent online database <u>eBird.org</u> was used with caution since a number of implausible records were detected. Finally, some observers have communicated observations that are not included in any database. A very large number of records have been submitted for Lake Fayetteville and therefore it has been necessary to be selective in those chosen for inclusion in this report, some significant observations may have been omitted. A two letter code is used to identify observers.

Systematic observations

Data used are based upon the observations of Mlodinow and Chapman from 2000-2012 during which 219 of the 259 species reported from Lake Fayetteville were recorded. The data are based upon similar field trips during which a range of habitats were visited and all species and their number were recorded. Each trip commenced about 7-8 am and visited the following areas: 1) the fields near the ballpark, the dam and spillway area, and Veterans Park, 2) the northern shore from the dam car park to the environmental center, and 3) the bottomland woods and old fields north of

the environmental center. Occasionally, fields near the botanical garden were included. 240 such visits were made during this period. The objective has been to obtain data for twenty trips per month so that a minimum occurrence of 5% can be determined for each species. Data were sorted by month and the percentage of occasions on which a particular species was observed calculated. For example, in May Pied-billed Grebe was seen on five of twenty trips giving a 25% monthly occurrence.

Based upon the systematic observations, the total number of species observed for each month is presented in the Table below and the mean number of species per month calculated.

Total and mean number of species observed / month at Lake Fayetteville												
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
N1	20	20	20	20	20	20	20	20	20	20	20	20
Species ²	95	91	116	154	143	99	86	113	119	135	107	92
Species ³	45.3	44.0	56.7	67.4	70.2	56.3	53.5	51.6	52.6	52.0	50.0	49.1
¹ Number of field trips from 2000-2012. ² Total number of species observed. ³ Mean number of species												

observed / trip.

Thus in May 143 species were seen but the mean number / trip was 70.2. As one might anticipate, spring is the best time to find birds followed by fall, winter, and summer. The 40 species listed were not observed during the systematic observations and are considered rare at Lake Fayetteville.

Rare species							
Black-bellied Whistling-Duck	Rough-legged Hawk	Short-eared Owl					
Mute Swan	Golden Eagle	Chuck-will's-widow					
Trumpeter Swan	Merlin	Horned Lark					
Egyptian Goose	Virginia Rail	Veery					
American Black Duck	Sandhill Crane	Smith's Longspur					
Cinnamon Teal	Semipalmated Plover	Swainson's Warbler					
Common Merganser	Willet	Grasshopper Sparrow					
Least Bittern	Lesser Yellowlegs	Henslow's Sparrow					
Tricolored Heron	Semipalmated Sandpiper	Scarlet Tanager					
Cattle Egret	Baird's Sandpiper	Western Meadowlark					
Yellow-crowned Night-Heron	Dunlin	Yellow-headed Blackbird					
Swallow-tailed Kite	Laughing Gull	Red Crossbill					
Mississippi Kite	Herring Gull						
Swainson's Hawk	White-winged Dove						

OBSERVERS

An abbreviation of an observers name follows the date for each record. The term "et al" is used if more than two persons were involved.

Abby Darrah (AD), Alan Gregory (AG), Andrew Scaboo (AS), Bill Beall (BB), Bob Sanger (BS), Brandon Schmidt (BR) Cecelia Riley (CR), Charlie Platt (CP), Charlie Wooten (CW), Charles McCutchen (CM), David Chapman (DC), Douglas James (DJ), Don Jackson (DJa), David Krementz (DK), David Oakley (DO), D. Petit (DP), Jacque Brown (JB), Jasa Holt (JH), Jason Luscier (JL), Jeanette Bider (JBi), Jim Mulhollan (JM), Jimmy Woodward (JW), Jo Ann Rife (JR), John Prather (JP), Joanie Patterson (JPa), John Perry (JPe), Joe Neal (JN), Joyce Shedell (JS), Judy Woltjen (JW), Karen Garrett (KG), Karen Willard (KW) Kenny Nichols (KN), Kim Smith (KS), Kris Zyrkowski (KZ), LaDonna Nichols (LN), Liz Adam (LA), Lib Haggerty (LH), Mike Mlodinow (MM), Mike Powers (MP), Mitchell Pruitt (MPr), Neil Nodelman (NN), Paul Rodewald (PR), Richard Stauffacher (RS), Rob Doster (RD), Rob Dobbs (RDo), Roland Roth (RR), Roy Fuller (RF), Russel Graham (RG), Scott Dingman (SD), Tom Haggerty (TH).



BIRD PHOTOGRAPHS



Three Trumpeter Swans were found on Dec 12, 2013(DC & MM) and stayed in the area for several months. A Black-billed Cuckoo was photographed on May 2, 2009 (DC) the first of three records. The first winter record for Louisiana Waterthrush was Dec 6, 2009 (DC) and perhaps the same bird was recorded in Feb 2011 and Jan 2014. A Cape May Warbler was found on May 2, 2009 (DC). A pair of Mississippi Kites frequented a garden on Lake Road and were seen feeding young (May 10 – June 3, 2014 DC). Red Crossbills were found in 2013, an invasion year (March 10, 2013 DC). Photographs by David Oakley.

BIRD NOTES

Black-bellied Whistling-Duck, Dendrocygna autumnalis [Apr 3]

A raft of 13 was seen in the middle of the lake on Apr 3, 2007 (DC). This is the only record and the first spring report for nwAR.

Greater White-fronted Goose, Anser albifrons [Oct 11 to Mar 2]

Flocks are occasionally observed flying overhead such as 200 on Mar 2, 1986 (TH & LH) and 100 on Oct 11, 2009 (DC), part of a large movement of Greater White-fronted Geese seen elsewhere in nwAR. There are occasional records in winter, sometimes a few birds in mixed flocks with Canada Geese (Jan 18, 2007 MM; Dec 17, 2010; Dec 28, 2009 DC). [% MO: 5, 0, 0, 0, 0, 0, 0, 0, 0, 5, 0, 10; median = 3, max = 100]

Snow Goose, Chen caerulescens [Oct 15 to Apr 14]

The sight of V shaped formations of Snow Geese flying in a leaden sky is inspirational. Sometimes this can involve large numbers, such as an estimated 540 during a cold front in 1983 and a similar number in 2009 (Nov 23, 1983 JN; Nov 29, 2009 DC). The largest number, however, was 5,800 on Dec 6, 2011 (MM & JN), the second largest count for nwAR. Mixed flocks of the white and blue form of the Snow Goose were found in the 1950s and a white/blue hybrid on Mar 25, 1960 (DJ); a large number of blue geese (107) were recorded on Mar 24, 1956 (BB). Most of these flocks are flyovers but single birds sometimes occur in winter. A white phase bird with a broken wing was present for about 3 weeks in 2007 and was consumed by a Bald Eagle.

[% MO: 10, 5, 0, 10, 0, 0, 0, 0, 0, 10, 15, 0; median = 26, max = 200]

Ross's Goose, Chen rossii [Nov 11 to Dec 30]

An adult Ross's Goose was identified by its small bill lacking a "grinning" patch (Nov 11, 2000 DJ et al). Another was present on Dec 30, 2010 (JP).

[% MO: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 5, 0; median = 1, max = 2]

Cackling Goose, Branta hutchinsii [Dec 11 to Jan 18]

Cackling Goose was separated as a species from Canada Goose in 2004. The first report was a flock of 23, identified on Jan 18, 2007 (MM). Two birds grazed with a large flock of Canada Geese in the winter of 2009/2010 (Dec 11, 2009; Jan 1, 2010 DC). Insufficient data is available to determine whether Cackling Geese are regular visitors.

[% MO: 15, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 5; median = 2, max = 23]

Canada Goose, Branta canadensis (CO) [All year]

Small numbers are usually present in summer and can be approached quite closely; they congregate along the dam and by the boat dock. About 4 to 6 pairs hold territories at the east end of the lake and parents with young can readily be seen. A pair has nested on the wooden platform

by the boat dock. In winter they occur in large numbers and are much more wary, about 600 were present on Jan 8, 2009 (DC) when the lake was almost completely frozen. This large flock probably included birds that had left other more shallow lakes in the area. Canada Geese often leave the lake at dawn to feed on fields nearby and can be heard calling as they return to roost at dusk. Flocks sometimes have birds of varying sizes and likely hybrid forms. Thus on Dec 11, 2009 (DC) one with an all dark breast resembled the Dusky form and another had a white head and neck. This bird has been present for several years.

[% MO: 100, 90, 100, 100, 100, 95, 100, 95, 70, 95, 95, 85; median = 10, max = 600]

Mute Swan, Cygnus olor [Nov 23]

Two Mute Swans were present on Nov 23, 1986 (MM), the only report in the AAS database for Washington County. According to BWAO they had almost certainly escaped from captivity. An immature bird was released by the Fayetteville Animal Shelter but subsequently removed (Feb 18, 2014 JN). Domesticated birds have been recorded from other small ponds in nwAR.

Trumpeter Swan, Cygnus buccinator [Dec 12-Feb 7]

Three first fall Trumpeter Swans were first observed on Dec 12, 2013 (DC & MM) and on several occasions thereafter (e.g. Jan 7 – Feb 9, 2014 (DC). They stayed for at least two months, spending time at a pond in pasture north of the Interstate, a few miles to the west of the lake. When this pond was frozen over they would roost at the lake. Possibly the same birds returned the following winter (Jan 8, 2015 JPa).

Tundra Swan, Cygnus colombianus [Dec 10]

Two immature swans were briefly observed during very cold weather on Dec 10, 2009 (DC). The following day what were thought to be the same birds were found at Lake Sequoyah and photographed (JN). Expert evaluation determined that they were Tundra Swans rather than the similar Trumpeter Swan. Separation of immature swans of these species can be very difficult. [% MO: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 5; median = 2, max = 2]

Egyptian Goose, Alopochen aegyptiacus [Aug 13]

This feral species breeds at several places in Benton County and is sometimes found on local ponds. Two birds were present on Aug 13, 1995 (MM).

Wood Duck, Aix sponsa [All year]

According to BWAO, especially high numbers have in past years congregated at Lake Fayetteville. The largest numbers are 32 and 24, in spring and fall respectively (Feb 28, 2011; Nov 3, 2002 MM). There are no records for Jan and only 2 records for Dec (Dec 10, 2010; Dec 25, 1993 MM). Suitable habitat for Wood Ducks would appear to be present at the east end of the lake, but birds are only occasionally encountered, likely due to heavy disturbance by walkers with dogs. A pair was seen on Jun 21, 2011 (DC & MM) and 2 females, possibly immature, on Jun 24, 2012 (DC). The absence of consistent records in summer suggests that breeding has not occurred, at least in recent years. [% MO: 0, 25, 40, 30, 20, 15, 5, 30, 20, 15, 30, 5; median = 3, max = 24]

Gadwall, Anas strepera [Oct 11 to May 23+]

Gadwall and Mallard are the commonest ducks at Lake Fayetteville. Large flocks of Gadwall are often present in winter, such as 397 on Nov 5, 1995 (JN), at the time the largest number for nwAR and 450 on Nov 11, 2008 (JL). Most are gone by early May but a pair were present on Jun 17, 2012 (DC) and a lone male stayed near the dam and spillway during the summer of 2008 (DC). [% MO: 95, 65, 85, 50, 10, 15, 10, 5, 10, 70, 100, 95; median = 15, max = 289]

American Wigeon, Anas americana [Sep 19 to Apr 19]

Small numbers of American Wigeon visit the lake in winter, spring, and fall such as the 8 on Mar 23, 2013 (DC) and 14 on Oct 27, 2013 (Pr & JN). A flock estimated to be 300 birds was present in the 1950s, a very large number unlikely to be recorded today (Mar 24, 1956 BB). [% MO: 10, 5, 20, 20, 0, 0, 0, 0, 15, 20, 30; median = 2, max = 8]

American Black Duck, Anas rubripes [Jan 21 to Mar 8]

This species has declined nationally and is rare in nwAR. There are a few reports from the 1950s (e.g. Jan 21, 1962; Mar 7-8, 1954 DJ). Sixty were recorded on Dec 9, 1956 (BB).

Mallard, Anas platyrhynchos (CO) [All year]

Truly wild migratory flocks arrive early in fall and depart in late spring. Large numbers are sometimes recorded, such as 715 in 1955 and 663 in 2008, when the lake was half frozen (Jan 4, 2008 DC; Feb 6, 1955 BB). Most have gone by early Mar but a few remain and breed in overgrown vegetation in the creeks and near the spillway. Family groups, with juveniles, are often present. Semi-domesticated birds usually hang around the boat dock and spillway during summer. [% MO: 100, 75, 100, 100, 80, 85, 80, 75, 45, 55, 95, 95; median = 4, max = 667]

Blue-winged Teal, Anas discors [Feb 29 to May 29; Aug 6 to Nov 20]

During migration, large flocks of Blue-winged Teal sometimes occur in open water, such as 350 on Sep 21, 1954 (BB), and 444 on Sep 24, 2010 (DC). They can be difficult to count since they form dense compacted flocks of birds swimming shoulder to shoulder. An influx of approximately 360-410 occurred following the first cold front in fall 2011 (Sep 14, 2011 DC & MM). Smaller numbers frequent the shallow water at the east end of the lake. A few have been located on the pond north of the EC.

[% MO: 0, 0, 55, 100, 35, 0, 0, 15, 40, 35, 10, 0; median = 8, max = 200]

Cinnamon Teal, Anas cyanoptera [Apr 2 to May 2]

A male and a possible female, accompanied by Blue-winged Teal, were identified on Apr 7, 1991 (RF). There are three other reports of this species (Apr 7, 1994 MM; Apr 2, 1996 JS et al; May 2,

1996 JP & MM). The last two records were likely the same bird that was seen by many observers.

Northern Shoveler, Anas clypeata [Aug 18 to May 17+]

Northern Shovelers arrive early in fall (e.g. 75 on Aug 25, 1964 RR) and occur regularly during most winters. Large flocks are sometimes present (e.g. 250 on Oct 10, 2009 DC; 320 on Nov 3, 2011 MM). A male in early eclipse plumage was found on Jun 17, 2012 (DC) and another on Jun 20, 2010 (DC) with Mallards in the creek at the east end of the Lake. There are a few other Jun reports for AR. [% MO: 45, 25, 55, 55, 10, 10, 5, 5, 15, 40, 65, 45; median = 6, max = 250]

Northern Pintail, Anas acuta [Sep 22 to Mar 24]

According to BWAO, flooded fields such as those found in the AR river valley are preferred habitat for this species. They are not often found and most reports just involve single birds. A flock of 76 was recorded on Feb 8, 1957 (BB), a very large number for nwAR. [% MO: 5, 10, 0, 0, 0, 0, 0, 0, 0, 10, 5, 0; median = 2, max = 5]

Green-winged Teal, Anas crecca [Sep 22 to May 1]

Green-winged Teal are usually found in small flocks in creeks at the east end of the lake and sometimes in open water with other ducks. A flock of 50 appeared on Jan 20, 2008 (DC), a few days before a freezing cold front, accompanied with large numbers of Gadwall, Northern Shoveler, and Mallard. A flock of 71 was a large spring count for nwAR (Mar 14, 2011 MM). Most have departed by late Apr but 2 were present with about 400 Blue-winged Teal following a heavy rainstorm on May 1, 2012 (DC). The highest number however was 285, recorded on Oct 31, 2006 (MM). [% MO: 35, 40, 60, 30, 5, 0, 0, 0, 0, 35, 45, 60; median = 3, max = 285]

Canvasback, Aythya valisineria [Oct 26 to Apr 7]

Canvasbacks occur occasionally; recent records have been in mid-winter, spring, and fall (e.g. Dec 8, 2013 DC). Four females appeared with a large flock of Lesser Scaup following a cold front on Apr 2, 2013 (DC). They were more common in the 1950s with records of small flocks of up to 24 (Mar 10, 1958 DJ; Mar 19, 1955; Apr 5-7, 1957; Dec 14, 1956 BB). [% MO: 5, 0, 0, 5, 0, 0, 0, 0, 0, 5, 15, 15; median = 1, max = 14]

Redhead, Aythya americana [Oct 12 to Apr 3]

Small numbers are sometimes found, such as the 16 on Nov 10, 1983 (JN) in a raft of waterfowl that included other species of diving ducks. At least 20 were observed on Nov 7, 2003 (JN), part of a large influx of waterfowl in nwAR. Fifty on Oct 27, 2013 (MPr & JN) is the largest number recorded. This species occurs more frequently than the similar Canvasback.

[% MO: 15, 0, 5, 5, 0, 0, 0, 0, 0, 10, 35, 30; median = 3, max = 11]

Ring-necked Duck, Aythya collaris [Oct 5 to May 10+]

Ring-necked Ducks usually occur in small flocks of less than 12 birds, the largest number (155) was

found on Dec 10, 2009 (DC). One bird on Jun 17, 2012 (DC) was difficult to identify but eventually determined to be a Ring-necked Duck.

[% MO: 35, 35, 30, 15, 5, 5, 0, 0, 0, 35, 35, 50; median = 3, max = 155]

Greater Scaup, Aythya marila [Oct 28 to Apr 4]

Small numbers have been reported in spring, fall and mid-winter, often in rafts with Lesser Scaup (e.g. Jan 3, 2010; Jan 31, 2005; Apr 4, 2010 DC; Oct 28, 1990 MM; Nov 13, 2012 DC). A raft of 36-40 birds was found on Dec 2, 2014 (MPr & DC), the largest number ever recorded for nwAR. [% MO: 5, 0, 5, 10, 0, 0, 0, 0, 0, 0, 5, 20; median = 2, max = 7]

Lesser Scaup, Aythya affinis [Oct 13 to May 17]

Lesser Scaup are fairly common during migration and in winter. Occasionally large numbers have been found such as the 250 on Mar 21, 2009 (DC). The highest count was 830 on Oct 31, 1991 (MM), only superseded in nwAR by approximately 1500 at Bob Kidd Lake. There is a very late May record from the 1950s (May 22, 1957 BB).

[% MO: 15, 35, 60, 45, 10, 0, 0, 0, 0, 20, 45, 55; median = 3, max = 136]

Surf Scoter, Melanitta perspicillata [Oct 15 to Apr 14]

A single male in breeding plumage, with a group of Lesser Scaup, was the first spring report for nwAR (Apr 14, 2007 DC). Surf Scoters have been recorded several times in fall (e.g. Oct 18, 2015 NN; Oct 15-25, 1985 JN et al; Nov 2, 2002 RD et al; Nov 12, 2012 MM & DC); Nov 10-20, 1981 JN & RS). Five first winter birds were present on Oct 25, 2013 (MPr et al). [% MO: 0, 0, 0, 5, 0, 0, 0, 0, 5, 5, 0; median = 1, max = 1]

White-winged Scoter, Melanitta fusca [Oct 27]

A White-winged Scoter in first winter plumage was observed in a mixed flock with about 300 Ruddy Ducks following a rain front (Oct 27, 2009 DC) and the bird was photographed 2 days later (JN). This record was unusually early for a species that is very uncommon at any time. There are only 4 other reports from nwAR.

[% MO: 0, 0, 0, 0, 0, 0, 0, 0, 0, 5, 0, 0; median = 1, max = 1]

Long-tailed Duck, Clangula hyemalis [Nov 22 to Mar 9]

This species is rare in nwAR. They seem to prefer large lakes but have occasionally been found (e.g. Nov 22, 2010 AS; Dec 10-11, 2008 MM; Dec 16, 1979 – Jan 27, 1980 DJ et al; Dec 28, 1985 – Jan 5, 1986 JN & RG). Several records involve birds that stayed a week or more. There is one spring record (Mar 9, 1981 JN).

[% MO: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 5; median = 1, max = 1]

Bufflehead, Bucephala albeola [Oct 31 to May 7]

Flocks of a dozen or more are usually found in winter and often congregate around the lake margin.

They arrive later than other ducks and depart by mid Apr. According to BWAO, they were absent during the severe cold of 1983-1984 but returned with milder weather. Buffleheads also left during an extremely cold spell in 2010 when the lake was almost entirely frozen. The largest number was an estimated 400+ on Nov 13, 1997 (JP et al). About, 200 were present on Nov 22, 2007 (DC) following the onset of a cold spell and a similar number on Nov 12, 2013 (DC). [% MO: 65, 85, 90, 30, 0, 0, 0, 0, 5, 75, 95; median = 5, max = 26]

Common Goldeneye, Bucephala clangula [Nov 20 to Mar 9]

Common Goldeneyes are late arrivals in fall. A small flock of about 4-6 birds is usually present in mid-winter and can be found in deeper water along the southern shore and sometimes in the creek that leads to the spillway. The largest number reported was 20 on Mar 9, 1954 (DJ). [% MO: 50, 20, 5, 0, 0, 0, 0, 0, 0, 15, 50; median = 3, max = 7]

Hooded Merganser, Lophodytes cucullatus [Sep 15 to Jun 15+]

Usually alone or in small flocks, 30 on Nov 11, 2004 (JN & MM) was a large number for nwAR as was 28 on Nov 12, 2012 (MM). They have occurred most frequently in Nov and Dec. There are a few spring and summer records (e.g. May 10, 2014 DC; May 15, 2011; May 31, 1992; Jun 6, 1987; Jul 15, 1995 MM). An unusual location was a female/immature by the spillway on Jun 15, 2010 (DC). [% MO: 10, 20, 20, 10, 5, 10, 5, 0, 0, 10, 45, 35; median = 2, max = 10]

Common Merganser, Mergus merganser [Oct 26 to Apr 1]

More common in the 1950s, there have been few recent records (Jan 12, 1958 DJ; Jan 16, 1991 MM; Feb 6, 1996 RDo; Dec 9, 1956 BB). The largest number was 13 on Nov 14, 1959 (DJ).

Red-breasted Merganser, Mergus servator [Feb 24 to May 28; Nov 3-25+]

Small numbers have been found in spring and fall such as the 4 on Mar 30, 2013 (DC), 10 on Nov 20, 1988 (MM) and 14 on Nov 23, 1983 (JN). Single birds in late Feb and May were considered very early and late spring migrants respectively (Feb 24, 1996; May 28, 1995 MM). One bird was found on Dec 28, 2010 (MM) and 44 on Dec 6, 2014 (MM & DC), the largest number reported for nwAR. [% MO: 0, 0, 20, 15, 5, 0, 0, 0, 0, 0, 20, 0; median = 1, max = 7]

Ruddy Duck, Oxyura jamaicensis [Oct 9 to May 26+]

Ruddy Ducks are usually found in small to medium sized flocks. A large number (301) followed a rain front on Oct 27, 2009 (DC). This was dwarfed however by an estimated 1200, perhaps the highest count in AR (Nov 7, 2003 JN & MM). Although uncommon in mid-winter, a small flock was continuously present from Jan to May, 2013 (DC). There are occasional summer records (May 13, 2012 DC; Jun 21, 2011 MM & DC).

[% MO: 5, 15, 50, 20, 25, 5, 0, 0, 0, 40, 70, 20; median = 4, max = 301]

Northern Bobwhite, Colinus virginianus [Apr 28 to May 12; Sep 22 to Dec 4]

Northern Bobwhites are a declining species especially in urban areas and are only occasionally seen or heard. They were more common in the 1950s and seen on almost every field trip (e.g. Apr 22, 27, 1954; May 13, 19, 20, 22, 1954; Sep 22, 1955; Oct 1, 1955; Nov 12, 1955; Dec 4, 1955 BB). The last spring report was May 12, 2002 (MM). There are a few summer records from the 1960s (Jun 12, 1965, Aug 25, 1964 RR). The most recent report was a covey flushed in the prairie restoration area on Nov 29, 2009 (DC). Bobwhites are still occasionally recorded in grassy fields during the nearby AVOCA breeding bird survey.

[% MO: 0, 0, 0, 0, 15, 5, 0, 0, 5, 0, 0, 0; median = 1, max = 1]

Common Loon, *Gavia immer* [Oct 25 to May 20]

Solitary birds are sometimes present in spring, fall and occasionally in winter. Three on Apr 8, 2005 (JN), and 2 on May 5, 2013 (DC) were in brilliant summer plumage. Spring migration occurs from late Mar to early May; there is a record for May 20, 1987 (BS et al), a late date for this species. Twelve on Nov 7, 2003 (JN & MM) was a large number for fall in nwAR. Ten were seen in flight; one was larger than the others and thought to be a possible Yellow-billed Loon. A Common Loon overwintered from Dec 2010 to Mar 2011 (JN et al.; DC) and another, maybe the same bird, was present from Jan 18-Apr 19, 2016 (DC & JN).

[% MO: 15, 15, 35, 35, 10, 0, 0, 0, 0, 5, 25, 5; median = 1, max = 7]

Pied-billed Grebe, Podilymbus podiceps [Aug 17 to May 20+]

Pied-billed Grebes are very common in winter and during migration. They can be difficult to count because they are usually widely dispersed throughout the lake. A flock of 294 on Sep 14, 2011 (DC & MM) followed the first cold front of the season, 335 on Oct 28, 2011 (DC) was the largest number ever recorded for nwAR. Few were present during the very cold winter of 2009/2010. There are occasional reports in summer of non-breeding single birds (e.g. Jun 1-20, 2009; Jun 2, 2013 DC; Jun 21, 2011 MM & DC; Jul 24, 1994 MM).

[% MO: 75, 75, 100, 90, 30, 20, 0, 15, 50, 100, 100, 100; median = 7, max = 115]

Horned Grebe, Podiceps auritus [Oct 13 to Apr 17]

A few birds can be found during migration and sometimes in winter. Two in breeding plumage on Apr 17, 2010 (MM & JP) was a late date for nwAR. They occur in much larger numbers elsewhere, such as at Beaver Lake. The largest number reported was 15, seen on Nov 12, 2008 (MM). [% MO: 0, 20, 50, 5, 0, 0, 0, 0, 25, 65, 5; median = 1, max = 15]

Eared Grebe, Podiceps nigricollis [Oct 28 to Apr 23+]

Eared Grebes are very uncommon and difficult to separate from Horned Grebes when in winter or transitional plumage. Three were found on Nov 6, 1986 (RG & MM). During the field trips they were only recorded in Oct, Nov, and Dec. One bird stayed for several weeks during Dec 2010 (JN et al). There is a record of a bird in breeding plumage (May 8, 2014 DC) and May 9, 1998 (MP).

[% MO: 0, 0, 0, 0, 0, 0, 0, 0, 5, 25, 20; median = 1, max = 2]

Western Grebe, Aechmophorus occidentalis [Nov 13 to Feb 6]

Western Grebes are rare winter visitors to nwAR. Single birds, presumed this species and not the similar Clark's Grebe, were found on Jan 15, 2000 (MM), and Feb 5-6, 2000 (KN & LN), possibly the same bird. Thought to be a Western Grebe because a dark wash extended down from culmen on sides of the upper mandible, the color seemed more orange than green (MM). The side of the head was dark below eye level. There is a record for Nov 13, 1997 (JP et al) and Dec 2-6, 2015 (MM). [% MO: 5, 5, 0, 0, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

Double-crested Cormorant, Phalacrocorax auritus [Aug 1 to Apr 30+]

Lake Fayetteville is a less preferred habitat than nearby Lake Sequoyah where this species usually occurs during winter. During the systematic field trips they were recorded in all months of the year except Jul. Cormorants are absent during very cold and freezing weather. Nevertheless, large numbers are sometimes reported, such as 70 on Dec 13, 2007 (MM), at the time the largest number in winter for nwAR and 121 following a cold front on April 5, 2015 (DC). A bird on Jun 2, 2001 (MM & DC) was a very late spring migrant and another on Aug 1, 2010 (DC) an early fall migrant. [% MO: 5, 10, 25, 40, 10, 10, 0, 10, 50, 55, 55, 35; median = 2, max = 70]

American White Pelican, *Pelecanus erythrorhynchos* [Mar 19 to May 4; Sep 11 to Dec 14+] Migrating flocks may sometimes be seen overhead, such as approximately 250 circling above the lake on Apr 11, 2009 (DC), a large number for nwAR. There are occasional records for spring, fall and winter (e.g. Jan 18, 2014 NN: Jan 24, 2010, Mar 25, 2013 DC; Sep 16, 1955 BB; Dec 14, 1989 MM). Approximately 100 rested on the water following a cold front (Sep 26, 2010 DC). Most records are of birds in flight but occasionally they alight on open water. One bird remained for several weeks and was observed resting on the shore in the eastern cove (2/9/14 DC). [% MO: 0, 0, 15, 10, 0, 0, 0, 0, 5, 15, 5, 5; median = 15, max = 250]

Least Bittern, Ixobrychus exilis [May 22]

This species is a very rare migrant in nwAR and prefers marshy vegetation in more open habitat. There is one record, a bird seen at dawn on May 22, 1954 (BB) on the southern shore opposite the EC. This bird was located in swampy vegetation that has reverted to forest.

Great Blue Heron, Ardea herodias [All year]

Several birds are usually present, often perched on low branches overhanging the water; 7 were found at the east end of the lake on Apr 14, 2007 (DC & MM) and 20 on Nov 3, 2002 (MM). There is no evidence of breeding; birds may nest at the heronry at nearby Lake Sequoyah which is much less disturbed than Lake Fayetteville.

[% MO: 70, 75, 85, 80, 90, 100, 95, 90, 95, 85, 90, 90; median = 2, max = 20]

Great Egret, Ardea alba [Apr 5 to Oct 27]

Great Egrets are regular visitors and can be found in spring, fall and occasionally in mid-summer (e.g. Jun 20, 2009; Jun 24, 2012 DC). A bird was present, more or less continuously, during Jul and Aug 2012 (DC). They usually stand in shallow water or perch in branches at the lake edge. Seven were recorded on Sep 20, 2000 (MM), a large number for Lake Fayetteville. [% MO: 0, 0, 0, 20, 10, 10, 25, 35, 30, 5, 0, 0; median = 1, max = 7]

[% MO. 0, 0, 0, 20, 10, 10, 23, 33, 30, 3, 0, 0, median - 1, max -

Snowy Egret, Egretta thula [Apr 25 to May 4; Aug 27]

Single birds have occasionally been located in spring at the east end of the lake (Apr 25, 2009; Apr 29, 2015 MM & DC; May 4, 2007 DC). There is one late summer record (August 27, 2014 MM). [% MO: 0, 0, 0, 5, 0, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

Little Blue Heron, Egretta caerulea [Apr 17 to May 14; Jul 11 to Sep 6]

Little Blue Herons are fairly common migrants in nwAR and local summer residents. They are occasionally present in spring, late summer and fall; mostly in the creeks and inlets at the east end of the lake (e.g. May 6, 2009 DO). An individual found alive with a broken metatarsus was found at the EC and submitted to the UA Collections Facility at the University of Arkansas (Sep 26, 1987 DP). [% MO: 0, 0, 0, 10, 5, 0, 10, 25, 0, 0, 0, 0; median = 1, max = 1]

Tricolored Heron, Egretta tricolor [Apr 7]

A very rare migrant in nwAR; there is one record, an adult seen on Apr 7, 1994 (MM).

Cattle Egret, Bubulcus ibis [Apr 16]

Cattle Egrets have occasionally been recorded from nearby farmland during the AVOCA breeding bird survey but there are only two records (Apr 16, 1983 TH; May 9, 1993 RDo).

Green Heron, Butorides virescens (CO) [Apr 4 to Oct 9]

A common summer resident, several birds can usually be flushed from around the lake margin; juveniles have been seen in creeks at the east end of the lake, by the spillway, and along the northern shore (e.g. Jul 5, 2009 DC & MM). Apr 4, 2009 (DC) was one day later than the earliest spring arrival in nwAR. Most are gone by the first week in Oct.

[% MO: 0, 0, 0, 25, 45, 85, 85, 95, 90, 5, 0, 0; median = 2, max = 5]

Black-crowned Night-Heron, Nycticorax nycticorax [Apr 7-19; Aug 5 to Nov 24]

There are two reports for spring (Apr 7, 1985 JN & TH; Apr 19, 2013 MM) and several reports for fall (e.g. Aug 5, 2012 DC; Sep 3, 1990; Nov 5, 2003; Nov 18, 2009 MM). Five birds on Oct 3, 2007 (MM) was an exceptional number. A juvenile was present for at least a week on the northern shoreline despite constant disturbance by disc golfers (Nov 12, 2012 MM et al). Nov 24, 2010 (JP) was a late fall record for nwAR.

[% MO: 0, 0, 0, 0, 0, 0, 0, 5, 0, 5, 10, 0; median = 4, max = 5]

Yellow-crowned Night-Heron, Nyctanassa violacea [May 7]

This species is somewhat rare in nwAR. A photograph of an immature bird was obtained at the small pond north of the EC (May 7, 2011 DO & JB).

Black Vulture, Coragyps atratus [All year]

Black Vultures are sometimes seen flying over the lake, often accompanied by Turkey Vultures. There are records for all seasons. Seven flew over on Mar 4, 2012 (DC) and on Sep 15, 2011 (JP). They are likely part of the large vulture roost at Lake Sequoyah. In 2013 a pair was seen on several occasions in the vicinity of the spillway but there was no evidence of nesting on the nearby commercial building.

[% MO: 5, 10, 20, 25, 15, 15, 10, 10, 0, 15, 10, 15; median = 2, max = 5]

Turkey Vulture, Cathartes aura [All year]

Turkey Vultures are often seen flying over the lake and occasionally resting in the tall trees near the EC. There is no evidence of breeding. Peak numbers occur in Mar, Apr, and Oct. [% MO: 50, 55, 95, 100, 85, 75, 70, 65, 65, 95, 75, 85; median = 2, max = 130]

Osprey, Pandion haliaetus [Mar 10 to May 18; Sep 6 to Oct 31]

Ospreys regularly patrol the lake in spring and less frequently in fall, often following disturbed weather. Mar 10, 2010 (DC) was an early arrival date for an Osprey during spring migration. Four were seen following turbulent weather on Apr 15, 2012 (DC). [% MO: 0, 0, 5, 55, 15, 0, 0, 0, 15, 20, 0, 0; median = 1, max = 2]

Swallow-tailed Kite, Elanoides forficatus [Jul 28]

This spectacular bird of prey was seen flying over the spillway on Jul 28, 2009 (MM), a remarkable record for nwAR. There is an old (1949) second-hand record from Newton County. In 2011, one was seen by many observers in northern Madison County (Aug 24, 2011 JN et al).

Mississippi Kite, Ictinia mississippiensis (CO) [May 10 to Aug 24]

There are recent records, such as May 10, 2013 (DC), May 13, 2007 (CP), and May 26, 2011 (MM). A juvenile was present on Aug 24, 2010 (MM). In 2010 and 2011 this species nested a few miles to the east. There were many reports for 2013 (Jul 1, MM; Jul 7, NN; Jul 12, 24, 31, 2013 MM; Aug 8, 14, 22, 2013 MM). In 2014, two first year adults perched on numerous occasions on a dead tree in Lake Road and were observed copulating (May 10-July 15+, 2014 DC). A nest was located and a juvenile subsequently seen. The adults and juvenile remained throughout the summer.

Bald Eagle, Haliaeetus leucocephalus [Sep 25 to Mar 24+]

Bald Eagles are usually present in winter when large flocks of coot provide a reliable source of food. Most depart by mid-Mar but one was observed on Apr 19, 2013 (MM). They perch in favored trees overlooking the water below. One was seen to repeatedly stoop at a flock, breaking off a few feet above the surface causing the coots to rise in unison. Eventually, it entered the water in order to make a catch. Bald Eagles usually appear following the first cold fronts in late Oct; however there are a few records for Jul, Aug and Sep (Jul 8, 2008 AD; Aug 22, 2013; Sep 6, 2008 MM; Sep 25, 2011 DC). The bird on Sep 6 flew over a few days after hurricane Gustav passed through the region and may have had a southerly origin because several marine species (Royal and Sooty Tern) were reported elsewhere in nwAR. Alternatively, it may have originated from the small nesting population in nwAR.

[% MO: 70, 25, 30, 0, 0, 0, 0, 0, 5, 30, 35, 70; median = 1, max = 7]

Northern Harrier, Circus cyaneus [Sep 30 to Feb 18]

Northern Harriers were recorded more frequently in the 1950-60s (e.g. Oct 6-13, 1956 BB; Nov 13, 1953; Dec 7, 1963 DJ). Their preferred habitat, extensive open grassland, is no longer found at Lake Fayetteville. On Jan 31 and Feb 18, 2010 (DC) an immature, possibly the same bird, was seen flying at dusk in a westerly direction, possibly to a roost west of Fayetteville. There are a few spring, fall and winter records (May 9, 2009; Sep 30, 2007 DC; Nov 3, 2002 MM). [% MO: 5, 5, 0, 5, 5, 0, 0, 0, 0, 0, 5, 0; median = 1, max = 1]

[70 MO, 5, 5, 0, 5, 5, 0, 0, 0, 0, 0, 0, 5, 0, 11001a11 - 1, 111ax - 1]

Sharp-shinned Hawk, Accipiter striatus [Oct 5 to Apr 4]

Sharp-shinned Hawks have been recorded in spring and fall but occur most frequently in midwinter (e.g. Jan 3, 2009; Apr 4, 2009; Nov 16, 2008 DC). On Dec 28, 2009 (DC) 3 were seen high up in trees overlooking a feeder, where many small birds were active. One was found dead during a mammalogy class (Nov 15, 2002 DJ) and submitted to the UA Collections Facility at the University of Arkansas.

[% MO: 25, 15, 15, 5, 0, 0, 0, 0, 0, 20, 20, 25; median = 1, max = 5]

Cooper's Hawk, Accipiter cooperii (CO) [All year]

Although once rare during the summer months this is no longer the case and Cooper's Hawks can now be seen regularly throughout the year. A pair were copulating and calling in Veterans Park and a nest with a sitting bird was found about 60' high in a Post Oak (Mar 13 – Apr 4, 2005 JN). Another was sitting on a nest in an oak in the field south of Lake Fayetteville road (Apr 27, 2008 DC) and a photograph obtained (JN); young were present by early Jun. They are less likely to be seen in midwinter during very cold weather.

[% MO: 30, 50, 50, 65, 25, 70, 55, 30, 35, 50, 25, 30; median = 1, max = 2]

Red-shouldered Hawk, Buteo lineatus (CO) [All year]

These hawks can be seen throughout the year. The high-pitched call can frequently be heard overhead during the breeding season and they are particularly noisy around their nesting sites. A nest in an oak tree overlooking a building along the northern boundary has been used for several years. Another nest was destroyed when developers chopped down all the mature oaks along the southern boundary of Veterans Park. A pair nest regularly in Lake Road (2012-2016 DC).

[% MO: 35, 80, 75, 60, 55, 65, 35, 40, 50, 35, 15, 45; median = 1, max = 4]

Broad-winged Hawk, Buteo platypterus [Mar 30 to May 8; Aug 8 to Oct 1]

This species prefers extensive forested areas. There is an unusually early spring report (Mar 30, 2008 MM et al). In 2013 there were several summer records (Jun 5, 2013 DC; Jun 19, Jul 12, Aug 14, 2013 MM) suggesting that breeding may have occurred somewhere in the vicinity. There are a few records for fall (e.g. Aug 8, 2007 MM; Oct 1, 2010 JP).

[% MO: 0, 0, 5, 20, 15, 5, 0, 5, 0, 0, 0, 0; median = 1, max = 1]

Swainson's Hawk, Buteo swainsoni [Apr 20 to May 9]

Swainson's Hawks are sometimes observed in open country and breed in Benton County. There is a recent record of a light morph adult on Apr 20, 2011 (MM) and a few spring reports from the 1980s (Apr 22, 1983 TH; Apr 27, 1982 CW; May 9, 1982 BS) but none for fall.

Red-tailed Hawk, Buteo jamaicensis. (PR) [All year]

Red-tailed Hawks can often be seen soaring over field and woodland, especially during the winter months. Pairs can be seen in aerial display. A bird of the very uncommon Krider's race, showing white head, body, and tail with faint breast and tail barring, was seen on Feb 26, 2010 (DC) and a Harlan's Hawk on Feb 2, 2013 (DC).

[% MO: 70, 65, 65, 70, 45, 60, 65, 25, 30, 60, 70, 90; median = 1, max = 5]

Rough-legged Hawk, Buteo lagopus [Nov 5]

This species is listed because an immature Rough-legged Hawk was seen perched in a dead tree about a mile south of the lake on Nov 5, 1994 (MM & DC). The site has now been commercially developed. This was the earliest winter arrival for nwAR.

Golden Eagle, Aquila chrysaetos [Dec 17]

A rare winter visitor to nwAR. There is a report of an immature seen on Dec 17, 1972 (DJ & DJa) and another on Nov 9, 2014 (KS).

American Kestrel, Falco sparverius [Aug 14 to Apr 26+]

Kestrels occur most frequently in winter, spring, and fall. Single birds often perch on wire west of the softball complex and overlooking the disc golf course. This species used to be more common and once nested (May 19, 1954 BB). There are no recent mid-summer reports but several records for Aug (e.g. Aug 14, 2013 MM; Aug 17, 2008 DC).

[% MO: 30, 40, 35, 15, 0, 0, 0, 5, 20, 20, 25, 35; median = 1, max = 2]

Merlin, Falco columbarius [Oct 1-Dec 15]

There are three records from the 1950s (Oct 1, 1955; Oct 6, 1957; Oct 9, 1955 BB) and one recent report from Frontage road near the Zion road entrance to the lake (Dec 15, 2015 MM).

Peregrine Falcon, Falco peregrines [Jan 12 to May 14]

There are a few records that were thought most probably to be this species (Jan 12, 1994 JN & MM; Apr 26, 2006 MM; May 14, 1994 PR). An adult from the Tundra population was identified flying low over the trail north of the botanical garden during a field trip (Apr 5, 2014 JN). There are no fall reports.

[% MO: 0, 0, 0, 5, 0, 0, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

Virginia Rail, Rallus limicola

One was flushed from broomsedge near the present day EC in the 1960s (DJ date unknown).

Sora, Porzana carolina [Apr 13 to May 19; Sep 19 to Nov 1]

Soras were recorded frequently in the 1950s (e.g. Apr 13, 1956; Oct 2, 1956 BB). There are a few recent reports, for example one in the ditch at the base of the dam (Sep 29, 2012 MM) and Oct 3, 2007 (MM), another in the field south of the botanical garden (Oct 2, 2011 DC), and an immature in the small pond by the boat dock (Oct 31, 2012 MM). Rail habitat is largely absent. [% MO: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

American Coot, Fulica americana [Sep 12 to May 26]

Small numbers of coots appear in fall and build up to large flocks of about 100-200 birds that are more or less continuously present in winter except when the lake is frozen. They mostly hug the shoreline but sometimes venture out into open water especially if disturbed. An estimated 850+ were present on Oct 23, 1984 (JN), 1100+ on Nov 3, 2011 (DC), and at least 2000 following a rain front on Oct 27, 2009 (DC), the largest number reported from nwAR.

[% MO: 100, 95, 100, 95, 35, 0, 0, 0, 15, 75, 100, 100; median = 53, max = 2000]

Sandhill Crane, Grus Canadensis [Nov 20]

Six birds flew over the lake on Nov 20, 2010 (AS et al) during an Audubon Society field trip. There are very few records of this species for nwAR.

Semipalmated Plover, Charadrius semipalmatus [Sep 13]

There is one record; a Semipalmated Plover from the 1950s (Sep 13, 1954 BB).

Killdeer, Charadrius vociferus (CO) [All year]

Killdeer's can sometimes be found near the ballpark and in driveways of commercial properties nearby. They occasionally breed at this location; for example young were found on Apr 11, 2008 (MM) but human disturbance has prevented this in recent years. During freezing conditions they can be found on gravel bars at the east end of the lake and occasionally at the base of the spillway. Larger numbers used to be recorded such as the 46 and 38 on Sep 13, 1954 and Oct 15, 1954 (BB). [% MO: 45, 65, 60, 70, 30, 40, 40, 65, 70, 45, 55; median = 1, max = 10]

American Avocet, Recurvirostra americana [Apr 18 to May 7; Oct 13-15]

A large number (35) were found resting in the center of the lake following a cold front (Apr 18, 2008 DC); this is the highest spring count for AR. There are several other spring and fall reports (Apr 20, 2003 RD; Apr 23, 2010 DC; May 7, 2011 JB; Oct 13-15, 2011 MM & DC; Oct 14, 1954 BB). [% MO: 0, 0, 0, 5, 0, 0, 0, 0, 0, 0, 0, 0; median = 5, max = 5]

Spotted Sandpiper, Actitis macularius [Apr 1 to Jun 4; Jul 20 to Oct 10+]

Spotted Sandpipers are usually found in small numbers, often on rocks by the dam, on the concrete spillway, and gravel bars at the east end of the lake. In 2015 several took up residence on the floating spiral wetland. Apr 1, 2011 (DC) was an early arrival date for nwAR. There is a very late fall record of an adult in basic plumage (Nov 13, 1997 JP et al).

[% MO: 0, 0, 0, 55, 60, 0, 15, 45, 30, 15, 0, 0; median = 1, max = 14]

Solitary Sandpiper, Tringa solitaria [Apr 19 to May 3; Aug 8 to Oct 1]

There are occasional reports for spring and fall migration (e.g. Apr 21-24, 2012 DC; Apr 26, 2007; May 3, 2013 MM; Oct 1, 1955 BB). One was found by the small pond north of the EC on Apr 25, 2008 (DC). Five were recorded on Aug 8, 2006 (MM).

[% MO: 0, 0, 0, 20, 0, 0, 0, 10, 0, 0, 0, 0; median = 1, max = 5]

Greater Yellowlegs, Tringa melanoleuca [Apr 8 to May 4; Nov 3-5]

There are occasional reports, such as 8 birds on Apr 8, 1954 (BB), 1 on May 2, 1964 (RR), and 2 on May 4, 2009 (AG). There are two fall records (Nov 3, 1956 BB; Nov 5, 2003 MM). [% MO: 0, 0, 0, 0, 0, 0, 0, 0, 0, 5, 0; median = 1, max = 1]

Willet, Tringa semipalmata [Apr 29-30]

There are two records, both in Apr (Apr 29, 2011 JB; Apr 30, 1987 JN). The 1987 report involved 14 birds. The bird seen in 2011 was photographed at close range on rocks by the dam (JB); this occurred following continuous rainstorms in the area.

Lesser Yellowlegs, Tringa flavipes [May 2; Sep 13]

A Lesser Yellowlegs was identified on a gravel bar in the creek at the east end of the lake on May 2, 2010 (DC) and seen during a field trip of the nwAR Audubon Society. There are a few other records (May 7, 2012 MM; Sep 13, 1954 BB).

Upland Sandpiper, Bartramia longicauda [Sep 2 to Oct 14]

Preferred habitat, open grassy areas, is not present. There are three fall records (Sep 2, 2010; Sep 8, 2001 MM; Oct 14, 1954 BB).

[% MO: 0, 0, 0, 0, 0, 0, 0, 0, 5, 0, 0, 0; median = 2, max = 2]

Semipalmated Sandpiper, Calidris pusilla [May 12 to Jun 9]

The only reports of this species are from the 1950s (e.g. May 12-20, 1956; Jun 9, 1955 BB). This includes 21 on May 20, 1956.

Least Sandpiper, Calidris minutilla [Aug 16 to Sep 30]

There are few recent records. Five were found with 2 Pectoral Sandpipers during an exceptionally dry spell when mud was exposed at the east end of the lake (Aug 16, 2006 MM). Nine were counted on Sep 30, 1954 (BB)

[% MO: 0, 0, 0, 0, 5, 0, 0, 5, 0, 0, 0, 0; median = 3, max = 5]

Baird's Sandpiper, Calidris bairdii [Mar 15]

Baird's Sandpiper was the first species of wader to be found during one of the earliest trips to the lake (Mar 15, 1954 DJ). This remains the only record.

Pectoral Sandpiper, Calidris melanotos [May 2-22; Aug 16]

There are a few spring reports (May 2, 1964 RR; May 8, 2010 JP; May 14, 2000 MM). A large number (30) were present on May 22, 1954 (BB). On one occasion a Pectoral Sandpiper was found with a Least during an exceptional dry spell (Aug 16, 2006 MM). [% MO: 0, 0, 0, 5, 0, 0, 5, 0, 0, 0; median = 2, max = 2]

Dunlin, *Calidris alpina* [May 11]

There is one record, a Dunlin accompanied by several Spotted Sandpipers, found on the spiral floating wetland constructed at the west end of the lake in the spring of 2013 (May 11, 2013 JB).

Wilson's Snipe, Gallinago delicata [Dec 7 to Mar 9]

A winter visitor found more frequently in the 1950s and 1960s (e.g. Jan 21, 1956 BB; Oct 31, 1964 RR; Dec 7, 1963 DJ). There are a few recent reports (Feb 14, 2006 MM; Dec 26, 2010 DC). Two on Jan 8, 2009 (DC) were seen at the base of the spillway during a cold spell when the lake was almost entirely frozen. Snipe prefer extensive wetland habitat that is absent at Lake Fayetteville. [% MO: 5, 5, 5, 0, 0, 0, 0, 0, 0, 0, 0, 5; median = 1, max = 2]

American Woodcock, Scolopax minor [Feb 3 to Apr 26; Aug 24 to Nov 3+]

Rough grassland west of the EC and south of the botanical garden are regular locations during migration. Birds are sometimes flushed from adjacent woodland. Feb 3, 2013 (DC) was an early spring arrival date. Birds have been heard "peenting" and showing their aerial display flight (e.g. Mar 2-7, 2009 DK), usually in Feb and Mar but also early Apr. There is a single Jun report but no evidence that this species summers (Jun 30, 2008 MM). There are a few records for fall (Aug 24, 2010 MM; Oct 27, 2008 DC; Nov 3, 2002 MM) and one report for early Dec (Dec 4, 2011 DC). The % MO below underestimates occurrence because field trips did not take place at dusk when this species is most readily encountered during its aerial display flight.

[% MO: 0, 30, 20, 0, 0, 5, 0, 0, 0, 0, 5, 0; median = 1, max = 4]

Bonaparte's Gull, Chroicocephalus philadelphia [Oct 9 to Apr 18]

In winter, spring, and fall large flocks of Bonaparte's Gull occur on nearby Beaver Lake but only small numbers visit Lake Fayetteville (e.g. Jan 25, 2009 DC; Apr 10, 1982 BS; Nov 16, 1956 BB; Dec 9, 1986 RG & MM). Oct 9, 2009 (DC) was the earliest fall arrival date for nwAR. [% MO: 15, 10, 5, 15, 0, 0, 0, 0, 0, 5, 15, 30; median = 3, max = 5]

Laughing Gull, *Leucophaeus atricilla* [Apr 5 to May 4]

There are two spring records of this coastal species, which is rare in nwAR (Apr 5, 1997 MM & DC; May 4, 1994 MM).

Franklin's Gull, Leucophaeus pipixcan [Mar 24 to May 29; Aug 29 to Nov 10]

Two Franklin's Gulls showing their pinkish breeding plumage flew over the lake on Mar 24, 2013 (DC) and another in breeding plumage was seen by several observers on Mar 30, 2008 (DC et al). Forty gulls flew over the lake on May 9, 2008 (DC & JN) and 70 on Nov 10, 2013 (DC). There are several other fall records of this species (e.g. Aug 29, 2009 DC; Sep 30, 1954; Oct 7, 1955 BB; Oct 23, 2011 DC & BB; Nov 3, 2002 MM).

[% MO: 0, 0, 10, 5, 5, 0, 0, 5, 0, 0, 5, 0; median = 1, max = 3]

Ring-billed Gull, Larus delawarensis [Sep 3 to May 10]

Ring-billed Gulls occur most frequently during winter and to a lesser extent in spring and fall. A small flock was more or less continuously present during the winter of 2008/9 but in other years they have only occasionally been found. Large numbers sometimes occur, such as the 113 on Dec 21, 2005 (MM) and the 116 on Mar 2, 2013 (DC).

[% MO: 35, 20, 35, 5, 5, 0, 0, 0, 5, 10, 40, 60; median = 2, max = 113]

Herring Gull, Larus argentatus [Mar 21 to Apr 14; Nov 7 to Dec 17]

There are a few spring and winter reports (Mar 21, 1957 DJ; Apr 14, 1991 KZ & MM; Nov 7, 2008 JL; Dec 17, 1989 DJ). An adult and first year bird was found on Jan 2, 2014 (MM).

Least Tern, Sternula antillarum [May 8; Aug 5-31]

Caspian Tern, *Hydroprogne caspia* [Apr 25 to May 25; Jul 10 to Oct 10]

Most sightings of Caspian Terns involve 1 or 2 birds, usually in flight, but 7 were present on one occasion. There are records for spring and fall (e.g. May 2, 1992 MM; May 5, 2013; Sep 8, 2007; Sep

14, 2012 DC). Four on Jul 10, 2009 (DC) were early for fall. [% MO: 0, 0, 0, 10, 15, 0, 5, 10, 15, 0, 0, 0; median = 2, max = 4]

Black Tern, Chlidonias niger [Apr 30 to May 22; Aug 7 to Sep 20]

Apr 30, 1994 (MM) was an early date for spring migration of Black Terns in nwAR. This species is most frequently observed in Aug, small flocks suddenly appearing following heavy rain and then departing within an hour or so, such as the 32 on Aug 17, 2012 (DC). [% MO: 0, 0, 0, 5, 0, 0, 40, 15, 0, 0, 0; median = 6, max = 25]

Common Tern, Sterna hirundo [May 10-25; Sep 24-25]

Common Terns are difficult to separate from Forster's unless good views are obtained. A mixed flock comprising Caspian, Forster's, and Common Terns, was seen following a heavy rainstorm on May 25, 2009 (DC). There is another record for May and a few reports for Sep (May 10, 2006 MM; Sep 25, 1997 JP & MM). A very large number (21-22) were identified on Sep 24, 2009 (MM et al), one of which was considered a Forster's Tern. This was a large number for any location in AR. [% MO: 0, 0, 0, 0, 10, 0, 0, 0, 5, 0, 0, 0; median = 1, max = 21]

Forster's Tern, Sterna forsteri [Apr 26 to Jun 7; Aug 8 to Dec 10]

Most records of Forster's Tern are for spring and fall but there is a summer report (Jul 31, 2013 MM) and a record for January (Jan 6, 2014 MM). Small flocks can be found during wet, squally weather. Large numbers were 14 on May 4, 1994 (MM) and 21 on Sep 12, 2009 (DC), the largest number for nwAR in fall.

[% MO: 0, 0, 0, 15, 20, 0, 0, 35, 20, 5, 0, 0; median = 2, max = 7]

Rock Pigeon, Columba livia [Mar 24 to Oct 22]

Rock Pigeons are locally common and frequently observed on power lines, under bridges, and at nearby poultry feed mills. It is surprising that they are only occasionally seen at Lake Fayetteville. Thus in the years 2000-2013 there were only a few sightings; e.g. Mar 24, 2011 (AS); Jul 18, 2009 (DC); Jul 18, 2013 MM; Oct 22, 2006 (JL). There are no mid-winter records. [% MO: 0, 0, 0, 5, 0, 5, 5, 5, 10, 5, 0, 0; median = 2, max = 3]

Eurasian Collared-Dove, Streptopelia decaocto (PC) [All year]

Eurasian Collared-Doves are spreading throughout the USA but are still uncommon at Lake Fayetteville. The first record was Jan 12, 2007 (DC); there are subsequent records for winter, spring, summer, and fall. They are often seen perched on power lines near Lewis and Clark. A pair copulated in a tree close to the boat dock suggesting they now breed (May 18, 2013 DC). Like Rock Pigeon, this species prefers inhabited areas and strays only a short distance from feeding sites. Usually single birds are observed but 3 were present on Shoreline Drive on Jun 30, 2007 (DC). At least 500 were counted perched above grain silos at the Georges Feed mill, less than one mile from Lake Fayetteville (Dec 14, 2013 DC).

[% MO: 10, 15, 30, 25, 5, 30, 25, 20, 5, 10, 10, 5; median = 1, max = 2]

White-winged Dove, Zenaida asiatica [Jul 1-24; Dec 14]

White-winged Doves are mentioned because a single bird was located among a large flock of Eurasian Collared-Doves at the nearby Georges Feed Mill on Dec 14, 2013 (DC). Another frequented a feeding station on Cedar Ridge Drive, Springdale, about 100 yards from the lake, during July 2015 and on Jul 24 three were observed (Jul 1-24+, 2015 DO).

Mourning Dove, Zenaida macroura (CO) [All year]

Mourning Doves can be found at any time of year but are uncommon in winter. Pairs reappear in their breeding territories in early Feb and their gentle cooing is a harbinger of spring. A nest with eggs was found in a tree by the forest edge (Apr 11, 1983 TH).

[% MO: 90, 95, 90, 100, 90, 100, 100, 95, 95, 80, 65, 70; median = 2, max = 15]

Yellow-billed Cuckoo, Coccyzus americanus (CO) [May 6 to Oct 16]

Yellow-billed Cuckoos are common summer residents that can be heard and seen as they move through trees, the woodland edge, scrub, and sometimes open areas. A bird carrying food in the botanical garden was evidence of breeding.

[% MO: 0, 0, 0, 0, 30, 95, 100, 60, 65, 10, 0, 0; median = 1, max = 4]

Black-billed Cuckoo, Coccyzus erythropthalmus [May 2 to Jun 3; Oct 1-12]

In 2009, single birds were found on three occasions north of the lake (May 2, 9, 2009 DC) and subsequently a photo obtained (May 23, 2009 DO). There is another May record and a report for Jun when one was heard and seen by the small pond north of the EC (May 10, 1986 MM; Jun 3, 2001 RD). Aug 25, 1964 (RR) was a rare late summer record for AR. There are 2 fall records (Oct 1, 1981 CW; Oct 12, 2010 JN & DC).

[% MO: 0, 0, 0, 0, 10, 0, 0, 0, 0, 5, 0, 0; median = 1, max = 1]

Greater Roadrunner, Geococcyx californianus [May 15; Aug 29 to Feb 28]

Most years Greater Roadrunners appear not to be present, preferred habitat seeming to be roadsides, open fields, farmland, and pasture. However, one was observed on many occasions near the EC during the fall and winter of 2007/2008. The bird also frequented the back lawns of houses on the corner of Lakeview and Powell Road. There is one spring and an early summer record, a bird carrying a snake in Veterans Park (May 15, 2016 DC; June 2, 2015 JN & DC). [% MO: 0, 5, 0, 0, 0, 0, 0, 15, 0, 10, 5; median = 1, max = 1]

Eastern Screech Owl, Megascops asio

Despite numerous attempts to locate this species using tape recordings at several locations throughout the park in spring, winter and fall, Eastern Screech Owls have not been recorded.

Great Horned Owl, Bubo virginianus (CO) [All year]

Due to nocturnal habits the occurrence of Great Horned Owls (and Barred Owls) is underestimated. They can be heard at dawn and dusk in wooded areas east of the EC. An adult was found on a nest and hatchlings were later seen, the young were climbing out of the nest by the end of Feb (Jan 22-27, 1983 JN et al). Three were singing a duet from 2-3 am on Oct 6, 2012 (DC). A bird was seen at mid-day in fall hunting over rough grassland at the base of the dam (Nov 1, 2009 DC). [% MO: 10, 5, 5, 5, 5, 5, 15, 5, 10, 5, 10, 10; median = 1, max = 1]

Barred Owl, Strix varia (CO) [All year]

Barred Owls can be heard and seen in wooded areas around the lake. This species is encountered somewhat more frequently than Great Horned Owls. A nest was found in the top of a red oak, about 25' from the ground, with young about to fledge (Mar 13, May 6, 2005 JN). [% MO: 5, 10, 10, 20, 35, 20, 15, 20, 15, 10, 5; median = 1, max = 2]

Short-eared Owl, Asio flammeus [Dec 15]

A bird of open country, suitable habitat for this species is no longer present. There is one record from the 1950s (Dec 15, 1953 DJ).

Common Nighthawk, Chordeiles minor [Apr 29 to Oct 22]

Flocks are sometimes observed overhead in early summer but are less frequent in Jul and Aug. Small numbers are seen regularly in fall. Oct 22, 2009 (DC) was a late fall record for nwAR. Most flights occur at dusk and so the % MO, conducted during the daytime, may be underestimated. [% MO: 0, 0, 0, 0, 25, 35, 0, 15, 35, 20, 0, 0; median = 2, max = 33]

Chuck-will's-widow, Caprimulgus carolinensis [Apr 22 to May 31]

Chuck-will's-widows are common summer residents in nwAR but there are only two records from Lake Fayetteville (Apr 22, 1983 TH; May 31, 1985 JN). The 1985 report was one heard from Zion road.

Chimney Swift, Chaetura pelagica [Mar 24 to Oct 14]

Chimney Swifts are frequent in summer hawking for insects over the lake. Two on Mar 24, 1987 (MM) were early in spring for nwAR. Fifty were counted on Oct 14, 2009 (JP). [% MO: 0, 0, 0, 50, 85, 100, 90, 90, 95, 30, 0, 0; median = 3, max = 70]

Ruby-throated Hummingbird, Archilochus colubris (CO) [Apr 8 to Nov 2]

Most Ruby-throated Hummingbirds arrive in late Apr but there is an early record, Apr 8, 2009 (DC) which was the earliest spring arrival for nwAR. Most have departed by late Sep. An adult male was seen at a feeder in Lake Road on Nov 2, 2009 (DC), perhaps the latest date for this species in the region. Occupied nests have been located and photographed (May 12, 2008 DO & MM). [% MO: 0, 0, 0, 40, 75, 85, 100, 100, 85, 20, 0, 0; median = 3, max = 9]

Belted Kingfisher, Megaceryle alcyon [All year]

Though present all year, Belted Kingfishers are less common in May/Jun. Although a breeding species in nwAR, suitable nesting sites such as dirt banks may be absent. [% MO: 85, 95, 65, 70, 55, 45, 85, 90, 85, 95, 90, 95; median = 1, max 3]

Red-headed Woodpecker, Melanerpes erythrocephalus [All year]

Red-headed Woodpeckers were more common in the 1950s and once nested (May 20, 1954 BB). The maximum count was 12, a number unlikely to be seen today (Oct 7, 1954 BB). A specimen collected on Feb 6, 1954 (DJ), said to be "in moult, slightly fat" was submitted to the UA Collections Facility at the University of Arkansas. There are few recent records (e.g. Jan 27, 2001 MM; Apr 23, 2010; May 5, 2013 DC; May 7, 2009 JP; Jun 20, 2010; Jul 24, 2013 MM; Aug 22, 2013 MM; Sep 29, 2007 DC et al; Dec 28, 2002 MM). A juvenile was observed over several weeks storing acorns high up in the snag of an old tree in the woodlot east of the EC (Nov 20- Dec 4, 2011 JN & DC) and there were further records from this site and from Veterans Park where up to 4 were located on several occasions during Jan and Feb 2012 (DC). An adult was present near the EC on Apr 22, 2012 (DC) and another by Copperhead Crossing on Jun 17, 2012 (DC). [% MO: 10, 5, 5, 5, 10, 10, 0, 0, 15, 0, 0, 5; median = 2, max = 4]

Red-bellied Woodpecker, Melanerpes carolinus (CO) [All year]

This species is very common and a regular visitor to feeders in Lake Road. [% MO: 100, 100, 100, 95, 95, 100, 85, 100, 100, 95, 100, 100; median = 3, max = 9]

Yellow-bellied Sapsucker, Sphyrapicus varius [Sep 28 – Apr 6]

Sapsuckers are fairly common, occurring in winter and during migration. One was observed taking sap and sunflower seeds from a feeder in Lake Road during a very cold spell when temperatures were just above 6° F. (Jan 9, 2010 DC).

[% MO: 55, 35, 45, 25, 0, 0, 0, 0, 0, 70, 50, 70; median = 1, max = 7]

Downy Woodpecker, Picoides pubescens (CO) [All year]

Hairy Woodpecker, Picoides villosus [All year]

Hairy Woodpeckers are most frequently observed in winter; they occasionally visit feeders where they dominate other birds. They can be hard to locate and are heard more often than seen. An adult carrying food was seen to enter a cavity in a Sycamore by Copperhead Crossing (Apr 21, 2012 DC). A nest was found on May 13, 1954 (BB) and 2 young were banded. [% MO: 50, 45, 25, 30, 40, 30, 20, 20, 35, 30, 60, 50; median = 1, max = 3]

Northern Flicker, Colaptes auratus [Jul 10 to Apr 21+]

Northern Flickers are sometimes seen in small flocks, especially in fall and winter. They are hard to find in summer with few records for May, Jun and Jul. There is a nesting record from the 1950s (May 19, 1954 BB). The red-shafted form was recorded on Feb 3, 1962 (DJ & JM); Mar 15, 1957 (BB); Mar 30, 2013 (DC) and Oct 6, 1956 (BB).

[% MO: 90, 95, 70, 50, 15, 15, 10, 45, 75, 100, 85, 95; median = 2, max = 10]

Pileated Woodpecker, Dryocopus pileatus (PO) [All year]

Pileated Woodpeckers occur wherever there are large mature trees and can often be located by their raucous calls. Evidence of breeding was one flushed from a cavity that was considered a possible nest hole (May 18, 1957 BB).

[% MO: 35, 40, 25, 60, 70, 65, 50, 70, 60, 35, 35, 60; median = 1, max = 2]

Olive-sided Flycatcher, Contopus cooperi [May 4 to Jun 9; Aug 12 to Sep 14]

An uncommon migrant, individuals have been seen at the top of trees in open areas north of the EC. This species has been recorded in spring and early fall (e.g. May 9, 2012 DC; Jun 7, 1997 MM; Jun 9, 2009 DC; Aug 12, 1986 MM; Sep 14, 1983 TH et al).

[% MO: 0, 0, 0, 0, 15, 0, 0, 15, 0, 0, 0, 0; median = 1, max = 1]

Eastern Wood-Pewee, Contopus virens (CO) [Apr 26 to Oct 5]

Eastern Wood-Pewees are fairly common summer residents that are heard more often than seen. They occur in well-forested areas and gardens adjoining the lake wherever there are mature trees. Eleven was a large number for nwAR (May 26, 2011 MM). [% MO: 0, 0, 0, 5, 85, 75, 65, 40, 40, 10, 0, 0; median = 1, max = 4]

Yellow-bellied Flycatcher, *Empidonax flaviventris* [May 5 to Jun 4; Aug 29 to Sep 12]

Yellow-bellied Flycatchers are considered rare transients in AR, nevertheless, there are many spring reports from Lake Fayetteville in the AAS database (e.g. May 15, 2008 MM & DC; May 17, 2010 JN). Trees by the lakeshore south of the EC are a favored location. There are two fall records (Aug 29, 2007; Sep 12, 2013 MM). This species and other *Empidonax* Flycatchers are difficult to identify when not calling and their monthly frequency is therefore probably underestimated. [% MO: 0, 0, 0, 0, 20, 5, 0, 5, 0, 0, 0, 0; median = 1, max = 1]

Acadian Flycatcher, Empidonax virescens (CO) [Apr 14 to Sep 12]

In mid-summer, Acadian Flycatchers are persistent singers in mature woodland with welldeveloped understory but they are often difficult to see. The forested area east of Veterans Park is a favored location. Apr 14, 2010 (MM) was a very early spring arrival date. A pair, thought to be this species, was seen near the EC, one of which (with eye ring and plain breast) carried a twig in its beak indicating nest building (Jun 5, 2008 DC).

[% MO: 0, 0, 0, 5, 10, 65, 75, 10, 20, 0, 0, 0; median = 1, max = 5]

Alder Flycatcher, Empidonax alnorum [May 4 to Jun 2+; Aug 13 to Sep 14]

This species is considered an uncommon migrant in nwAR but occurs regularly in spring and occasionally in fall. They are most reliably found in the fringe of willow trees along the north edge of the lake. May 4, 1995 (MM) was the earliest spring arrival for nwAR. Eleven were present on May 17, 2003 (RD) and 19 on May 26, 2011 (MM), large numbers for nwAR. There are many reports from Lake Fayetteville in the AAS database.

[% MO: 0, 0, 0, 0, 45, 5, 0, 15, 10, 0, 0, 0; median = 3, max =10]

Willow Flycatcher, Empidonax traillii [May 13 to Jun 2]

There are few reports of Willow Flycatchers, which are rare in AR away from their known nesting area in Boone County. This species is difficult to identify because, like other *Empidonax*, they rarely sing or call during migration. There is a record in the AAS database for May 26, 2011 (MM) and one was identified on Jun 2, 2001 (MM). A bird heard and seen during the Washington County migration bird count was subsequently considered a "Traill's" Flycatcher. (May 13, 2012 NN). One was identified by the absence of an eye ring and characteristic call note on May 13, 2014 (JN & DC). [% MO: 0, 0, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

Least Flycatcher, Empidonax minimus [Apr 26 to May 26+; Aug 16 to Oct 13]

This is the commonest *Empidonax* species to occur during migration. A large number (23) were identified by song near the EC (May 11, 2002 RD); on another occasion 15 were found (May 10, 2003 RD). May 26, 2001 (MM) was considered a late spring departure for nwAR. A single bird was found on Jul 26, 1992 (MM) which at the time was the only report for this species in AR for Jul. There are two late fall records (Oct 10, 1993 MM & RD; Oct 13, 2014 JN). [% MO: 0, 0, 15, 85, 0, 0, 25, 55, 5, 0, 0; median = 2, max = 11]

Eastern Phoebe, *Sayornis phoebe* (CO) [Feb 15 to Nov 30+]

Eastern Phoebes are often present along the lakeshore and elsewhere, including the old fields being restored to prairie. Peak migration occurs in mid-Mar and young have been found in summer. A dozen Phoebes were observed from the pier by the EC sallying out over the water in search of insects (Mar 24, 2013 DC). One hovered over the water for one minute before returning to the shore. They are much less common in winter but there are several records, including an observation during freezing conditions following the ice storm in Jan 2009 (Jan 18, 2016; Jan 20, 2009 DC).

[% MO: 20, 50, 100, 100, 65, 90, 90, 75, 95, 70, 45, 25; median = 2, max = 14]

Great Crested Flycatcher, Myiarchus crinitus (CO) [Apr 5 to Oct 1]

Great Crested Flycatchers are often heard and seen moving through the branches of trees in wooded areas throughout the park. Apr 5, 2008 (DC) was the earliest arrival date reported for this species in nwAR.

[% MO: 0, 0, 0, 35, 100, 90, 95, 75, 50, 0, 0, 0; median = 2, max = 6]

Western Kingbird, Tyrannus verticalis [May 1-17]

There are two spring reports but none for fall (May 1-7, 1999 JP; May 17, 2006 MM). [% MO: 0, 0, 0, 0, 5, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

Eastern Kingbird, Tyrannus tyrannus (CO) [Apr 14 to Sep 24]

Eastern Kingbirds are widespread and often seen along the lakeshore where they sally out across the lake. They also occur in open fields, and wooded areas. Adults have been observed feeding young in trees near the ballpark.

[% MO: 0, 0, 0, 45, 95, 95, 95, 95, 35, 0, 0, 0; median = 3, max = 10]

Scissor-tailed Flycatcher, Tyrannus forficatus (CO) [Mar 30 to Nov 3]

Scissor-tailed Flycatchers can often be seen perched on telephone poles and wires and prefer open areas such as the fields along the northern shore of the lake and west of the ballpark. Nests have been built on the platforms of the ballpark floodlights and young have been seen nearby (e.g. Jun 10, 2011; Jun 20, 2007 DC). This is one of the last flycatchers to leave the region, although most birds leave in Sep/early Oct a few stay as late as Nov. One such was observed perched on a telephone wire by the disc golf course (Nov 3, 2009 DC).

[% MO: 0, 0, 5, 70, 70, 85, 90, 55, 50, 15, 0, 0; median = 2, max = 6]

Loggerhead Shrike, Lanius ludovicianus [Jan 15 to Mar 13; Aug 16 to Oct 13]

A declining species in nwAR, Loggerhead Shrikes prefer open country and farmland and were more common in the 1950s (Jan 15, 1955; Feb 16, 1956 BB; Sep 10, 1954; Sep 22, 1955; Oct 13, 1955; Dec 2, 1954 BB). There are a few recent records, all of single birds found in the fields near the ballpark (Mar 13, 2010 DC; Aug 16, 2006 MM; Sep 2, 2007 DC). [% MO: 0, 0, 5, 0, 0, 0, 0, 5, 0, 0, 0; median = 1, max = 1]

White-eyed Vireo, Vireo griseus (PO) [Mar 19 to Oct 12+]

White-eyed Vireos are frequently heard in summer and certainly breed although this is difficult to prove. They occur anywhere there is dense understory, scrub, thickets, and lakeside vegetation. Although very common, they can be difficult to see. Mar 19, 2008 (MM) was an unusually early arrival. An immature was found on Dec 19, 1991 (MM) and another on Dec 12, 2014 (MM). [% MO: 0, 0, 5, 60, 100, 95, 90, 90, 100, 25, 0, 0; median = 3, max = 10]

Bell's Vireo, Vireo bellii [May 3-23; Sep 7-17]

Preferred habitat for Bell's Vireo is extensive, dense, low shrub in brushy fields, hedgerows, and second growth forest that occurs to a limited extent in the old fields north of the lake. This species has declined in the region and is not often encountered. Bell's Vireos were regular in summer as recently as the 1980s but now are considered transients in nwAR and rarely occur away from nesting areas. One was seen near the sand beach by the boat dock (May 3, 2011 MM) and another heard singing in Unit 3 of the prairie restoration area during Jun 2011 (DC). There are a few recent

May and Sep reports (e.g. May 4, 2009 JN & DO; Sep 7, 2006 MM; Sep 17, 2011 DC). [% MO: 0, 0, 0, 0, 0, 10, 0, 0, 5, 0, 0, 0; median = 1, max = 1]

Yellow-throated Vireo, Vireo flavifrons [Apr 1 to Jun 30; Jul 26 to Sep 22]

There are records for spring, and occasionally for summer and fall (e.g. Apr 1, 2007 JL; Apr 11, 2013 DC; Jun 30, 2008 MM; Sep 18, 2011 DC). They can be found in canopy woodland near the EC and elsewhere but prefer more extensive mature forest such as at Devil's Den. [% MO: 0, 0, 0, 15, 40, 20, 5, 15, 10, 0, 0, 0; median = 1, max = 2]

Blue-headed Vireo, Vireo solitarius [Apr 11 to May 31; Aug 29 to Nov 16]

Blue-headed Vireos are fairly common migrants, occurring in forest and woodland edge habitat. There are several early arrival and late departure records for this species. Thus, Apr 11, 2008 was an early spring arrival and May 31, 1992 a late spring departure in nwAR (MM). Aug 29, 2009 (DC) was the earliest fall arrival date for AR, and Nov 16, 2010 (MM) an unusually late fall departure. One was observed and photographed on Sep 27, 2008 (MM & JB) and showed some characteristics of "Cassins Vireo" including a lack of contrast in the greenish color of the head and back, and weak contrast between the throat and auriculars.

[% MO: 0, 0, 0, 10, 60, 0, 0, 0, 10, 50, 10, 0; median = 1, max = 6]

Warbling Vireo, Vireo gilvus [Apr 11 to May 26; Jul 11 to Oct 23]

This vireo is frequently found in spring and fall, usually in trees along the lake margin and open areas near the dam. Apr 11, 2008 (MM) was an unusually early spring arrival date and Oct 13, 1991 (MM) a late departure. An even later date (Oct 23, 2013 MM), however, is the latest fall departure for AR.

[% MO: 0, 0, 0, 30, 55, 0, 5, 40, 35, 5, 0, 0; median = 1, max = 7]

Philadelphia Vireo, Vireo philadelphicus [Apr 29 to May 26; Sep 3 to Oct 3]

There are several spring and fall records such as 6 on May 11, 2007 (JN) and Sep 23, 2012 (DC). May 26, 2011 (MM) was an unusually late date in spring. Sep 3, 2009 (DC) was the earliest fall arrival date for this species in nwAR.

[% MO: 0, 0, 0, 5, 50, 0, 0, 0, 15, 5, 0, 0; median = 2, max = 6]

Red-eyed Vireo, Vireo olivaceus (CO) [Apr 18 to Oct 4]

Red-eyed Vireos are a common summer resident especially in wooded areas west and north of the botanical garden and in forest along the southern shore where they sing from high up in the trees. During migration, they have also been seen in shrub vegetation in old fields north of the lake. [% MO: 0, 0, 0, 30, 100, 95, 100, 80, 65, 0, 0, 0; median = 2, max = 12]

Blue Jay, Cyanocitta cristata (CO) [All year]

Blue Jays are very common, sometimes occurring in large flocks such as 82 on Oct 8, 1955 (BB).

[% MO: 85, 85, 100, 90, 90, 85, 90, 90, 100, 95, 95, 95; median = 3, max = 31]

American Crow, Corvus brachyrhynchos (PR) [All year]

Before dawn these crows can be heard flying overhead and giving their early morning wake-up calls. The largest number recorded was 126 on Sep 21, 1954 (BB). [% MO: 100, 100, 95, 95, 100, 95, 90, 100, 100, 95, 100; median = 3, max = 60]

Fish Crow, Corvus ossifragus (PO) [Feb 17 to Oct 28]

Small groups are often seen and heard flying over the lake in spring and summer when, on occasion, they can outnumber American Crows. Feb 17, 2011 (DC) was an early date of arrival in nwAR. A migrating flock of 48 seen on Mar 14, 2011 (MM) was a large number for nwAR. They occur throughout the summer months and likely breed but it has been difficult to prove. There is a late fall record (Oct 28, 2009 MM).

[% MO: 0, 0, 65, 95, 90, 80, 75, 75, 25, 5, 0, 0; median = 3, max = 36]

Horned Lark Eremophila alpestris [Feb 21 to May 4]

Horned Larks are rare and there are no recent records. There are reports from 1950s when there was much more open habitat than today (e.g. Feb 21, 1954 DJ; Mar 6, Apr 22, 1954; May 4, 1955; Oct 13, 1956 BB). A specimen collected on Feb 21, 1954 (DJ), was submitted to the Collections Facility at the University of Arkansas. A flock of 25 was found on Feb 25, 1956 (BB).

Purple Martin, Progne subis (CO) [Feb 24 to Sep 2]

The arrival of Purple Martins is one of the first harbingers of spring. They are a common sight flying over the lake in summer and congregating on overhead wires in their hundreds in fall. An occupied nest box can be found at the back of commercial properties near the ballpark. [% MO: 0, 10, 85, 85, 75, 95, 95, 60, 5, 0, 0, 0; median = 4, max = 60]

Tree Swallow, Tachycineta bicolor [Feb 21 to Jun 5; Oct 5 to Dec 2]

Swirling flocks often appear following cold fronts in spring and fall and are often accompanied by a few Barn and Northern Rough-winged Swallows. About 320 were found in late Mar, the largest number for nwAR (Mar 28, 2008 MM). On May 2, 2013 (DC), a misty morning following overnight rain, uncountable numbers (1000+) of a mixed flock of swallows including Tree, Barn, Bank, and Cliff were encountered. Two pairs of Tree Swallows were observed in nest boxes erected in the field south of the botanical garden (Apr-May 2015 JN & DC) and a family group of 2 adults and 2 juveniles was found on Jul 11, 2006 (MM). Migration of Tree Swallows occurs later in fall than other swallows, they can be found in small numbers in Oct and occasionally Nov (e.g. 40 birds on Oct 5, 2012 DC; a single bird on Nov 3, 2011 MM). A single bird was observed on Dec 2, 2014 (MPr & DC) a very late record for nwAR. Thirty five on Oct 14, 2009 (MM & JP) was a large count for fall. [% MO: 0, 10, 75, 90, 35, 15, 5, 0, 0, 20, 0, 0; median = 10, max = 320]

Northern Rough-winged Swallow, Stelgidopteryx serripennis (CO) [Feb 28 to Nov 2]

Large flocks, such as the 110 on Apr 4, 2011 (MM & JP), are often seen feeding low over the water in wet weather. Feb 28, 2011 (MM) was a very early spring arrival. A few remain during summer and several young birds have been seen near the spillway indicating that breeding occurs. Although common in spring they are less common in fall when they are outnumbered by Tree and Barn Swallows. One on Nov 2, 2002 (MM et al) was the latest fall record for nwAR. [% MO: 0, 0, 75, 100, 80, 70, 45, 5, 0, 15, 0, 0; median = 5, max = 100]

Bank Swallow, *Riparia riparia* [Mar 31 to May 30; Aug 17]

Bank Swallows are very uncommon migrants that have been recorded in spring and only once in fall. They can be hard to identify when flying rapidly over the water in mixed flocks with other species and therefore their occurrence may be underestimated. They arrive much later than other swallows; an early spring arrival was Mar 31, 1989 (MM). Thirty were counted on May 19, 1957 (BB) and 50 on May 10, 2006 (MM). During stormy weather on May 12, 2011 (JN), approximately 200-400 swallow species were present and of these at least 100 were Bank Swallows. This is a very large number for AR. Two were seen on Aug 17, 2012 (DC) following an overnight thunderstorm. [% MO: 0, 0, 0, 5, 40, 0, 0, 5, 0, 0, 0; median = 1, max = 50]

Cliff Swallow, Petrochelidon pyrrhonota (CO) [Mar 21 to Sep 12]

Cliff Swallows are mainly observed during spring migration and sometimes in summer often in the company of other swallow species. In late May 2009 a small number of birds were found flying around the concrete tower in the southwest corner of the lake. The tower was constructed in 1949 and was the means by which water entered the Fayetteville water system. By early Jun more than 20 were found and a nesting colony had established; by Jun 27, 2009 (DC) more than 100 were present. Large flocks were seen at this site and on the infield dirt area of the nearby softball field from where they obtained mud for nest building. By Aug all birds had departed. This nest site was not utilized from 2010 -2016.

[% MO: 0, 0, 10, 30, 35, 30, 35, 0, 5, 0, 0, 0; median = 5, max = 100]

Barn Swallow, Hirundo rustica (CO) [Mar 4 to Nov 13]

A large colony of Barn Swallows nests regularly beneath the roof of the boat dock. They leave from the end of Jul to early Sep, but migrants from the north reappear in smaller numbers in Oct. During migration they are a regular sight perched on wires overhead. Nov 13, 1997 (JP et al) was a late date for fall.

[% MO: 0, 0, 55, 100, 70, 100, 100, 85, 10, 20, 0, 0; median = 9, max = 200]

Carolina Chickadee, Poecile carolinensis (CO) [All year]

These busy little birds are rarely missed on field trips and one of the most frequent birds seen at feeders. In fall and winter they are a good indication of mixed foraging flocks including titmice, warblers and other migrants.

[% MO: 95, 95, 100, 95, 100, 100, 95, 100, 100, 100, 95, 100; median = 7, max = 29]

Tufted Titmouse, Baeolophus bicolor (CO) [All year]

Small groups of noisy titmice can be found throughout the year often in mixed flocks with other species such as chickadees, cardinals, and nuthatches.

[% MO: 95, 100, 100, 90, 100, 100, 100, 100, 95, 100, 95; median = 5, max = 22]

Red-breasted Nuthatch, Sitta canadensis [Sep 27 to May 7]

Red-breasted Nuthatches are an irruptive species that are uncommon winter visitors; some years they are difficult to find (e.g. 2002-2006, 2009, and 2011). When present, they can be located by their characteristic vocalization which sometimes can be heard in pines near the boat dock and the EC. Several were feeding with Pine Siskins in the conifer trees by the boat dock on Nov 4, 2012 (DC). They sometimes visit feeders along Lake Fayetteville road (e.g. May 7, 2013 DC). [% MO: 0, 10, 10, 5, 0, 0, 0, 0, 30, 30, 20; median = 1, max = 4]

White-breasted Nuthatch, Sitta carolinensis (CO) [All year]

This species is best located by its characteristic vocalization. They regularly visit feeders, an adult feeding young at a feeder in Lake Road on May 16, 2008 (DC) was evidence of breeding. [% MO: 85, 85, 75, 55, 50, 70, 85, 60, 70, 70, 65, 95; median = 1, max = 6]

Brown Creeper, Certhia americana [Oct 1 to Apr 11]

Easily overlooked, creepers can be hard to find in mid-winter during sustained very cold weather. They often occur in mixed flocks with titmice, chickadees, and nuthatches. Oct 1, 2010 (JP) was an early arrival in fall.

[% MO: 55, 35, 65, 35, 0, 0, 0, 0, 0, 45, 45, 50; median = 1, max = 4]

Carolina Wren, Thryothorus ludovicianus (CO) [All year]

Although this vocal bird has never been missed on field trips in the last 10 years, numbers can decline, especially in Jan and Feb during hard winters.

Bewick's Wren, Thryomanes bewickii [Mar 19 to May 3; Sep 12 to Oct 9]

Bewick's Wren is in decline, its status in AR uncertain. This species has occasionally been observed in spring and fall at various locations including the boat dock, near the EC, along the hard top trail, and in a backyard on Lake Road. There is no evidence of breeding although this has occurred recently in nwAR. There are reports for Mar, May, Sep and Oct (e.g. Mar 19, 2008; Mar 14, 2011 MM; May 3, 2008; Sep 12, 2010 DC; Sep 30, 2013 MM; Oct 9, 2007 MM & DC). [% MO: 0, 0, 10, 0, 0, 0, 0, 0, 5, 0, 0; median = 1, max = 1]

House Wren, Troglodytes aedon (CO) [Apr 14 to Nov 24]

House Wrens are very common summer residents. Most have departed by the end of Oct but a bird in the tree line south of the botanical garden on Nov 24, 2007 (DC) was unusually late for nwAR. [% MO: 0, 0, 0, 35, 85, 100, 100, 95, 85, 60, 0, 0; median = 3, max = 13]

Winter Wren, Troglodytes hiemalis [Oct 5 to Apr 1]

Fairly common in winter, but shy and retiring, Winter Wrens are more often heard than seen. Good views have been obtained from the iron bridge by the spillway where they sometimes can be seen among the rocks below. One was observed clinging to the vertical concrete wall of the spillway and foraging among algae in the running water on Jan 10, 2010 (DC). A Winter Wren can usually be found by the short path leading from the EC to the shoreline platform. Oct 5, 2008 (DC) equaled the earliest fall arrival in nwAR.

[% MO: 60, 35, 65, 10, 0, 0, 0, 0, 0, 45, 85, 85; median = 1, max = 4]

Sedge Wren, Cistothorus platensis [Apr 26 to May 9+; Sep 25 to Nov 6]

The ditch at the base of the dam and the field south of the botanical garden have provided suitable habitat for this uncommon migrant. There are records for spring and fall (e.g. Apr 26, 2006; May 9, 2006 MM; Sep 25, 1955 BB; Sep 30, 2012; Oct 7, 2007 DC; Nov 6, 2013 MM) and an unexpected record of a bird singing in the fencerow by the disc golf course in late May early Jun (May 24, Jun 6, 2009 MM). These dates are unusual for AR. Eight were located on Sep 30, 1954 (BB). [% MO: 0, 0, 0, 5, 5, 0, 0, 0, 5, 5, 0; median = 1, max = 8]

Marsh Wren, Cistothorus palustris [Sep 6 to Nov 4]

This species is uncommon but sometimes occurs during migration. A male was singing near the shore on May 4, 1994 (RDo & PR). Most records are for fall such as 4 Marsh Wrens with 3 Sedge Wrens in the field south of the botanical garden on Oct 7, 2007 (DC). They have been observed in rough tussocky vegetation at the base of the dam; at least one was present for several weeks during Oct 2012 (DC). There are several other fall reports (e.g. Sep 29, 1955 BB; Oct 11, 2009 DC; Nov 4, 2000 MM). Sep 6, 2010 (MM & JPa) was the second earliest fall report for nwAR. [% MO: 0, 0, 0, 0, 0, 0, 0, 5, 20, 5, 0; median = 1, max = 2]

Blue-gray Gnatcatcher, Polioptila caerules (CO) [Mar 25 to Oct 12]

Blue-gray Gnatcatchers are one of the first summer residents to arrive in spring. They are readily seen, small groups fluttering and chasing through foliage at all levels in the forest. Completed nests are not difficult to find. A large number (24) were present on Aug 17, 2011 (MM). There is a winter record (Dec 5, 1981 CW).

[% MO: 0, 0, 20, 100, 100, 100, 95, 100, 90, 10, 0, 0; median = 5, max 18]

Golden-crowned Kinglet, Regulus satrapa [Oct 5 to Apr 19]

The occurrence of Golden-crowned and Ruby-crowned Kinglets is similar during late fall, winter,

and early spring (Nov to Mar) but this species occurs less frequently than Ruby-crowned Kinglet in Apr and Oct. This kinglet was absent in Feb and Mar 2009 following a severe ice storm. [% MO: 45, 45, 55, 15, 0, 0, 0, 0, 0, 55, 70, 75; median = 2, max = 17]

Ruby-crowned Kinglet, Regulus calendula [Aug 29 to May 17]

In Apr Ruby-crowned Kinglets can be one of the commonest birds seen in the shrub and understory as they move through on their northerly migration. A fairly common winter resident, Aug 29, 2007 (DC) was the earliest fall arrival in AR. May 17, 2006 (MM) was a late spring departure. They visit feeders during extremely cold weather (Jan 10, 2010; Jan 13, 2013 DC). [% MO: 45, 50, 55, 100, 35, 0, 0, 0, 10, 95, 75, 80; median = 2, max = 21]

Eastern Bluebird, Sialia sialis (CO) [All year]

Bluebirds are usually seen perched on wire fences and telephone lines overlooking open areas of grass and parkland. They are one of the most likely birds to be seen in the old fields being restored to prairie. During very cold weather they can be found in woodland.

[% MO: 95, 100, 85, 85, 65, 95, 95, 95, 80, 75, 100, 100; median = 3, max = 20]

Veery, Catharus fuscescens [Apr 29 to May 12]

Veery is a rare migrant in nwAR. There are three reports (Apr 29, 1987 RG; May 9, 1998 JH; May 12, 1990 MM).

Gray-cheeked Thrush, Catharus minimus [Apr 25 to May 17]

There are several spring reports, such as a Gray-cheeked Thrush with 2 Swainson's Thrushes on the path by the EC (Apr 30, 2012 JN et al). A photograph was obtained on May 8, 2009 (MM & DO). There is only one fall record, a bird in woodland edge north of the EC with a Hermit Thrush nearby for comparison (Oct 18, 2008 DC). This was the third fall record for the state. [% MO: 0, 0, 0, 15, 25, 0, 0, 0, 0, 0, 0; median = 1, max = 2]

Swainson's Thrush, Catharus ustulatus [Apr 12 to Jun 3; Sep 12 to Nov 1]

This common migrant is encountered more frequently in spring than in fall. Apr 12, 2008 (DC) was an early arrival in nwAR and one found in Veterans Park on Jun 3, 2011 (DC) a late departure. The few fall records reflect a more easterly migration route (e.g. Sep 23, 1989 MM; Sep 24, 2009 DC). Nov 1, 2010 (JN) was the latest fall record for AR.

[% MO: 0, 0, 0, 40, 80, 5, 0, 0, 15, 0, 0, 0; median = 2, max = 7]

Hermit Thrush, Catharus guttatus [Oct 11 to May 3]

Careful observation is required since this thrush often perches motionless on low branches in forest and forest edge. Sometimes more than one is present but 6 on Jan 6, 2007 (DC) was a large number. May 3, 1996 (JP & MM) was a very late spring record for AR. For a few weeks they overlap with Swainson's and Gray-cheeked Thrushes and therefore care needs to be taken in identification.

[% MO: 60, 25, 25, 35, 0, 0, 0, 0, 0, 40, 55, 35; median = 1, max = 6]

Wood Thrush, Hylocichla mustelina [Apr 27 to May 13]

Wood Thrushes have been recorded only a few times, in spring but not in fall (Apr 27, 1954 BB; Apr 28, 1990 MM; May 1, 2008 BR; May 3, 1990 MM; May 9, 1998 MP; May 13, 1954 BB). There are very few summer records (June 1-3, 2015 MM et al; Jun 30, 2008 MM). According to BWAO, this species prefers open mature forest with a suitable understory and is rather common in extensively forested areas in lightly developed sections of towns. This species is in general decline and suitable habitat may be absent at Lake Fayetteville.

[% MO: 0, 0, 0, 0, 0, 5, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

American Robin, Turdus migratorius (CO) [All year]

American Robins are one of the commonest birds especially in summer and fall when large flocks can be found around fruiting trees. Thousands were seen at dawn flying south over the lake in early fall (Nov 1, 2010 DC). In hard winters, such as occurred in 2007/8 and 2009/10, they can be difficult to find.

[% MO: 85, 100, 100, 95, 90, 100, 95, 100, 100, 100, 95, 90; median = 15, max = 390]

Gray Catbird, Dumetella carolinensis (CO) [Feb 10 to Oct 25+]

Catbirds are hard to locate in summer but during migration can be found in dense understory throughout the park. An adult and young were seen on Jun 21, 2011 (MM). Recent removal of vegetation along the northern shore has adversely affected this species. There are 2 Feb reports (Feb 10, 2001; Feb 14, 2006 MM) and two Dec records (Dec 2, 2015; Dec 16, 2014 MM). [% MO: 0, 10, 5, 25, 85, 35, 60, 85, 30, 0, 0; median = 2, max = 20]

Northern Mockingbird, *Mimus polyglottos* (CO) [All year]

Several well established territories are held in open areas by hedgerows, thickets, and playing fields around the northern shore of the lake and elsewhere. A family of adult and juveniles regularly took suet from a feeder at a house on Lake Road.

[% MO: 100, 100, 100, 95, 90, 95, 95, 100, 95, 100, 85, 100; median = 3, max = 11]

Brown Thrasher, Toxostoma rufum (CO) [All year]

Thrashers are hard to find in winter but there are occasional records (e.g. Jan 4, 2014; Jan 23, 2016 DC). Four was a large number for mid-winter (Jan 6, 2007 DC). They reappear in early February and are very common in spring and summer. On one occasion 11 were counted perched in a dead tree by the disc golf course (Jun 18, 2012 DC).

[% MO: 30, 10, 70, 90, 90, 90, 90, 100, 100, 65, 50, 35; median = 3, max = 11]

European Starling, Sturnus vulgaris (CO) [All year]

Vast flocks can occur in nwAR but at Lake Fayetteville much smaller numbers usually occur. After

heavy rain, flocks feed in the waterlogged grassland of the disc golf course. They congregate on telephone wires and pylons in the ballpark, dam area, and commercial properties nearby. [% MO: 100, 95, 95, 100, 100, 100, 95, 100, 100, 95, 85, 85; median = 10, max = 300]

American Pipit, Anthus rubescens [Nov 11 to Apr 22]

There are several reports from the 1950s (e.g. Nov 12, 1955 BB), including 31 on Feb 18, 1956 (BB) and 55 on Apr 22, 1955 (BB). As with other open country species, suitable habitat is no longer present. A flock of 97 was observed on Mar 25, 2013 (MM). An unusual sight was an American Pipit foraging in the rocks at the base of the spillway when the lake was almost entirely frozen (Jan 8, 2009 DC) and another at the same location on Mar 3, 2014 (DC) during freezing conditions. Two were identified in flight by their flight call (Mar 11, 2000 MM). [% MO: 10, 0, 5, 0, 0, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 2]

Cedar Waxwing, Bombycilla cedrorum (CO) [Sep 13 to May 27+]

Small flocks can be observed feeding on berries in the treetops and sometimes foraging in low vegetation along the lake edge. About 600+ were counted following heavy rains on Mar 10, 2013 (DC), all perched on trees in Lake Road. This equals the highest count for AR. Large flocks (e.g. 175) can also occur in fall (Nov 17, 2001 MM). They seem to have increased in summer in nwAR with records in Jun, Jul, and Aug. In 2009, a nest attended by adults was discovered about 10 feet high in an Osage Orange tree in the northeast section of the park (Jul 5, 2009 DC). Juveniles have been found in Aug and Sep (e.g. Aug 11, 2008 JN; Sep 2, 1989 MM). These reports, and a few others from the region, indicate that Cedar Waxwings are a breeding species in AR. [% MO: 55, 60, 45, 35, 55, 55, 45, 0, 20, 5, 50, 65; median = 10, max = 175]

Smith's Longspur, Calcarius pictus [Dec 4]

There is an old record of 7 Smith's Longspurs seen in heavily grazed open fields north of the EC (Dec 4, 1955 BB). This species is rare in nwAR.

Ovenbird, Seiurus aurocapilla [Apr 25 to May 20+; Jul 10 to Oct 4]

Ovenbirds are recorded in spring and less frequently in fall. In nwAR they are summer residents in extensive open forests, but at Lake Fayetteville are only occasionally reported during the summer months (e.g. Jul 10, 2009 MM). Oct 4, 2009 (DC) was a relatively late date for nwAR. [% MO: 0, 0, 0, 0, 0, 0, 5, 10, 15, 5, 0, 0; median = 1, max = 2]

Worm-eating Warbler, *Helmitheros vermivorum* [Apr 20 to Jun 19; Aug 6 to Sep 4]

There are a few spring and fall records (Apr 20, 1986 TH; May 2, 2008 AS; Aug 14, 2000; Aug 6, 2012 MM; Sep 4, 1985 CR). One was seen on the hard top trail north of the EC on Jun 17, 2007 (DC), a very late date for a presumed spring migrant in nwAR. Another was found on Jun 19, 2013 (MM). According to BWAO, rocky slopes and ravines in mature forests at high elevations are preferred. Habitat somewhat resembling this can be found east of Veterans Park but the species has not been

found at this location. [% MO: 0, 0, 0, 0, 0, 0, 0, 5, 0, 0, 0, 0; median = 1, max = 1]

Louisiana Waterthrush, Parkesia motacilla [Mar 30 to Sep 3+]

Louisiana Waterthrushes prefer fast-flowing forested streams and during spring migration can be found along the shore of the lake and near stream inlets. This species is considered common in the Fayetteville area but there were few summer records during the systematic field trips (e.g. Jun 17, 2013 DC). An adult was seen interacting with a juvenile on Aug 1, 2010 (DC) by the spillway. This is one day outside the "safe date" for breeding (Jul 31) specified for the AR Breeding Bird Atlas and it is possible that the birds had moved to Lake Fayetteville having bred at some other location nearby. The juvenile showed incomplete development of the primary wing feathers and flank streaking. Birds depart in early fall, most having left by early Sep. However, one was located by the spillway on Dec 6, 2009 (DC) and again on Jan 9, 2010 (DC); remarkable records suggesting that it may have overwintered. Another was located on Feb 18, 2011 (MM) and once again on Mar 3, 2011 (JP). Finally, a cooperative bird was found on Jan 22-23, 2014 (MM & JN) and photographed. These are the only winter records for AR and possibly may be the same bird. [% MO: 5, 5, 5, 25, 35, 10, 25, 25, 0, 0, 0, 5; median = 1, max = 2]

Northern Waterthrush, Parkesia noveboracensis [Apr 11 to May 26; Aug 16-29]

Swampy, wooded areas by the lakeshore are preferred habitat; the fringe of willow trees along the north side of the lake has been a reliable spot. Apr 11, 2008 (MM) was an unusually early arrival and May 26, 2001 (MM) the latest date in spring for nwAR. [% MO: 0, 0, 0, 20, 50, 0, 0, 15, 0, 0, 0, 0; median = 1, max = 7]

Golden-winged Warbler, Vermivora chrysoptera [Apr 28 to May 18; Aug 17 to Sep 30]

There are several records during spring migration and a few reports for fall (e.g. Apr 28, 2012; May 2, 2009, May 18, 2007 DC; Sep 5, 2011 JN et al; Sep 16, 2009 JP & DO; Sep 28, 1993; Sep 29, 2012 MM). Following an overnight thunderstorm, many species of warbler were seen including a Goldenwinged, Nashville, and Chestnut-sided Warbler (Aug 17, 2012 DC). These were by far the earliest arrival records for fall migration in AR.

[% MO: 0, 0, 0, 5, 10, 0, 0, 10, 0, 0, 0, 0; median = 1, max = 1]

Blue-winged Warbler, Vermivora pinus [Apr 18 to May 23; Aug 10 to Oct 1]

Suitable habitat (regenerating woodland, clearings, and old fields) would seem to be available north of the EC and the botanical garden but this species is not often found and there is no indication that they breed. They occur more frequently in fall than in spring (e.g. May 15, 2008 MM & DC; Aug 22, 2008 MM; Sep 3, 2011; Sep 10, 2010 DC). Most have departed by mid-Sep, an Oct report was late for fall migration (Oct 1 1995, PR & MM).

[% MO: 0, 0, 0, 0, 0, 0, 0, 25, 10, 0, 0, 0; median = 1, max = 1]

Black-and-white Warbler, Mniotilta varia (PO) [Mar 19 to Sep 29]

Black-and-white Warblers arrive early in spring and are common summer residents that occur throughout wooded areas. They certainly breed although proof has been difficult to obtain. Mar 19, 2008 (MM) was a somewhat early arrival in nwAR.

[% MO: 0, 0, 10, 35, 75, 85, 75, 70, 70, 5, 0, 0; median = 2, max = 24]

Prothonotary Warbler, Protonotaria citrea (CO) [Apr 14 to Sep 19]

Most records of Prothonotary Warbler in the AAS database have been from Lake Fayetteville. They can be found anywhere along the lake margin during summer and are frequently seen from the viewing platform near the EC, and in the creeks at the east end of the lake. One was seen entering a hole in a rotten tree trunk in the small pond north of the EC and a pair was photographed at a nest hole (JB). They can be hard to find in late Jul and Aug. There have been several records in Sep, considered late for nwAR (e.g. Sep 19, 2008 MM).

[% MO: 0, 0, 0, 35, 90, 60, 35, 30, 20, 0, 0, 0; median = 2, max = 6]

Swainson's Warbler, Limnothlypis swainsonii [June 1]

There is one record, a bird first heard singing repeatedly along the old black top road that used to be the entrance to Veterans Park, now overgrown with a dense shrubbery (June 1, 2015 MM). The bird was subsequently photographed (June 2, 2015 JN & DC).

Tennessee Warbler, *Oreothlypis peregrina* [Apr 19 to May 20; Aug 27 to Oct 23] Tennessee Warblers are common migrants in spring, foraging high in the canopy. May 20, 2001 (MM) was considered late for spring migration. They are much less common in fall, Aug 27, 1989 (MM) was the earliest fall arrival for AR and Oct 23, 2007 (MM) was a late departure. [% MO: 0, 0, 0, 35, 70, 0, 0, 0, 5, 5, 0, 0; median = 2, max = 10]

Orange-crowned Warbler, *Oreothlypis celata* [Mar 11 to May 15; Sep 30 to Nov 20]

A common migrant, this species favors regenerating woodland and bushy habitat in old fields north of the EC. Orange-crowned, Yellow-rumped, and Pine Warblers arrive early in spring. There are several Mar reports and an unusually late May record (May 15, 2008 DC & MM). Fall migration is much later than other warblers.

[% MO: 0, 0, 15, 75, 35, 0, 0, 0, 0, 80, 35, 0; median = 2, max = 14]

Nashville Warbler, Oreothlypis ruficapilla [Mar 31 to May 17; Aug 19 to Nov 6]

Nashville Warblers occur at all levels in forested and edge habitat from the canopy to brushy understory. Mar 31, 2002 (RD) was a very early spring arrival and May 17, 2010 (MM) a late departure. Aug 19, 2012 (DC) was the earliest fall arrival for AR and Oct 24, 2009 (DC) a somewhat late departure. On one occasion 15 were seen moving through bushes during fall migration (Oct 4, 2009 DC). There is one Nov record (Nov 6, 2007 MM).

[% MO: 0, 0, 0, 45, 50, 0, 0, 10, 45, 75, 5, 0; median = 3, max = 15]

Mourning Warbler, Geothlypis philadelphia [May 9-31; Aug 17 to Sep 10]

Mourning Warblers are generally uncommon but sometimes can be found in woodland edge habitat and dense shrubby undergrowth along the northern shore and in old fields north of the lake. They are mainly found in May but harder to find in fall. With only a few fall records. Aug 17, 2007 (MM) is the earliest fall arrival for AR.

[% MO: 0, 0, 0, 0, 50, 0, 0, 15, 5, 0, 0, 0; median = 1, max = 4]

Kentucky Warbler, Geothlypis formosus (CO) [Apr 24 to Sep 14]

Kentucky Warblers are common summer residents in nwAR preferring thickets with dense understory in forest. They are not uncommon but are more often heard than seen. Most records are for spring with a few for summer. One was carrying food (Jun 2008 DC) suggesting a nest nearby with fledgling young. An unusual observation was a bird foraging on the footpath near the EC (Jul 26, 2012 (DC).

[% MO: 0, 0, 0, 15, 55, 30, 5, 20, 10, 0, 0, 0; median = 1, max = 3]

Common Yellowthroat, *Geothlypis trichas* (PO) [Apr 8 to Oct 24]

Common Yellowthroats can be found in swampy lakeside vegetation mainly in spring and fall, during migration they also occur in drier areas such as the old fields north of the lake. They are hard to find in summer and possibly breed but proof has been difficult to obtain. There is a late date for fall migration (Oct 24, 2009 DC).

[% MO: 0, 0, 0, 35, 75, 50, 20, 20, 55, 55, 0, 0; median = 1, max = 23]

Hooded Warbler, Setophaga citrina [Apr 15 to May 6; Aug 14 to Sep 21]

Hooded Warblers are common summer residents in the extensive forests of nwAR but they are uncommon at Lake Fayetteville. A male Hooded Warbler in breeding plumage was seen in woodland near the EC (Jun 20, 2013 DC) and another in the fringe of trees at the base of the dam (Aug 15, 2009 DC & MM). Other records include Apr 15, 2012 DC; Apr 21, 2001; Apr 26, 2006; Apr 27, 1991 MM; May 1, 2012 AD; May 6, 2012 NN & DC; May 14, 29, Jun 4, 2013 MM; Aug 14, 2000 MM; Aug 17, 2012 DC; Sep 21, 1983 JN.

[% MO: 0, 0, 0, 15, 5, 5, 0, 15, 10, 0, 0, 0; median = 1, max = 1]

American Redstart, Setophaga ruticilla [Apr 25 to May 26; Aug 7 to Oct 16]

Although a resident in nwAR, American Redstarts only occur during migration. There is a May report of 22 birds along the north shore by the EC (May 11, 2002 RD) and an even larger number (26) on May 15, 2011 (MM). Redstarts have not been recorded during Jun and Jul probably because they prefer more extensive forest. One seen in Veterans Park on Oct 16, 2009 (DC) was the second latest fall departure record for nwAR.

[% MO: 0, 0, 0, 10, 90, 0, 0, 25, 65, 15, 0, 0; median = 2, max = 24]

Cape May Warbler, Setophaga tigrina [May 2-17]

A very uncommon migrant, there are several spring records but none for fall (e.g. May 9, 1987 BS & MM; May 13, 2012; May 17, 2007 DC). A male was found eating berries in a cedar tree in the north shore parking lot on May 2, 2009 (DC) and an excellent photo obtained (DO). [% MO: 0, 0, 0, 0, 10, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

Cerulean Warbler, Setophaga cerulea [Aug 14 to Sep 14]

Northern Parula, Setophaga americana (CO) [Mar 19 to Oct 12]

Northern Parulas are the commonest warbler in summer seen on most field trips and occurring throughout forested areas. Mar 19, 2008 (MM) was an unusually early arrival. Evidence of breeding was an adult carrying food in late Jun (Jun 25, 2008 DC).

[% MO: 0, 0, 20, 90, 100, 80, 95, 95, 100, 40, 0, 0; median = 3, max = 13]

Magnolia Warbler, Setophaga magnolia [Apr 29 to May 22; Aug 31 to Oct 6]

This colorful warbler is fairly common in spring but, like many other warblers, less common in fall (e.g. Aug 31, 1991; Sep 4, 1986 MM; Sep 25, 2011 DC; Oct 6, 2012 DC & MM). There are records of 10 and 12 birds, large numbers for spring migration (May 10, 2003 RD; May 15, 2011 MM). One was observed in fall catching insects in a wheel barrow containing potted plants in the yard of a house in Lake Road (Sep 16, 2010 DC).

[% MO: 0, 0, 0, 5, 70, 0, 0, 0, 10, 5, 0, 0; median = 3, max = 8]

Bay-breasted Warbler, Setophaga castanea [May 2-31; Sep 14]

Bay-breasted Warblers have been recorded a few times during spring migration (May 2, 2008; May 11, 2013 JPe; May 11, 2008 DC; May 12, 1956 BB; May 13, 2014 JN & DC; May 13, 1989 MM & JW; May 14, 2011 AS & JN; May 17, 2015 JPa; May 31, 1992 MM). This species has been recorded once in fall (Sep 14, 2011 MM); there are few fall records for AR. [% MO: 0, 0, 0, 0, 5, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

Blackburnian Warbler, Setophaga fusca [May 1-24; Aug 17-Sep 28]

This species is uncommon in spring and rare in fall, seen in woodland near the EC and in trees along the northern shore. There are a few spring and fall records (e.g. May 1, 2012 AD; May 10, 2007 DC; May 16, 2007 MM; Aug 17, 2012 MM; Sep 2, 2001 RD; Sep 28, 1993 MM). [% MO: 0, 0, 0, 0, 10, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 1]

Yellow Warbler, *Setophaga petechia* [Apr 26 to May 26; Jul 28 to Oct 6] Yellow Warblers are a common migrant and often occur in willows and sycamores along the lake

margin. In fall, migration is early, most birds having departed by late Sep. In mid-Aug Yellow Warblers can be the most frequent warbler encountered. There are 3 late Sep and one Oct report (e.g. Sep 29, 2007 DC & MM; Oct 6, 2011 MM). This species is rare in Oct in nwAR. [% MO: 0, 0, 0, 5, 65, 0, 0, 75, 60, 0, 0, 0; median = 2, max = 17]

Chestnut-sided Warbler, *Setophaga pensylvanica* [Apr 30 to May 26; Aug 17 to Sep 13] Regular in spring, Chestnut-sided Warblers are harder to find in fall (e.g. Sep 13, 2008 MM). Aug 17, 2012 (DC) was an early date for fall arrival in nwAR. [% MO: 0, 0, 0, 5, 75, 0, 0, 5, 25, 0, 0, 0; median = 2, max = 8]

Blackpoll Warbler, Setophaga striata [Apr 24 to Jun 4]

Blackpoll Warblers are regularly recorded in spring especially in trees by the water edge. Twentythree on May 19, 2009 (MM) was a large number. May 26, 1986 (JN & MM) was the latest date for spring departure in nwAR.

[% MO: 0, 0, 0, 5, 45, 0, 0, 0, 0, 0, 0, 0, 0; median = 1, max = 4]

Palm Warbler, Setophaga palmarum [Apr 14 to May 7; Sep 28 to Oct 15]

Once recorded regularly but fewer Palm Warblers have been reported recently probably due to human disturbance in open field habitat. The AAS database has 8 spring records, including 6 birds on Apr 27, 1995 (MM), a large number for nwAR. Apr 14, 2010 (MM) was an early spring arrival date. There are few records for fall (e.g. Sep 28, 1993 MM; Oct 2, 2009 DC; Oct 15, 1985 JN). [% MO: 0, 0, 0, 10, 5, 0, 0, 0, 10, 0, 0; median = 1, max = 1]

Pine Warbler, Setophaga pinus (CO) [All year]

Sometimes Pine Warblers can be found in pine trees near the boat dock and EC. Although extensive pine forest is absent, juveniles have been identified in summer (for example near the EC) indicating that occasionally breeding occurs. One was located during a recent Christmas Bird Count and a bird appeared at a feeder in Lake Road during the 2009 ice storm. There are several winter records (e.g. Dec 14, 2002 MM & JN; Jan 24, 2009; Feb 2, 2007 DC).

[% MO: 10, 5, 35, 10, 0, 15, 0, 5, 5, 10, 5, 15; median = 1, max = 2]

Yellow-rumped Warbler, Setophaga coronata [Sep 23 to May 26]

This is the only warbler that occurs consistently in winter. Large numbers of several hundred birds have been recorded during migration when they can pass in waves through trees on the northern shore (Apr 4, 2011 MM & JP; Apr 16, 2012 MM). The latter record was the largest number ever submitted to the AAS database. There is a late May record (May 26, 2011 MM). A bird in basic plumage on Sep 23, 1989 (MM) was the earliest fall report for nwAR.

[% MO: 95, 95, 95, 100, 45, 0, 0, 0, 5, 100, 95, 100; median = 2, max = 114]

Yellow-throated Warbler, Setophaga dominica (CO) [Mar 19 to Oct 9]

Yellow-throated Warblers breed at Lake Fayetteville, juveniles having been identified on two occasions. They can often be found in sycamores and pines near the spillway at the southern end of the dam and in the pines by the boat dock. Fall migration is said to commence early with most birds having departed by mid-Sep. Oct 9, 2007 (DC & MM) was the latest departure for nwAR. [% MO: 0, 0, 15, 60, 40, 60, 60, 35, 30, 10, 0, 0; median = 1, max = 3]

Prairie Warbler, Setophaga discolor [Apr 13 to Aug 31]

Prairie Warblers prefer regenerating forest and old fields but although this habitat is present, there are few records (e.g. Apr 13, 2008 CM; Apr 23, 2010 DC; Apr 27, 1984 MM). One was found on Jun 3, 2010 (DC) at the edge of the northern fields undergoing prairie restoration but could not be relocated. Another was located on Jul 9, 2009 (DC) in low scrub in the old field along the northern boundary, and an early fall migrant was seen near the EC (Aug 31, 2002, RD). [% MO: 0, 0, 0, 5, 0, 5, 5, 0, 0, 0, 0; median = 1, max = 1]

Black-throated Green Warbler, Setophaga virens [Apr 7 to May 19; Aug 13 to Oct 23]

Black-throated Green Warblers prefer extensive, diverse forest with a well-developed understory. Small numbers turn up during migration. Apr 7, 1996 (JP & MM) was an early date for spring arrival although there is a late Mar date elsewhere in nwAR. There is a record of 10 birds on Oct 2, 1956 (BB), an unusually large number.

[% MO: 0, 0, 0, 0, 15, 0, 0, 10, 15, 25, 0, 0; median = 1, max = 3]

Canada Warbler, Cardellina canadensis [May 11 to Jun 6; Aug 17 to Sep 24]

Canada Warblers are uncommon but sometimes can be seen foraging in the understory and midlevels of regenerating woodland. There are several spring and fall reports (e.g. May 11, 2008; May 21, 2015 DC; Jun 6, 1987; Aug 17, 2012 MM; Sep 24, 2009 DC). [% MO: 0, 0, 0, 0, 15, 0, 0, 15, 15, 0, 0, 0; median = 1, max = 2]

Wilson's Warbler, Cardellina pusilla [Apr 21 to May 31; Aug 17 to Oct 16]

This species is one of the most frequently encountered warblers during migration. Large numbers are sometimes encountered such as 15 on May 11, 2002 (RD) and 16 on Sep 12, 2006 (MM). Aug 17, 1991 (MM) and Aug 17, 2012 (DC) may be the earliest fall arrival dates and Oct 16, 2007 (MM) a somewhat late fall departure for nwAR.

[% MO: 0, 0, 0, 5, 85, 0, 0, 30, 90, 25, 0, 0; median = 3, max = 16]

Yellow-breasted Chat, Icteria virens (CO) [Apr 20 to Oct 13]

The best place to find this species is in the old fields north of the EC where birds can be singing from exposed branches of dead trees and shrubs. Birds have been located in different areas suggesting several territories. Evidence of breeding was an adult seen feeding young (Jun 14, 2008 DC). Most have left by Aug. Oct 13, 1991 (MM) was a late fall departure.

[% MO: 0, 0, 0, 25, 60, 95, 75, 20, 15, 0, 0, 0; median = 1, max = 5]

Spotted Towhee, Pipilo maculatus [Oct 12 to Apr 17]

This is a western species whose winter range includes eastern Oklahoma. They are occasionally recorded in early spring, fall and winter (e.g. Mar 4, 2001; Oct 12, 2006; Oct 26, 2012 MM; Nov 11, 2006 AD; Dec 3, 2000 MM; Jan 2, 2014 DC). A Spotted Towhee near the EC on Apr 17, 2008 (DC) was a very late spring date for AR. Usually single birds are observed but on Nov 11, 2000 (DJ et al) 2 females and a male were found in regenerating woodland. There are 2 Dec records, one of which was considered a Spotted/Eastern hybrid (Dec 24, 2007 DC). The winter of 2013/2014 was extremely cold and a female spent several days at a feeder in Lake Road and was photographed (Feb 5-9, 2014, DC).

[% MO: 0, 0, 5, 0, 0, 0, 0, 0, 0, 10, 5, 5; median = 1, max = 2]

Eastern Towhee, Pipilo erythrophthalmus (CO) [All year]

In spring and summer, Eastern Towhees are frequently heard singing from overgrown thickets in the old fields north of the lake and elsewhere. They are less frequently encountered in winter, especially during hard weather.

[% MO: 20, 60, 80, 95, 85, 90, 90, 70, 40, 80, 50, 35; median = 2, max = 12]

American Tree Sparrow, Spizella arborea [Oct 28 to Apr 1]

American Tree Sparrows were recorded regularly in the 1950s; e.g. Jan 8 – Feb 5, 1956; Dec 15, 1953 (BB) but have only occasionally been observed in recent years. There were 6 records in the winter of 2001 (MM) but none from 2002-2013. There is an Oct report, early for nwAR (Oct 28, 1995 JP et al). One was found on Apr 1, 2001 (MM), Apr records are rare in AR. One was present at a feeder in Lake Road during extremely cold weather and was photographed (Feb 5-7, 2014 DC). [% MO: 10, 10, 5, 0, 0, 0, 0, 0, 0, 0; median = 10, max = 25]

Chipping Sparrow, Spizella passerina (CO) [All year]

Chipping Sparrows are very uncommon in winter and late summer but there are records for all months of the year. They are best seen in open grassy areas with scattered mature trees such as Veterans Park, parking areas, and in the prairie north of the EC. They sometimes occur in summer; an adult was seen feeding a young bird at the botanical garden indicating that breeding had occurred (Jun 21, 2011 MM & DC). Large flocks can occur in fall such as 95 on Oct 22, 2009 (MM). They are occasionally seen in winter, often feeding on the ground with other sparrows. [% MO: 25, 5, 30, 75, 60, 20, 25, 5, 5, 40, 40, 20; median = 2, max = 50]

Clay-colored Sparrow, Spizella pallida [Apr 26 to May 12; Aug 30 to Oct 20]

Clay-colored Sparrows are very uncommon in nwAR. There are several records in the AAS database, including a bird on Apr 26, 2006 (MM) that was the first of many sightings that spring. Two were present in Unit 2 of the prairie area on Apr 26, 2013 (DC) and 3 were recorded on May 2,

1986 (JR et al), including several calling from a Sassafras/blackberry thicket. There are four fall records (Aug 30, 1998 JP & DC; Oct 2, 1995 JP & PR; Oct 11, 2009 DC; Oct 20, 2002 RD). [% MO: 0, 0, 0, 15, 5, 0, 0, 0, 0, 5, 0, 0; median = 1, max = 1]

Field Sparrow, Spizella pusilla (CO) [All year]

Field Sparrows are common throughout the year. They are the most frequently encountered sparrow in summer; best seen and heard in the old fields north of the lake. The brushy field west of the botanical garden often holds a dozen or more in spring and fall. The largest number was 104 in the winter of 1956 (Feb 5, 1956 BB).

[% MO: 95, 85, 85, 85, 70, 85, 85, 60, 50, 75, 80, 75; median = 2, max = 26]

Vesper Sparrow, Pooecetes gramineus [Feb 8 to Apr 28; Oct 5 to Nov 4]

Vesper Sparrows were more common in the 1950s (e.g. Feb 8, 1957; Mar 16, 1957; Apr 28, 1956 BB). In spring they have been found in open areas such as the hedgerow bordering the ballpark and recently in burnt over prairie north of the EC (Mar 19, 2011; Apr 1, 2011 DC). There are a few fall records (e.g. Oct 19, 2012 DC; Nov 4, 2000 MM). Oct 5, 2009 (MM) was unusually early for fall migration of this species in nwAR. The largest number was 7 on Oct 23, 2007 (MM). [% MO: 0, 0, 5, 5, 0, 0, 0, 0, 10, 5, 0; median = 2, max = 7]

Lark Sparrow, Chondestes grammacus [Apr 10-24; Aug 24-29]

Lark Sparrows are very uncommon, with only a few records (Apr 27, 1991; Aug 24, 2010; Aug 29, 2006 MM). Four were found in a log pile in Unit 3 of the prairie restoration area (Apr 24, 2013 (DC). They were more frequent in the 1950s (e.g. Apr 10, 13, 1956; Apr 22, 27, 1954; May 13, 19, 20, 22, 1954 BB). This species prefers more open habitat than is found at Lake Fayetteville. [% MO: 0, 0, 0, 5, 0, 0, 0, 0, 0; median = 1, max = 1]

Savannah Sparrow, Passerculus sandwichensis [Oct 9 to May 16]

A few Savannah Sparrows can sometimes be found during migration in open fields near the ballpark, in the field south of the botanical garden, and in the old fields being restored to prairie. They occur most frequently in Mar and Apr.

[% MO: 5, 5, 45, 50, 15, 0, 0, 0, 0, 20, 10, 20; median = 1, max = 6]

Grasshopper Sparrow, Ammodramus savannarum [Apr 22 to May 20]

Suitable habitat for this species, short sparse grassland, is no longer present and there are no recent records. They were encountered more frequently in the 1950s (Apr 22, 1955; Apr 28, 1956; May 10, May 12, 1956; Oct 7, 1955 BB). Six were found on May 20, 1956 (BB).

Henslow's Sparrow, Ammodramus henslowii [Apr 1]

The absence of this species suggests that suitable habitat for Henslow's Sparrow is no longer present. The only record was one found in dense grass just north of the EC that has now regenerated to woodland (Apr 1, 1986 MM).

Le Conte's Sparrow, Ammodramus leconteii [Oct 2 to Apr 19]

Le Conte's Sparrows are uncommon transients and winter residents once found in the old fields being restored to prairie (DJ, personal communication; Feb 25, 1956 BB). They had not been recorded for many years but recently have been found in the field south of the botanical garden (e.g. Apr 19, 2008; Dec 19, 2010 DC), a site proposed for future development. They have also been located in rough grass in the field west of the EC (Nov 7, 2013 DC). The occurrence of this species may be underestimated. Oct 2, 2011 (DC) was the earliest fall arrival date for nwAR. [% MO: 20, 15, 10, 15, 0, 0, 0, 0, 5, 15, 15; median = 1, max = 2]

Fox Sparrow, *Passerella iliaca* [Oct 13 to Apr 6]

Fox Sparrows are often encountered in woodland and woody edge in old fields near the EC and elsewhere. They usually occur in small numbers in mixed flocks with White-throated and Song Sparrows. Fall arrival is somewhat later than for other species.

[% MO: 85, 75, 80, 15, 0, 0, 0, 0, 0, 25, 55, 60; median = 2, max = 9]

Song Sparrow, Melospiza melodia [Oct 4 to Apr 27]

A common winter resident, Song Sparrows are usually found in mixed flocks with Fox and Swamp Sparrows. They are common in wet rank vegetation below the dam but also in mature and regenerating woodland. In winter, they are the most likely sparrow to be encountered in the fields being restored to prairie north of the EC. A very large flock (200) was found on Dec 16, 1954 (BB). [% MO: 100, 95, 100, 60, 0, 0, 0, 0, 0, 95, 100; median = 6, max = 17]

Lincoln's Sparrow, Melospiza lincolnii [Sep 22 to May 27]

Lincoln's Sparrow is common throughout brushy areas and woodland during migration, peak months of occurrence are Apr and Oct. On one occasion 22 were present, considered a large number (Apr 26, 2006 MM). They are very uncommon in winter but there are records of single birds in Dec and Jan (Jan 24, 2010 DC; Jan 25, 2013 MM; Dec 5, 1985 MM; Dec 9, 2010 DC). [% MO: 10, 0, 30, 80, 50, 0, 0, 0, 5, 75, 20, 0; median = 2, max = 22]

Swamp Sparrow, Melospiza georgiana [Sep 22 to May 17]

Rank, wet vegetation along the lake margin is preferred but Swamp Sparrows also occur in drier situations such as the old fields north of the EC. The bottomland at the eastern end of the lake and old fields near the botanical garden are favored locations. May 17, 2006 (MM) was a late spring departure and Sep 22, 2012 (DC) the earliest fall arrival for Arkansas. [% MO: 90, 65, 60, 70, 5, 0, 0, 0, 5, 75, 80, 75; median = 2, max = 14]

White-throated Sparrow, Zonotrichia albicollis [Sep 21 to May 31]

White-throated Sparrows are very common in winter and are found throughout the park wherever there is woodland or woodland edge habitat. Flocks of a dozen or so can be seen foraging on the ground but quickly head for cover if disturbed. There is a late spring and a very early fall report (May 31, 1992 MM; Aug 13, 1988 JN et al).

[% MO: 100, 100, 100, 100, 45, 0, 0, 0, 5, 75, 100, 100; median = 20, max = 82]

Harris's Sparrow, Zonotrichia querula [Nov 10 to Apr 28]

Harris's Sparrows are very uncommon winter visitors, preferring more open country than is present at Lake Fayetteville. They were recorded regularly in the 1950s (e.g. Jan 15, 1956; Apr 8, 1954; Apr 28, 1957 BB) with as many as 23 on Apr 8, 1954 BB, 30 on Nov 22, 1953 (DJ) and 33 on Dec 9, 1956 (BB). These large numbers are an indication of how much habitat has changed in the last 60 years. There were three reports in the winter of 2001 (e.g. Jan 6, 2001 MM). Recent records include Nov 28, 2011 (MM), and Dec 1, 2012 (DC). In 2013, several Harris's Sparrows were located in large log piles in Units 2 and 3 of the newly managed prairie area and were continuously present from Jan 30- Apr 14, 2013 (DC). They did not leave despite a prescribed burn carried out in Mar that year that destroyed this habitat.

[% MO: 10, 5, 5, 0, 0, 0, 0, 0, 0, 0, 0, 0, 5; median = 2, max = 3]

White-crowned Sparrow, Zonotrichia leucophrys [Oct 16 to May 11]

White-crowned Sparrows are common in nwAR but infrequently encountered; they are best found along hedgerows and edges of fields, such as south of the botanical garden and by the ballpark. They also can occasionally be seen in woodland.

[% MO: 40, 15, 25, 30, 25, 0, 0, 0, 0, 30, 40, 35; median = 1, max = 20]

Dark-eyed Junco, Junco hyemalis [Oct 11 to Apr 28]

Dark-eyed Juncos are very common winter residents, flocks are often flushed from open ground while walking trails around the park. Oct 11, 2010 (DC) was one of the earliest arrival dates in fall for AR and Apr 28, 2001 (MM) the latest spring departure for nwAR. A female Oregon Junco, rare in AR, was identified by a combination of rusty sides, brown back, and a gray hood (Mar 28, 2008 MM). Another was found on Feb 6, 1955 (BB). A bird showing some characteristics of the Oregon race was present at a feeder in Lake Road on Feb 5, 2014 and photographed (JN & DC). [% MO: 95, 100, 95, 55, 0, 0, 0, 0, 0, 55, 95, 100; median = 18, max = 67]

Summer Tanager, Piranga rubra (CO) [Apr 16 to Oct 25]

Summer Tanagers are common summer residents that are most numerous in mature forests with well-developed canopy such as occur around the eastern end of the lake and at Veterans Park. An adult was seen attending a begging juvenile at the latter location (Jul 5, 2009 DC et al). They are also heard and seen regularly in gardens with tall trees along Lake Road. There are several late fall records (e.g. Oct 25, 2007 DC).

[% MO: 0, 0, 0, 30, 75, 80, 80, 55, 70, 25, 0, 0; median = 1, max = 4]

Scarlet Tanager, Piranga olivacea [May 9]

A bird that prefers extensive forest, there is one record (May 9, 1986 MM).

Northern Cardinal, Cardinalis cardinalis (CO) [All year]

Rose-breasted Grosbeak, Pheucticus ludovicianus [Apr 21 to May 17; Sep 12 to Oct 16]

Rose-breasted Grosbeaks are transients that occasionally occur in small numbers during migration, they are uncommon in spring and very uncommon in fall. Apr 21, 2002 (RD) was early for spring. Four females have been seen in fall (Oct 9, 2007 DC).

[% MO: 0, 0, 0, 30, 35, 0, 0, 0, 5, 15, 0, 0; median = 1, max = 4]

Blue Grosbeak, Passerina caerulea (CO) [Apr 30 to Sep 12]

Blue Grosbeaks are considered common summer residents in nwAR but are uncommon at Lake Fayetteville preferring more open habitat. There are records for spring, summer, and fall. It seems likely that this species has bred since a pair was observed south of the botanical garden on Jun 24, 2012 (DC) and a male was seen with an immature bird that was fluttering its wings rapidly, suggesting begging behavior (Jul 10, 2009 DC).

[% MO: 0, 0, 0, 0, 25, 20, 15, 0, 10, 0, 0, 0; median = 1, max = 3]

Indigo Bunting, Passerina cyanea (CO) [Apr 18 to Oct 23+]

Indigo Buntings are very common in summer in the old fields north of the lake and along the forest edge where males can be seen singing from prominent perches. They congregate in small flocks in the fall. Most Indigo Buntings leave in Sep but a few stragglers are usually present in late Oct (Oct 23, 2009 DC). Nov 16, 2010 (MM) was a very late record.

[% MO: 0, 0, 0, 35, 100, 100, 95, 100, 65, 35, 0, 0; median = 4, max = 15]

Painted Bunting, Passerina ciris (CO) [Apr 28 to Aug 17]

Painted Buntings prefer overgrown old fields with scattered shrubs and trees. They were not recorded from 2001-2006. The opening of the multi-use trail through the old fields north of the EC in 2007 provided new opportunities to find this species. On one occasion 4 were found (May 19, 2007 DC) and this has been followed by regular reports. Singing males occupy separate territories, sometimes with females. An adult female was seen with 3 juveniles (Aug 17, 2007 MM). The earliest spring date was a record from the 1950s (Apr 28, 1956 BB).

[% MO: 0, 0, 0, 0, 30, 45, 35, 15, 0, 0, 0, 0; median = 1, max = 4]

Dickcissel, Spiza americana [May 2 to Jun 10; Jul 23 to Oct 2]

Although small numbers have been recorded in open fields and meadows during the nearby AVOCA breeding bird survey this species is rarely encountered. The only recent records are a bird seen south of the botanical garden outside the boundary of the park (Jun 10, 2008 MM) and another near the dam (Jul 23, 2011 MM & DC). A single bird was also seen on May 3, 1998 (MP). Dickcissels were more frequently recorded in the 1950s and 1960s such as May 2, 1964 (RR), and the 17 on May 20, 1956 (BB). Fall records include Sep 22, 1955 and Oct 2, 1956 (BB). [% MO: 0, 0, 0, 0, 5, 5, 0, 0, 0, 0; median = 1, max = 1]

Red-winged Blackbird, Agelaius phoeniceus (CO) [All year]

Red-winged Blackbirds are most likely found near open, wet areas such as the rank vegetation at the base of the dam and near the boat dock. Singing birds establish their territories in late Feb and

can be heard consistently in summer. Sometimes large flocks can be seen flying overhead and descend on feeders in winter. Large numbers were recorded in the 1950s, such as 200 on Apr 7, 1957 (BB). At that time open wetland habitat was extensive along the northern margin of the lake. [% MO: 25, 50, 70, 65, 55, 60, 60, 10, 15, 10, 10, 15; median = 1, max = 200]

Eastern Meadowlark, Sturnella magna [All Year]

Eastern Meadowlarks prefer grassy fields and cropland in open country and are infrequent at Lake Fayetteville. A few birds may sometimes be found in the fields west of the softball complex and south of the botanical garden. During the systematic field trips meadowlarks were recorded in all months except Dec. There are few summer records and no evidence of breeding. There is a record of 300+ from the 1950s, an indication of the decline of this species and the lack of suitable habitat (Oct 14, 1954 BB).

[% MO: 15, 5, 40, 55, 45, 40, 15, 5, 10, 30, 10, 0; median = 1, max = 9]

Western Meadowlark, Sturnella neglecta [Oct 19 to Mar 10]

There is one recent record, a Western Meadowlark identified by its low pitched "chub" call (Oct 19, 1991 MM). There were more records in the 1950s (Jan 12, 1958 DJ; Feb 2, 1957; Feb 25, 1956; Mar 10, 1956 BB).

Yellow-headed Blackbird, Xanthocephalus xanthocephalus [Mar 6]

An adult male was identified in flight and said to be "flying to a roost at the east of town" (Mar 6, 1992 JBi). Unfortunately documentation of this western species was not provided.

Rusty Blackbird, Euphagus carolinus [Nov 5 to Apr 12]

Rusty Blackbirds prefer wet situations such as ditches, swampy forest edge, pond flats, and feedlots. There are a few spring, fall and winter records (e.g. Jan 6, 1955: Feb 28, 1957 BB; Mar 21, 2012; Apr 12, 2008; Nov 5, 2010 DC; Dec 10, 2008 MM). Fifty were feeding in the waterlogged short sward of the disc golf course following heavy rain on Mar 14, 2011 (DC). A flock of 26 on Jan 18, 2007 (MM) was thought to be an example of "escape" migration due to cold weather further north. Two appeared at a feeder in Lake Road following an ice storm (Mar 2, 2014 DC). [% MO: 5, 10, 30, 5, 0, 0, 0, 0, 0, 5, 5; median = 2, max = 50]

Common Grackle, Quiscalus quiscula (CO) [All year]

Common Grackles are widespread especially in summer when they can be found throughout Lake Fayetteville. Vocal flocks have been seen systematically working the lake edge looking for food. The dam and spillway are good places to find them. They are less common in winter, although flocks can sometimes be seen flying over the lake on their way to roost elsewhere. Sometimes very large numbers are recorded, such as a continuous stream of at least 1000+ birds flying in a southeasterly direction on Mar 6, 2012 (DC).

[% MO: 40, 40, 60, 75, 85, 100, 90, 100, 80, 25, 30, 20; median = 5, max = 200]

Great-tailed Grackle, Quiscalus mexicanus [Apr 28; Sep 2 to Nov 6]

There are a few records, such as a single bird on Apr 28, 1987 (MM) and 9 flying over the lake on Nov 6, 2007 (MM). A group of 6, one of which was a male, was the first Sep record for nwAR (Sep 2, 1989 MM). This species is more frequently reported from farmland, and occurs regularly on the nearby AVOCA breeding bird survey route.

[% MO: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 5, 0; median = 9, max = 9]

Brown-headed Cowbird, Molothrus ater (CO) [Mar 1 to Aug 10+]

Cowbirds are conspicuous in summer perched at the top of trees looking for nests to parasitize. The patchwork of cleared areas and woodlots is favored. They are much less common in fall and winter when they leave the lake to join foraging groups of blackbirds elsewhere. Following a prescribed burn in the prairie restoration area, a flock of about 100 were seen working the burnt stubble (Mar 17, 2013 DC). During the winter of 2007/08, they were not recorded but they were present in large numbers at the University farm. A flock of 38 was present on Mar 19, 1955 (BB). [% MO: 25, 25, 65, 100, 100, 95, 100, 10, 0, 0, 5, 0; median = 5, max = 20]

Orchard Oriole, Icterus spurious (CO) [Apr 16 to Sep 3]

Orchard Orioles are considered common in the Fayetteville area but can be elusive and difficult to find. Sycamore trees lining the dam are a favored location (e.g. May 13, 2012 DC). There are reports for spring, summer, and early fall (e.g. Jun 3, 2010; Jul 29, 2009; Aug 17, 2012 DC). A male and female were seen in rank vegetation and willows along the northern shore on Jun 18, 2010 (DC) suggesting that breeding occurs. An adult was seen feeding young out of a nest on Jul 26, 1982 (JN) in the "Lake Fayetteville area". Sep 3, 1990 (MM) was the first Sep record for the Ozarks. [% MO: 0, 0, 0, 15, 35, 5, 20, 0, 0, 0; median = 1, max = 3]

Baltimore Oriole, Icterus galbula [Apr 11 to Jun 2; Aug 19 to Sep 24]

Spring has truly arrived when the vivid orange color of Baltimore Orioles is first seen in the treetops. Up to 35 have been recorded during spring migration. Apr 11, 2011 (MM) was the earliest spring arrival for nwAR. Most birds have departed by late May but a male was seen on Jun 2, 2009 (DC), an unusual summer record. Apparently, a nest was built in a sycamore on the dam in the 1980s or early 1990s (MM). Baltimore Orioles are less common in fall but have been found in Aug and late Sep (e.g. Aug 19, 2012; Sep 24, 2009 DC). A bird showing the characteristics of a Baltimore/Bullock's hybrid was seen by several observers on May 2, 2012 (MM et al). [% MO: 0, 0, 0, 15, 60, 5, 0, 20, 40, 0, 0, 0; median = 1, max = 35]

Purple Finch, Carpodacus purpureus [Oct 10 to Apr 20]

Purple Finches are much less common than House Finches but this was not so during the winter of 2007/2008 and the following spring. In some years, however, they are not reported. Up to 16 were seen feeding high in the canopy (DC). Three visited a feeder on Lake Road (Jan 16-Mar 5, 2016 DC). [% MO: 25, 20, 20, 5, 0, 0, 0, 0, 0, 0, 30, 20; median = 2, max = 6]

House Finch, Carpodacus mexicanus (CO) [All year]

House Finches are common residents that can be found near houses and commercial properties along Lake Fayetteville road, the boat dock, playing fields, and at feeders all year round. However, some years this finch is difficult to find such as the winter of 2007.

[% MO: 100, 95, 95, 85, 55, 80, 90, 90, 80, 90, 75, 75; median = 3, max = 32]

Red Crossbill, Loxia curvirostra [Feb 21 to Mar 9]

The winter of 2012/2013 was notable for the large invasion of Red Crossbills seen at many locations in nwAR. Six were found in pines along the northern boundary of the park on Feb 22, 2013 (MM) and 4 at the same location on Mar, 10, 2013 (DC). Another 4 were in pines by the boat dock (Mar 9, 2013 DC).

Pine Siskin, Carduelis pinus [Oct 16 to May 10]

Pine Siskins are very uncommon winter visitors and do not occur every year. Several were heard and seen at feeders in the winter of 2007/2008, said to be a "finch invasion" year. A dozen were present at the Mary Bess Mulhollan feeders in the botanical garden (Feb 7, 2016 DC). At least 6 were feeding in the conifers by the boat dock on Nov 4, 2012 (DC). On Apr 4, 2009 (MM et al), nest construction was attempted in a pine tree by the boat dock. [% MO: 0, 0, 5, 10, 5, 0, 0, 0, 0, 5, 20, 10; median = 2, max = 5]

American Goldfinch, Carduelis tristis (CO) [All year]

Flocks of American Goldfinches can often be heard and seen as they fly overhead. Several dozen birds often frequent the Mulhollan bird feeders in the botanical garden in winter and flocks can be seen feeding on the seed heads of plants growing in the dried up creek bed by Copperhead Crossing. A nest with young was found in a sycamore by the spillway. [% MO: 100, 95, 95, 100, 100, 100, 100, 95, 80, 95, 100; median = 4, max = 65]

House Sparrow, Passer domesticus (CO) [All year]

House Sparrows are usually found near human habitation, such as the colony near the boat dock and houses along Lake Fayetteville road.

[% MO: 85, 90, 90, 95, 90, 95, 100, 95, 90, 90, 80, 100; median = 5, max = 89]

Month	J	F	М	Α	М	J	J	А	S	0	Ν	D
Number of trips	20	20	20	20	20	20	20	20	20	20	20	20
G. White-fronted Goose	5									5		10
Snow Goose	10	5		10						10	15	
Ross's Goose											5	
Cackling Goose	15											5
Canada Goose	100	90	100	100	100	95	100	95	70	95	95	85
Tundra Swan												5
Wood Duck		25	40	30	20	15	5	30	20	15	30	5
Gadwall	95	65	85	50	10	15	10	5	10	70	100	95
American Wigeon	10	5	20	20						15	20	30
Mallard	100	75	100	100	80	85	80	75	45	55	95	95
Blue-winged Teal			55	100	35			15	40	35	10	
Northern Shoveler	45	25	55	55	10	10	5	5	15	40	65	45
Northern Pintail	5	10								10	5	
Green-winged Teal	35	40	60	30	5					35	45	60
Canvasback	5			5						5	15	15
Redhead	15		5	5						10	35	30
Ring-necked Duck	35	35	30	15	5	5				35	35	50
Greater Scaup	5		5	10							5	20
Lesser Scaup	15	35	60	45	10					20	45	55
Surf Scoter				5						5	5	
White-winged Scoter										5		
Long-tailed Duck												5
Bufflehead	65	85	90	30						5	75	95
Common Goldeneye	50	20	5								15	50
Hooded Merganser	10	20	20	10	5	10	5			10	45	35
Red-breasted Merganser			20	15	5						20	
Ruddy Duck	5	15	50	20	25	5				40	70	20
Northern Bobwhite					15	5			5			
Common Loon	15	15	35	35	10					5	25	5
Pied-billed Grebe	75	75	100	90	30	20		15	50	100	100	100
Horned Grebe		20	50	5						25	65	10
Eared Grebe										5	25	20
Western Grebe	5	5										
Double-crest. Cormorant	5	10	25	40	10	10		10	50	55	55	35
American White Pelican			15	10					5	15	5	5
Great Blue Heron	70	75	85	80	90	100	95	90	95	85	90	90
Great Egret				20	10	10	25	35	30	5		
Snowy Egret				5								
Little Blue Heron				10	5		10	25				
Green Heron				25	45	85	85	95	90	5		
Black-cr. Night-Heron								5		5	10	
Black Vulture	5	10	20	25	15	15	10	10		15	10	15
Turkey Vulture	50	55	95	100	85	75	70	65	65	95	75	85
Osprey			5	55	15				15	20		
Bald Eagle	70	25	30						5	30	35	70

Percentage monthly occurrence of birds at Lake Fayetteville (2000-2011)

Month	J	F	М	А	Μ	J	J	А	S	0	Ν	D
Number of trips	20	20	20	20	20	20	20	20	20	20	20	20
Northern Harrier	5	5		5	5						5	
Sharp-shinned Hawk	25	15	15	5						20	20	25
Cooper's Hawk	30	50	50	65	25	70	55	30	35	50	25	30
Red-shouldered Hawk	35	80	75	60	55	65	35	40	50	35	15	45
Broad-winged Hawk			5	20	15	5		5				
Red-tailed Hawk	70	65	65	70	45	60	65	25	30	60	70	90
American Kestrel	30	40	35	15				5	20	20	25	35
Peregrine Falcon				5								
Sora										5		
American Coot	100	95	100	95	35				15	75	100	100
Killdeer	45	65	60	70	30	40	40	40	65	70	45	55
American Avocet				5								
Spotted Sandpiper				55	60		15	45	30	15		
Solitary Sandpiper				20				10				
Greater Yellowlegs											5	
Upland Sandpiper									5			
Least Sandpiper					5			5				
Pectoral Sandpiper					5			5				
Wilson's Snipe	5	5	5									5
American Woodcock		30	20			5					5	
Bonaparte's Gull	15	10	5	15						5	15	30
Franklin's Gull			10	5	5			5			5	
Ring-billed Gull	35	20	35	5	5				5	10	40	60
Least Tern								10				
Caspian Tern				10	15		5	10	15			
Black Tern					5			40	15			
Common Tern					10				5			
Forster's Tern				15	20			35	20	5		
Rock Pigeon				5		5	5	5	10	5		
Eurasian Collared Dove	10	15	30	25	5	30	25	20	5	10	10	5
Mourning Dove	90	95	90	100	90	100	100	95	95	80	65	70
Yellow-billed Cuckoo					30	95	100	60	65	10		
Black-billed Cuckoo					10					5		
Greater Roadrunner		5							15		10	5
Great Horned Owl	10	5	5	5	5	5	15	5	10	5	10	10
Barred Owl	5	10	10	10	20	35	20	15	20	10	10	5
Common Nighthawk					25	35		15	35	20		
Chimney Swift				50	85	100	90	90	95	30		
Ruby-thr. Hummingbird				40	75	85	100	100	85	20		
Belted Kingfisher	85	95	65	70	55	45	85	90	85	95	90	95
Red-headed Woodpecker	10	5	5	5	10	10			15			5
Red-bellied Woodpecker	100	100	100	95	95	100	85	100	100	95	100	100
Yellow-bellied Sapsucker	55	35	45	25						70	50	70
Downy Woodpecker	100	100	100	100	100	100	90	100	100	100	95	100
Hairy Woodpecker	50	45	25	30	40	30	20	20	35	30	60	50

Percentage monthly occurrence of birds at Lake Fayetteville (2000-2011)

Month	J	F	М	А	М	J	J	А	S	0	N	D
Number of trips	20	20	20	20	20	20	20	20	20	20	20	20
Northern Flicker	90	95	70	50	15	15	10	45	75	100	85	95
Pileated Woodpecker	35	40	25	60	70	65	50	70	60	35	35	60
Olive-sided Flycatcher					15			15				
Eastern Wood-Pewee				5	85	75	65	40	40	10		
Yellow-bellied Flycatcher					20	5		5				
Acadian Flycatcher				5	10	65	75	10	20			
Alder Flycatcher					45	5		15	10			
Willow Flycatcher						5						
Least Flycatcher				15	85			25	55	5		
Empidonax species					35	5	10	65	65	10		
Eastern Phoebe	20	50	100	100	65	90	90	75	95	70	45	25
Great Crested Flycatcher				35	100	90	95	75	50			
Western Kingbird					5							
Eastern Kingbird				45	95	95	95	95	35			
Scissor-tailed Flycatcher			5	70	70	85	90	55	50	15		
Loggerhead Shrike			5					5				
White-eyed Vireo			5	60	100	95	90	90	100	25		
Bell's Vireo						10			5			
Yellow-throated Vireo				15	40	20	5	15	10			
Blue-headed Vireo				10	60				10	50	10	
Warbling Vireo				30	55		5	40	35	5		
Philadelphia Vireo				5	50				15	5		
Red-eyed Vireo				30	100	95	100	80	65			
Blue Jay	85	85	100	90	90	85	90	90	100	95	95	95
American Crow	100	100	100	95	95	100	95	90	100	100	95	100
Fish Crow			65	95	90	80	75	75	25	5		
Purple Martin		10	85	85	75	95	95	60	5			
Tree Swallow		15	75	90	35	15	5			20		
N. R-winged Swallow			75	100	80	70	45	5		15		
Bank Swallow				5	40			5				
Cliff Swallow			10	30	35	30	35		5			
Barn Swallow			55	100	70	100	100	85	10	20		
Carolina Chickadee	95	95	100	95	100	100	95	100	100	100	95	100
Tufted Titmouse	95	100	100	90	100	100	100	100	100	95	100	95
Red-breasted Nuthatch		10	10	10	5					30	30	20
White-breasted Nuthatch	85	85	75	55	50	70	85	60	70	70	65	95
Brown Creeper	55	35	65	35						45	45	50
Carolina Wren	100	100	100	100	100	100	100	100	100	100	100	100
Bewick's Wren	l		10							5		
House Wren				35	85	100	100	95	85	60		
Winter Wren	60	35	65	10						45	85	85
Sedge Wren	l			5	5				5	5	5	
Marsh Wren	İ	-							5	20	5	
Blue-gray Gnatcatcher	İ	-	20	100	100	100	95	100	90	10		
Golden-crowned Kinglet	45	45	55	15						55	70	75

Percentage monthly occurrence of birds at Lake Fayetteville (2000-2011)

Month	J	F	Μ	Α	М	J	J	А	S	0	Ν	D
Number of trips	20	20	20	20	20	20	20	20	20	20	20	20
Ruby-crowned Kinglet	45	50	55	100	35				10	95	75	80
Eastern Bluebird	95	100	85	85	65	95	95	95	80	75	100	100
Gray-cheeked Thrush				15	25							
Swainson's Thrush				40	80	5			15			
Hermit Thrush	60	25	25	35						40	55	35
Wood Thrush						5						
American Robin	85	100	100	95	90	100	95	100	100	100	95	90
Gray Catbird		10	5	25	85	35	35	60	85	30		
Northern Mockingbird	100	100	100	95	90	95	95	100	95	100	85	100
Brown Thrasher	30	10	70	90	90	90	90	100	100	65	50	35
European Starling	100	95	95	100	100	100	95	100	100	95	85	85
American Pipit	10		5									
Cedar Waxwing	55	60	45	35	55	55	45		20	5	50	65
Ovenbird					30		5	10	15	5		
Worm-eating Warbler								5				
Louisiana Waterthrush	5	5	5	25	35	10	25	25				5
Northern Waterthrush				20	50			15				
Golden-winged Warbler				5	10			10				
Blue-winged Warbler								25	10			
Black-and-white Warbler			10	35	75	85	75	70	70	5		
Prothonotary Warbler				35	90	60	35	30	20			
Tennessee Warbler				35	70				5	5		
Orange-crowned Warbler			15	75	35					80	35	
Nashville Warbler				45	50			10	45	75	5	
Mourning Warbler					50			15	5			
Kentucky Warbler				15	55	30	5	20	10			
Common Yellowthroat				35	75	50	20	20	55	55		
Hooded Warbler				15	5	5		15	10			
American Redstart				10	90			25	65	15		
Cape May Warbler					10							
Cerulean Warbler								5				
Northern Parula			20	90	100	80	95	95	100	40		
Magnolia Warbler				5	70				10	5		
Bay-breasted Warbler					5							
Blackburnian Warbler					10							
Yellow Warbler				5	65			75	60			
Chestnut-sided Warbler				5	75			5	25			
Blackpoll Warbler				5	45							
Palm Warbler				10	5					10		
Pine Warbler	10	5	35	10		15		5	5	10	5	15
Yellow-rumped Warbler	95	95	95	100	45				5	100	95	100
Yellow-throated Warbler			15	60	40	60	60	35	30	10		
Prairie Warbler				5		5	5					
Black-throated G. Warbler					15			10	15	25		
Canada Warbler					15			15	15			

Percentage monthly occurrence of birds at Lake Fayetteville (2000-2011)

Month	J	F	Μ	А	М	J	J	А	S	0	N	D
Number of trips	20	20	20	20	20	20	20	20	20	20	20	20
Wilson's Warbler				5	85			30	90	25		
Yellow-breasted Chat				25	60	95	75	20	15			
Spotted Towhee			5							10	5	5
Eastern Towhee	20	60	80	95	85	90	90	70	40	80	50	35
American Tree Sparrow	10	10	10	5								
Chipping Sparrow	25	5	30	75	60	20	25	5	5	40	40	20
Clay-colored Sparrow				15	5					5		
Field Sparrow	95	85	85	85	70	85	85	60	50	75	80	75
Vesper Sparrow			5	5						10	5	
Lark Sparrow				5				5				
Savannah Sparrow	5	5	45	50	15					20	10	20
Le Conte's Sparrow	20	15	10	15						5	15	15
Fox Sparrow	85	75	80	15						25	55	60
Song Sparrow	100	95	100	60						90	95	100
Lincoln's Sparrow	10		30	80	50				5	75	20	
Swamp Sparrow	90	65	60	70	5				5	75	80	75
White-throated Sparrow	100	100	100	100	45				5	75	100	100
Harris's Sparrow	10		5									5
White-crowned Sparrow	40	15	25	30	25					30	40	35
Dark-eyed Junco	95	100	95	55						55	95	100
Summer Tanager				30	75	80	80	55	70	25		
Northern Cardinal	100	100	100	95	100	100	100	100	95	100	100	100
Rose-breasted Grosbeak				30	35				5	15		
Blue Grosbeak					25	20	15		10			
Indigo Bunting				35	100	100	95	100	65	35		
Painted Bunting					30	45	35	15				
Dickcissel						5	5					
Red-winged Blackbird	25	50	70	65	55	60	60	10	15	10	10	15
Eastern Meadowlark	15	5	40	55	45	40	15	5	10	30	10	
Rusty Blackbird	5	10	30	5							5	5
Common Grackle	40	40	60	75	85	100	90	100	80	25	30	20
Great-tailed Grackle											5	
Brown-headed Cowbird	25	25	65	100	100	95	100	10			5	
Orchard Oriole					15	35	5	20				
Baltimore Oriole				15	60	5		20	40			
Purple Finch	25	20	20	5							30	20
House Finch	100	95	95	85	55	80	90	90	80	90	75	75
Pine Siskin			5	10	5					5	20	10
American Goldfinch	100	95	95	100	100	100	100	100	95	80	95	100
House Sparrow	85	90	90	95	90	95	100	95	90	90	80	100

Percentage monthly occurrence of birds at Lake Fayetteville (2000-2011)

Birds recorded from 1953-1957

Species	% occurrence		e	Species	% occurrence				
-	54 ¹	55 ¹	56 ¹	57 ¹		54 ¹	55 ¹	56 ¹	57 ¹
Snow Goose			7		Solitary Sandpiper		18		
Canada Goose		4	4		Greater Yellowlegs	11		4	
Black Duck			4		Lesser Yellowlegs	6			
American Wigeon		4	7	10	Upland Sandpiper	6			
Mallard	11	39	36	38	Semipalmated sandpiper	6	4	7	
Blue-winged Teal	61	25	25	29	Least Sandpiper	17		4	
Northern Shoveler	39	4	11	43	Pectoral Sandpiper	11		7	
Northern Pintail	28	7	18	29	Wilson's Snipe	11		18	
Green-winged Teal				19	Bonaparte's Gull	6		4	
Canvasback		4	4	10	Franklin's Gull	17	4		
Ring-necked Duck		4	36	5	Ring-billed Gull		4		
Lesser Scaup	11	4	14	62	Least Tern	11			5
Common Merganser			4		Black Tern			4	
Ruddy Duck	11		7		Mourning Dove	67	61	43	52
Northern Bobwhite	50	25	29	57	Yellow-billed Cuckoo	22	14	11	
Common Loon			4	5	Great Horned Owl	33	46	36	48
Pied-billed Grebe	28	14	7	43	Barred Owl	28			
Double-crested Cormorant	11	7			Common Nighthawk	11		4	5
American White Pelican		4	4		Chimney Swift	17	21	21	24
Least Bittern	11				Ruby-throated Hummingbird	17		4	19
Great Blue Heron	11	7	14	14	Belted Kingfisher	56	46	32	19
Great Egret	6		4		Red-headed Woodpecker	78	50	43	67
Little Blue Heron		4			Red-bellied Woodpecker	67	54	54	86
Green Heron	22	25	18	14	Yellow-bellied Sapsucker				10
Turkey Vulture	17	14	14		Downy Woodpecker	67	68	50	76
Osprey	6	6	4	10	Hairy Woodpecker	33	39	43	33
Northern Harrier	6		14	24	Northern Flicker	72	79	75	76
Sharp-shinned Hawk	6				Pileated Woodpecker	39	54	54	43
Cooper's Hawk	17	4	14		Olive-sided Flycatcher			4	
Red-shouldered Hawk		4	4		Eastern Wood-Pewee	28	25	25	38
Red-tailed Hawk	11	14	11	48	Acadian Flycatcher	11			33
American Kestrel	56	43	18	29	Alder Flycatcher	11	4		
Merlin			4		Eastern Phoebe	22	21	29	33
Sora		7	14		Great Crested Flycatcher	33	2	18	38
American Coot	33	32	32	52	Eastern Kingbird	33	21	18	33
Semipalmated Plover	6				Loggerhead Shrike	11	32	36	5
Killdeer	72	71	89	43	White-eyed Vireo	11	7	14	29
American Avocet	6	4			Blue-headed Vireo		14	7	5
Spotted Sandpiper	17	29	14	5	Warbling Vireo	6	4		

A summary of the species of bird observed at Lake Fayetteville in the 1950s by Bill Beall. Trips were in the afternoons and approximately of 2-2.5 hour's duration. The route followed is shown in the section "birding pioneers" and included various habitats (heavily grazed fields, succession and mature woodland, lake edge, and open water). Eighteen, 28, 28, and 21 trips were completed in 1954, 1955, 1956, and 1957 respectively. No trips were made in June, July, or August and no trips were made after May 1957. ¹ Number of times a species was observed expressed as a percentage of the number of trips made in that year (95 trips were made from 1954-1957).

Birds recorded from 1953-1957 (cont.)

	% occurrence		e		% occurrence				
Species	54 ¹	55 ¹	56 ¹	57 ¹	Species	54 ¹	55 ¹	56 ¹	57 ¹
Red-eyed Vireo	17	18	7	24	Chestnut-sided Warbler		4		
Blue Jay	78	79	89	95	Blackpoll Warbler	6	4		10
American Crow	83	100	93	81	Pine Warbler		4		5
Horned Lark		11	21		Yellow-rumped Warbler	28	43	11	33
Purple Martin	11	14		33	Yellow-throated Warbler	33	11		
Northern R-winged Swallow	6	11	11		Black-throated Green Warbler	6		11	5
Bank Swallow				5	Wilson's Warbler	6	11	18	5
Cliff Swallow				5	Yellow-breasted Chat	22	7	11	38
Barn Swallow	6			29	Eastern Towhee	55	29	18	43
Carolina Chickadee	78	86	89	81	American Tree Sparrow		14	25	
Tufted Titmouse	89	89	93	100	Chipping Sparrow		4		
White-breasted. Nuthatch	17	57	43	14	Field Sparrow	67	89	75	86
Brown Creeper		11			Vesper Sparrow			7	14
Carolina Wren	67	68	96	100	Lark Sparrow	33	7	4	5
Bewick's Wren			7	14	Savannah Sparrow	6			14
House Wren	22		7	5	Grasshopper Sparrow	6	11	14	
Sedge Wren		7	4		Le Conte's Sparrow		4	7	
Marsh Wren	6	7	4		Fox Sparrow		14		
Blue-gray Gnatcatcher	44	21	29	48	Song Sparrow	22	43	57	62
Golden-crowned Kinglet			14		Lincoln's Sparrow	39	61	50	48
Ruby-crowned Kinglet	6	21	11	19	Swamp Sparrow	17	7	4	5
Eastern Bluebird	72	79	79	76	White-throated Sparrow	33	43	25	33
Gray-cheeked Thrush			4	5	Harris's Sparrow	22	18	43	38
Swainson's Thrush	22	4		19	White-crowned Sparrow	11	32	36	24
Wood Thrush	11	4		19	Dark-eyed Junco	11	43	54	57
American Robin	43	64	64	62	Summer Tanager	33	32	18	33
Gray Catbird	33	21	7	29	Northern Cardinal	83	93	96	100
Northern Mockingbird	56	54	61	67	Rose-breasted Grosbeak		4		
Brown Thrasher	56	25	18	33	Blue Grosbeak	17	11	7	10
European Starling	44	32	50	76	Indigo Bunting	22	36	32	38
American Pipit		14	4		Painted Bunting			4	5
Cedar Waxwing	11	11	4	29	Dickcissel	28	11	25	38
Smith's Longspur		25			Red-winged Blackbird	44	36	39	67
Louisiana Waterthrush	6			10	Eastern Meadowlark	89	71	71	100
Northern Waterthrush			4		Western Meadowlark			7	
Black-and-white Warbler		11		10	Rusty Blackbird		4		24
Tennessee Warbler		4		10	Common Grackle		7	14	
Nashville Warbler	6	4	11		Brown-headed Cowbird	39	25	25	48
Common Yellowthroat		14	32	33	Orchard Oriole	28	7	14	29
American Redstart	11		7	19	Baltimore Oriole	6	4		
Northern Parula	17	4	4	5	Purple Finch	6	11	14	10
Magnolia Warbler	1		4	10	American Goldfinch	83	86	68	33
Bay-breasted Warbler	1		4	l	House Sparrow	1	4	l	
Yellow Warbler	11		7	10		1		l	

PLANTS RECORDED AT LAKE FAYETTEVILLE

Ferns, Rushes, Sedges, and Grasses

Specific name	Common name	Family	Туре
Asplenium platyneuron	ebony spleenwort	Aspleniaceae	native
Asplenium resiliens	black-stem spleenwort	Aspleniaceae	native
Carex amphibola	sedge	Cyperaceae	native
Carex bushii	bush's sedge	Cyperaceae	native
Carex festucacea	fescue sedge	Cyperaceae	native
$Carex (frankii)^1$	frank's sedge	Cyperaceae	native
Carex lupulina	hop sedge	Cyperaceae	native
Carex lurida	sedge	Cyperaceae	native
Carex muehlenbergii	muhlenberg's sedge	Cyperaceae	native
Carex oligocarpa	sedge	Cyperaceae	native
Carex retroflexa	sedge	Cyperaceae	native
Carex typhina	cat-tail sedge	Cyperaceae	native
Carex vulpinoidea	fox sedge	Cyperaceae	native
Cyperus echinatus	globe flatsedge	Cyperaceae	native
<i>Cyperus (esculentus)</i> ²	nutsedge	Cyperaceae	native
Cyperus lupulinus	flatsedge	Cyperaceae	native
Cyperus strigosus	false nutsedge	Cyperaceae	native
Scirpus (atrovirens) ³	bulrush	Cyperaceae	native
Scleria pauciflora	nut-rush	Cyperaceae	native
Agrostis hyemalis	winter bent grass	Gramineae	native
Aira caryophyllea	annual hair grass	Gramineae	alien
Andropogon gerardii	big bluestem	Gramineae	native
Andropogon ternarius	split-beard bluestem	Gramineae	native
Andropogon virginicus	broomsedge	Gramineae	native
Aristida oligantha	prairie three-awn	Gramineae	native
Bouteloua gracilis	blue grama	Gramineae	native
Bromus hordeaceus	soft chess	Gramineae	alien
Bromus inermis	smooth brome	Gramineae	alien
Bromus sterilis	poverty brome	Gramineae	alien
Chasmanthium latifolium	river-oats	Gramineae	native
Cynodon dactylon	bermuda grass	Gramineae	alien
Dactylis glomerata	orchard grass	Gramineae	alien
Danthonia spicata	poverty oat grass	Gramineae	native
Dichanthelium boscii	bosc's rosette grass	Gramineae	native
Dichanthelium linearifolium	slim-leaf panic grass	Gramineae	native

Comments by Brent Baker:

¹ The first one is *Carex typhina*. The second one is either *Carex frankii* or *C. aureolensis*. *Carex frankii* is clump forming and more common in the Ozarks. *Carex aureolensis* is strongly rhizomatous and is absent to very rare in the Ozarks. ² The first is a nutsedge (Cyperus). It looks like maybe Cyperus esculentus. It would have rhizomes and small tubers...you didn't happen to notice, did you? If not, then perhaps Cyperus strigosus.

³ The first two in this email are rushes: *Juncus marginatus* and *Juncus diffusissumus*. The third one is a bulrush (in sedge family): appears to be *Scirpus atrovirens*, but *S. georgianus* is very similar and I would need to examine mature fruiting clusters with hand lens or microscope to tell for sure.

Dichanthelium malacophyllum	soft-leaf rosette grass	Gramineae	native
Dichanthelium oligosanthes	few-flower rosette grass	Gramineae	native
Digitaria ciliaris	southern crab grass	Gramineae	native
Digitaria ischaemum	smooth crab grass	Gramineae	alien
Elymus villosus	hairy wild rye	Gramineae	native
Elymus virginicus	virginia wild rye	Gramineae	native
Eragrostis capillaris	lace grass	Gramineae	native
Eragrostis minor	little love grass	Gramineae	alien
Eragrostris spectabilis	purple love grass	Gramineae	native
Glyceria striata	fowl manna grass	Gramineae	native
Hordeum pusillum	little barley	Gramineae	native
Leersia virginica	white grass	Gramineae	native
Microstegium vimineum	nepalese brown-top	Gramineae	alien
Muhlenbergia schreberi	nimblewill	Gramineae	native
Panicum anceps	beaked panic grass	Gramineae	native
Panicum virgatum	switch grass	Gramineae	native
Paspalum floridanum	florida paspalum	Gramineae	native
Paspalum pubiflorum	hairy-seed paspalum	Gramineae	native
Poa pratensis	kentucky blue grass	Gramineae	alien
Schizachyrium scoparium	little bluestem	Gramineae	native
Setaria faberi	chinese foxtail	Gramineae	alien
Setaria parviflora	knot-root grass	Gramineae	native
Sorghastrum nutans	indian grass	Gramineae	native
Sorghum halepense	johnson grass	Gramineae	alien
Tridens flavus	chapman's tridens	Gramineae	native
Vulpia myuros	rat tail fescue	Gramineae	alien
Vulpia octoflora	six-weeks fescue	Gramineae	native
Juncus diffusissimus	rush	Juncaceae	native
Juncus dudleyi	dudley's rush	Juncaceae	native
Juncus effusus	soft rush	Juncaceae	native
Juncus marginatus	grass-leaf rush	Juncaceae	native
Juncus secundus	rush	Juncaceae	native
Juncus tenuis	path rush	Juncaceae	native
Luzula bulbosa	wood-rush	Juncaceae	native
Botrychium (dissectum) ⁴	cut-leaf grape fern	Ophioglossaceae	native
Botrychium virginianum	rattlesnake fern	Ophioglossaceae	native
Pellaea atropurpurea	purple-stem cliff-brake	Pteridaceae	native
Phegopteris hexagonoptera	broad beech fern	Pteridaceae	native
Typha latifolia	common cat-tail	Typhaceae	native

⁴ Comments by Brent Baker: It's a grape fern (traditionally treated in the genus *Botrychium*, though this one might be found in *Sceptirdium* now). I'm not confident on the exact species. There are supposedly two (*B. biternatum* and a less dissected form of *B. dissectum*) which are very similar morphologically but supposedly are quite genetically distinct (which is not much help when you're in the field!). The tips of the ultimate frond divisions seem somewhat pointy to me, which supposedly may point more toward *B. dissectum*.

Specific name	Common name	Family	Туре
Rhus copallinum	winged sumac	Anacardiaceae	native
Rhus glabra	smooth sumac	Anacardiaceae	native
Toxicodendron radicans	poison-ivy	Anacardiaceae	native
Ilex opaca	american holly	Aquifoliaceae	native
Alnus serrulata	Smooth alder	Betulaceae	native
Ostrya virginiana	hop-hornbeam	Betulaceae	native
Celtis laevigata ⁵	sugarberry	Cannabaceae	native
Celtis occidentalis	hackberry	Cannabaceae	native
Lonicera japonica	japanese honeysuckle	Caprifoliaceae	alien
Lonicera maackii	amur honeysuckle	Caprifoliaceae	alien
Lonicera sempervirens	trumpet honeysuckle	Caprifoliaceae	native
Sambucus canadensis	Elderberry	Caprifoliaceae	native
Symphoricarpos orbiculatus	coral-berry	Caprifoliaceae	native
Viburnum prunifolium	blackhaw	Caprifoliaceae	native
Celastrus orbiculatus	oriental bittersweet	Celastraceae	alien
Euonymus alatus	burning-bush	Celastraceae	alien
Euonymus fortunei	winter-creeper	Celastraceae	alien
Cornus florida	flowering dogwood	Cornaceae	native
Cornus obliqua	silky dogwood	Cornaceae	native
Nyssa sylvatica	black-gum	Cornaceae	native
Juniperus virginiana	eastern red-cedar	Cupressaceae	native
Diospyros virginiana	persimmon	Ebenaceae	native
Elaeagnus umbellata	autumn-olive	Elaeagnaceae	alien
Vaccinium stamineum	deerberry	Ericaceae	native
Albizia julibrissin	mimosa	Fabaceae	alien
Amorpha fruticosa	indigo bush	Fabaceae	native
Cercis canadensis	eastern redbud	Fabaceae	native
Gleditsia triacanthos	honey locust	Fabaceae	native
Pueraria montana	kudzu	Fabaceae	alien
Robinia pseudoacacia	black locust	Fabaceae	native
Quercus alba	white oak	Fagaceae	native
Quercus macrocarpa	bur oak	Fagaceae	native
Quercus marilandica	blackjack oak	Fagaceae	native
Quercus muehlenbergii	chinquapin oak	Fagaceae	native
Quercus pagoda	cherrybark oak	Fagaceae	native
Quercus palustris	pin oak	Fagaceae	native

Trees, Shrubs, and Vines

⁵ Comment by Brent Baker: The *Celtis* appears to me to be sugarberry (*Celtis laevigata*): the leaves are light colored, relatively slender, and have only a few noticeable irregular teeth on the upper portions of the margins typically on only one side (some leaves don't even appear to have distinct teeth as far as I can tell from your photo). Hackberry (*Celtis occidentalis*) leaves are usually darker green, broader, and usually have distinct regular teeth along the entire margins of both sides. The bark is not really useful; they can look identical. Hackberry is a more northern species and is restricted in Arkansas to the northern couple tiers of counties. Sugarberry occurs statewide in Arkansas, reaching its northwestern range limit in southeastern Kansas and northern Missouri. In the zone where their ranges overlap, the two can grow in similar habitats and can even grow together.

Quercus rubra	northern red oak	Fagaceae	native
Quercus stellata	post oak	Fagaceae	native
\tilde{Q} uercus velutina	black oak	Fagaceae	native
Liquidambar styraciflua	sweet gum	Hamamelidaceae	native
Carya alba	mockernut hickory	Juglandaceae	native
Carya cordiformis	bitternut hickory	Juglandaceae	native
Carya ovata	shagbark hickory	Juglandaceae	native
Sassafras albidum	sassafrass	Lauraceae	native
Liriodendron tulipifera	tulip-tree	Magnoliaceae	native
Maclura pomifera	osage-orange	Moraceae	native
Morus rubra	red mulberry	Moraceae	native
Fraxinus americana	white ash	Oleaceae	native
Fraxinus pennsylvanica	green ash	Oleaceae	native
Ligustrum sinense	chinese privet	Oleaceae	alien
Platanus occidentalis	sycamore	Platanaceae	native
Pinus taeda	loblolly pine	Pinaceae	native
Frangula caroliniana	carolina buckthorn	Rhamnaceae	native
Amelanchier arborea	downy service-berry	Rosaceae	native
Physocarpus opulifolius	ninebark	Rosaceae	native
Prunus hortulana	hortulan plum	Rosaceae	native
Prunus serotina	black cherry	Rosaceae	native
Pyrus calleryana	callery pear	Rosaceae	alien
Rosa multiflora	multiflora rose	Rosaceae	alien
Rosa wichuraiana	memorial rose	Rosaceae	alien
Rubus spp.	blackberry	Rosaceae	-
Cephalanthus occidentalis	buttonbush	Rubiaceae	native
Salix nigra	black willow	Salicaceae	native
Acer rubrum	red maple	Sapindaceae	native
Acer saccharinum	silver maple	Sapindaceae	native
Acer saccharum	sugar maple	Sapindaceae	native
Smilax bona-nox	saw greenbriar	Smilacaceae	native
Ribes missouriense	missouri gooseberry	Saxifragaceae	native
Taxodium distichum	bald cypress	Taxodiaceae	native
Ulmus alata	winged elm	Ulmaceae	native
Ulmus americana	american elm	Ulmaceae	native
Ulmus pumila	siberian elm	Ulmaceae	alien
Ulmus rubra	slippery elm	Ulmaceae	native
Parthenocissus quinquefolia	virginia-creeper	Vitaceae	native
Vitis aestivalis	summer grape	Vitaceae	native
Vitis vulpina	frost grape	Vitaceae	native

Specific name	Common name	Family	Туре
Justicia americana	water willow	Acanthaceae	native
Ruellia humilis	hairy wild petunia	Acanthaceae	native
Ruellia pedunculata	long stalked petunia	Acanthaceae	native
Ruellia strepens	smooth wild petunia	Acanthaceae	native
Yucca $(flaccida)^6$	уисса	Agavaceae	alien
Alisma subcordatum	water-plantain	Alismataceae	native
Sagittaria latifolia	arrowhead	Alismataceae	native
Allium canadense	wild onion	Alliaceae	native
Nothoscordum bivalve	crow-poison	Alliaceae	native
Narcissus pseudonarcissus	daffodil	Amaryllidaceae	alien
Cicuta maculata	water-hemlock	Apiaceae	native
Conium maculatum	poison-hemlock	Apiaceae	alien
Daucus carota	queen Anne's-lace	Apiaceae	alien
Osmorhiza longistylis	aniseroot	Apiaceae	native
Sanicula odorata	clustered black-snakeroot	Apiaceae	native
Taenidia integerrima	yellow pimpernel	Apiaceae	native
Thaspium trifoliatum	meadow-parsnip	Apiaceae	native
Apocynum cannabinum	dogbane	Apocynaceae	native
Asclepias incarnata	swamp milkweed	Apocynaceae	native
Asclepius purpurascens	purple milkweed	Apocynaceae	native
Asclepias tuberosa	butterfly milkweed	Apocynaceae	native
Asclepias viridiflora	green-flower milkweed	Apocynaceae	native
Asclepias viridis	green milkweed	Apocynaceae	native
Vinca major	big-leaf periwinkle	Apocynaceae	alien
Arisaema dracontium	green dragon	Araceae	native
Hydrocotyle umbellata	water pennywort	Arialaceae	native
Achillea millefolium	yarrow	Asteraceae	native
Ageratina altissima	white snakeroot	Asteraceae	native
Ambrosia artemisiifolia	common ragweed	Asteraceae	native
Ambrosia bidentata	lance-leaf ragweed	Asteraceae	native
Ambrosia trifida	giant ragweed	Asteraceae	native
Ambrosia psilostachya	western ragweed	Asteraceae	native
Antennaria plantaginifolia	pussytoes	Asteraceae	native
Anthemis cotula	mayweed	Asteraceae	alien
Astranthium ciliatum	western daisy	Asteraceae	native
Bidens aristosa	tickseed-sunflower	Asteraceae	native
Bidens cernua	nodding bur-marigold	Asteraceae	native
Bradburia pilosa	golden-aster	Asteraceae	native
Carduus nutans	nodding thistle	Asteraceae	alien
Centaurea stoebe	spotted knapweed	Asteraceae	alien

Wildflowers

⁶ Comment by Brent Baker: I'm no Yucca expert and am hesitant with my Yucca IDs, but it doesn't appear to me to be Y. arkansana. The leaves look too wide, the inflorescence too hairy and too branched. That being said, I don't think I can give you a definite ID...perhaps tending toward Y. flaccida, but not sure.

Cichorium intybus	common chickory	Asteraceae	alien
Cirsium altissimum	tall thistle	Asteraceae	native
Cirsium vulgare	bull thistle	Asteraceae	alien
Conoclinium coelestinum	mist flower	Asteraceae	native
Conyza canadensis	horseweed	Asteraceae	native
Coreopsis lanceolata	lance-leaf tickseed	Asteraceae	native
Coreopsis tinctoria	tickseed	Asteraceae	native
Crepis pulchra	small-flower hawk's-beard	Asteraceae	alien
Echinacea paradoxa	yellow coneflower	Asteraceae	native
Echinacea purpurea	purple coneflower	Asteraceae	native
Elephantopus carolinianus	carolina elephant's-foot	Asteraceae	native
Erechtites hieraciifolius	fireweed	Asteraceae	native
Erigeron annuus	daisy fleabane	Asteraceae	native
Erigeron philadelphicus	philadelphia fleabane	Asteraceae	native
Erigeron strigosus	daisy fleabane	Asteraceae	native
Erigeron tenuis	fleabane	Asteraceae	native
Eupatorium altissimum	tall thoroughwort	Asteraceae	native
Eupatorium perfoliatum	boneset	Asteraceae	native
Eupatorium serotinum	late boneset	Asteraceae	native
Gaillardia pulchella	indian-blanket	Asteraceae	native
Gamochaeta purpurea	purple cudweed	Asteraceae	native
Gnaphalium obtusifolium	sweet everlasting	Asteraceae	native
Gnaphalium purpurea	purple cudweed	Asteraceae	native
Helenium amarum	bitterweed	Asteraceae	native
Helenium autumnale	sneezeweed	Asteraceae	native
Helenium flexuosum	purple-head sneezeweed	Asteraceae	native
Helianthus annuus	common sunflower	Asteraceae	native
Helianthus grosseserratus	saw-tooth sunflower	Asteraceae	native
Helianthus hirsutus	hairy woodland sunflower	Asteraceae	native
Helianthus maximiliani	maximilian's sunflower	Asteraceae	native
Helianthus mollis	ashy sunflower	Asteraceae	native
Helianthus tuberosus	jerusalem artichoke	Asteraceae	native
Heliopsis helianthoides	oxeye	Asteraceae	native
Heterotheca camporum	golden-aster	Asteraceae	native
Krigia biflora	two-flower dwarf-dandelion	Asteraceae	native
Krigia virginica	virginia dwarf-dandelion	Asteraceae	native
Lactuca canadensis	wild lettuce	Asteraceae	native
Lactuca floridana	florida wild lettuce	Asteraceae	native
Leucanthemum vulgare	ox-eye daisy	Asteraceae	alien
Liatris pycnostachya	prairie gayfeather	Asteraceae	native
Packera obovata	round-leaf ragwort	Asteraceae	alien
Packera tomentosus	woolly ragwort	Asteraceae	native
Pseudognaphalium obtusifolium	rabbit-tobacco	Asteraceae	alien
Pyrrhopappus carolinianus	false dandelion	Asteraceae	native
Ratibida columnifera	mexican-hat	Asteraceae	native
Ratibida pinnata	gray-head coneflower	Asteraceae	native
Rudbeckia amplexicaulis	clasping coneflower	Asteraceae	native

Rudbeckia hirta	black-eyed Susan	Asteraceae	native
Rudbeckia triloba	brown-eyed Susan	Asteraceae	native
Silphium asteriscus	starry rosinweed	Asteraceae	native
Silphium perfoliatum	cup-plant	Asteraceae	native
Solidago altissima	tall goldenrod	Asteraceae	native
Solidago gigantea	late goldenrod	Asteraceae	native
Solidago hirsuta	goldenrod	Asteraceae	native
Solidago rugosa	wrinkle-leaf goldenrod	Asteraceae	native
Solidago ulmifolia	elm-leaf goldenrod	Asteraceae	native
Sonchus asper	sow thistle	Asteraceae	alien
Symphyotrichum patens	late purple aster	Asteraceae	native
Symphyotrichum urophyllum	white arrow-leaf aster	Asteraceae	native
Taraxacum officinale	common dandelion	Asteraceae	alien
Tragopogon porrifolius	salsify	Asteraceae	alien
Verbesina alternifolia	yellow-ironweed	Asteraceae	native
Verbesina helianthoides	crownbeard froatwood	Asteraceae	native
Verbesina virginica Vernonia arkansana	frostweed	Asteraceae	native
	arkansas ironweed	Asteraceae	native
Vernonia baldwinii	baldwin's ironweed	Asteraceae	native
Impatiens pallida	yellow jewelweed	Balsaminaceae	native
Mahonia aquifolium	oregon grape	Berberidaceae Berberidaceae	alien native
Podophyllum peltatum Campsis radicans	may-apple	Bignoniaceae	native
Myosotis verna	trumpet creeper spring scorpion-grass	Boraginaceae	native
Barbarea vulgaris	yellow-rocket	Brassicaceae	alien
Capsella bursa-pastoris	shepherd's purse	Brassicaceae	alien
Cardamine concatenata	toothwort	Brassicaceae	native
Cardamine hirsuta	hairy bittercress	Brassicaceae	alien
Lepidium densiflorum	pepper-grass	Brassicaceae	alien
Lepidium virginicum	virginia pepper-grass	Brassicaceae	native
Microthlaspi perfoliatum	pennycress	Brassicaceae	alien
Campanula americana	tall bellflower	Campanulaceae	native
Cerastium glomeratum	sticky mouse-ear chickweed	Caryophyllaceae	alien
Dianthus armeria	deptford pink	Caryophyllaceae	alien
Saponaria officinalis	soapwort	Caryophyllaceae	alien
Silene latifolia	white campion	Caryophyllaceae	alien
Silene virginica	fire-pink	Caryophyllaceae	native
Stellaria media	common chickweed	Caryophyllaceae	alien
Lobelia appendiculata	pale lobelia	Campanulaceae	native
Lobelia cardinalis	Cardinal-flower	Campanulaceae	native
Lobelia inflata	indian tobacco	Campanulaceae	native
Lobelia siphilitica	great blue lobelia	Campanulaceae	native
Lobelia spicata	Pale-spike lobelia	Campanulaceae	native
Triodanis perfoliata	Small venus'-looking-glass	Campanulaceae	native
Commelina communis	asiatic dayflower	Commelinaceae	alien
Tradescantia ohiensis	ohio spiderwort	Commelinaceae	native
Calystegia sepium	hedge bindweed	Convolvulaceae	native

Cuscuta spp.	dodder	Convolvulaceae	native
Ipomoea coccinea	red morning-glory	Convolvulaceae	native
Ipomoea pandurata	wild potato vine	Convolvulaceae	native
Ipomoea purpurea	morning-glory	Convolvulaceae	alien
Acalypha gracilens	slender three-seed mercury	Euphorbiaceae	native
Croton capitatus	hogwort	Euphorbiaceae	native
Croton glandulosus	tropic croton	Euphorbiaceae	native
Croton monanthogynus	prairie-tea	Euphorbiaceae	native
Euphorbia corollata	flowering spurge	Euphorbiaceae	native
Amphicarpaea bracteata	hog-peanut	Fabaceae	native
Apios americana	groundnut	Fabaceae	native
Baptisia bracteata	cream wild indigo	Fabaceae	native
Chamaecrista fasciculata	showy partridge-pea	Fabaceae	native
Dalea candida	white prairie-clover	Fabaceae	native
Dalea purpurea	purple prairie-clover	Fabaceae	native
Desmanthus illinoensis	prairie mimosa	Fabaceae	native
Desmodium glutinosum	tick-trefoil	Fabaceae	native
Desmodium nudiflorum	naked-flower tick-trefoil	Fabaceae	native
Desmodium paniculatum	panicled tick-trefoil	Fabaceae	native
Desmodium sessilifolium	sessile-leaf tick-trefoil	Fabaceae	native
Kummerowia stipulacea	korean bush-clover	Fabaceae	alien
Lathyrus latifolius	everlasting-pea	Fabaceae	alien
Lespedeza capitata	round-head bush-clover	Fabaceae	native
Lespedeza cuneata	sericea lespedeza	Fabaceae	alien
Lespedeza hirta	hairy bush-clover	Fabaceae	native
Lespedeza repens	creeping bush-clover	Fabaceae	native
Lespedeza virginica	slender bush-clover	Fabaceae	native
Medicago lupulina	black medick	Fabaceae	alien
Melilotus albus	white sweet-clover	Fabaceae	alien
Mimosa quadrivalvis	sensitive-brier	Fabaceae	native
Securigera varia	crown-vetch	Fabaceae	alien
Strophostyles leiosperma	wild bean	Fabaceae	native
Tephrosia virginiana	goat's-rue	Fabaceae	native
Trifolium arvense	rabbit's-foot clover	Fabaceae	native
Trifolium campestre	hop clover	Fabaceae	alien
Trifolium incarnatum	crimson clover	Fabaceae	alien
Trifolium pratense	red clover	Fabaceae	alien
Trifolium repens	white clover	Fabaceae	alien
Vicia sativa	common vetch	Fabaceae	alien
Sabatia angularis	rose-gentian	Gentianaceae	native
Geranium carolinianum	carolina crane's bill	Geraniaceae	native
Geranium columbinum	long stalk crane's bill	Geraniaceae	native
Hemerocallis fulva	orange day-lily	Hemerocallidaceae	alien
Nemophila phacelioides	baby blue-eyes	Hydrophyllaceae	native
Hypericum drummondii	nits and lice	Hypericaceae	native
Hypericum hypericoides	st. Andrew's-cross	Hypericaceae	native
Hypericum perforatum	european St. John's-wort	Hypericaceae	alien

Iris domestica	blackberry-lily	Iridaceae	alien
Iris pseudacorus	yellow Flag	Iridaceae	alien
Iris virginica	southern blue flag	Iridaceae	native
Sisyrinchium angustifolium	blue-eyed-grass	Iridaceae	native
Agastache scrophulariifolia ⁷	giant purple hyssop	Lamiaceae	alien
Cunila origanoides	dittany	Lamiaceae	native
Lamium purpureum	purple dead-nettle	Lamiaceae	alien
Lycopus americana	american bugleweed	Lamiaceae	native
Mentha ^x piperita	peppermint	Lamiaceae	native
Monarda citriodora	lemon beebalm	Lamiaceae	native
Monarda fistulosa	beebalm	Lamiaceae	native
Perilla frutescens	beefsteak-plant	Lamiaceae	alien
Prunella vulgaris	self-heal	Lamiaceae	native
Pycnanthemum tenuifolium	slender mountain-mint	Lamiaceae	native
Salvia azurea	blue sage	Lamiaceae	native
Salvia lyrata	lyre-leaf sage	Lamiaceae	native
Teucrium canadense	american germander	Lamiaceae	native
Lemna spp.	duckweed	Lemnaceae	native
Ornithogalum umbellatum	star of bethlehem	Liliaceae	alien
Trillium sessile	wakerobin	Liliaceae	native
Linum lewisii	flax	Linaceae	native
Linum perenne	blue flax	Linaceae	alien
Lythrum alatum	winged loosestrife	Lythraceae	native
Callirhoe digitata	winecup	Malvaceae	native
Callirhoe involucrata	purple poppy-mallow	Malvaceae	native
Hibiscus laevis	halberd-leaf rose-mallow	Malvaceae	native
Hibiscus lasiocarpos	rose-mallow	Malvaceae	native
Rhexia mariana	meadow-beauty	Melastomataceae	native
Rhexia mariana	meadow-beauty	Melastomataceae	native
Nelumbo lutea	american lotus	Nymphaeaceae	native
Gaura longiflora	biennial gaura	Onagraceae	native
Ludwigia alternifolia	seedbox	Onagraceae	native
Ludwigia decurrens	wing-stem primrose-willow	Onagraceae	native
Ludwigia peploides	floating primrose-willow	Onagraceae	native
Oenothera fruticosa	sundrops	Onagraceae	native
Oenothera laciniata	cut-leaf evening-primrose	Onagraceae	native
Oenothera linifolia	threadleaf evening primrose	Onagraceae	native
Oenothera villosa	hairy evening-primrose	Onagraceae	native
Cypripedium parviflorum	small yellow lady's-slipper	Orchidaceae	native
Spiranthes vernalis	spring ladies;-tresses	Orchidaceae	native
Oxalis dilleni	slender yellow wood-sorrel	Oxalidaceae	Native

⁷ Comments by Brent Baker: As for this lavender-flowered mint, it looks to me (just from a quick google search) like Agastache scrophulariifolia (giant purple hyssop). Where was this taken? Is it blooming now? Were there many plants? This species, although native to the Northeast U.S., Appalachians, and Midwest (down to northern Missouri), has never been documented in Arkansas before! I rather suspect it might be an introduction at the site given that it appears to be a disturbed park area, but if there was a population of plants and if it persists from year to year, it may need to be a plant we document with a specimen and add to the state flora.

Oxalis stricta	yellow wood-sorrel	Oxalidaceae	native
Oxalis violacea	violet wood-sorrel	Oxalidaceae	native
Corydalis flavula	pale corydalis	Papaveraceae	native
Passiflora incarnata	purple passion-flower	Passifloraceae	native
Mimulus alatus	monkey-flower	Phrymaceae	native
Phryma leptostachya	lopseed	Phrymaceae	native
Phytolacca americana	pokeweed	Phytolaccaceae	native
Mecardonia acuminata	purple axil-flower	Plantaginaceae	native
Nutallanthus canadensis	sand blue toadflax	Plantaginaceae	native
Penstemon digitalis	foxglove beardtongue	Plantaginaceae	native
Penstemon tenuis ⁸	beardtongue	Plantaginaceae	native
Plantago aristata	bracted plantain	Plantaginaceae	native
Plantago lanceolata	english plantain	Plantaginaceae	alien
Plantago virginica	hoary plantain	Plantaginaceae	native
Veronica arvensis	corn speedwell	Plantaginaceae	native
Veronica persica	persian speedwell	Plantaginaceae	alien
Phlox divaricata	wild blue phlox	Polemoniaceae	native
Phlox drummondii	annual phlox	Polemoniaceae	native
Phlox paniculata	perennial phlox	Polemoniaceae	native
Phlox pilosa	downy phlox	Polemoniaceae	native
Polygala sanguinea	purple milkwort	Polygalaceae	native
Persicaria hydropiper	water-pepper	Polygonaceae	alien
Persicaria longiseta	bristly lady's-thumb	Polygonaceae	alien
Persicaria pensylvanica	pink smartweed	Polygonaceae	native
Persicaria punctata	dotted smartweed	Polygonaceae	native
Persicaria virginiana	virginia knotweed	Polygonaceae	native
Rumex crispus	curly dock	Polygonaceae	alien
Claytonia virginica	spring-beauty	Portulacaceae	native
Anagallis arvensis	scarlet pimpernel	Primulaceae	alien
Anemone virginiana	thimbleweed	Ranunculaceae	native
Clematis spp.	leather flower	Ranunculaceae	native
Clematis terniflora	sweet autumn virgin's-bower	Ranunculaceae	native
Ranunculus abortivus	small-flower crowfoot	Ranunculaceae	native
Ranunculus harveyi	harvey's buttercup	Ranunculaceae	native
Ranunculus sardous	hairy buttercup	Ranunculaceae	alien
Thalictrum thalictroides	rue-anemone	Ranunculaceae	native
Agrimonia parviflora	agrimony	Rosaceae	native
Agrimonia pubescens	agrimony	Rosaceae	native
Duchesnea indica	indian-strawberry	Rosaceae	alien
Geum canadense	white avens	Rosaceae	native
Potentilla recta	rough-fruit cinquefoil	Rosaceae	alien

⁸ The beardtongue looks like Gulf Coast beardtongue (*Penstemon tenuis*). Its native range is mostly restricted to the western and central Gulf Coast, extending up the Red, Mississippi, and Arkansas River valleys. I know of it in southwest Arkansas and east Arkansas to central Arkansas. I'm not aware of any native records from northwest Arkansas, so the plants at Lake Fayetteville are interesting. It is cultivated at least in the native plant nursery trade (that's how I got it in my yard) and it is somewhat of a weed under those conditions. So my suspicion is that plants there may be escaped from cultivation. It has a deeper purple flower than Arkansas beardtongue and has leaves that are very long tapered to a pointed tip and more of a glossy green (Arkansas beardtongue has shorter leaves that are duller).

Potentilla simplex	oldfield cinquefoil	Rosaceae	native
Rosa carolina	carolina rose	Rosaceae	native
Rosa setigera	climbing rose	Rosaceae	native
Cruciata pedemontana	piedmont bedstraw	Rubiaceae	alien
Diodia teres	rough buttonweed	Rubiaceae	native
Diodia virginiana	virginia buttonweed	Rubiaceae	native
Galium spp.	bedstraw	Rubiaceae	-
Houstonia longifolia	long-leaf bluet	Rubiaceae	native
Houstonia pusilla	star-violet	Rubiaceae	native
Houstonia purpurea	mountain houstonia	Rubiaceae	native
Sherardia arvensis	field-madder	Rubiaceae	alien
Liriope muscari	monkey-grass	Ruscaceae	alien
Maianthemum racemosum	false solomon's-seal	Ruscaceae	native
Hydrangea arborescens	wild hydrangea	Saxifragaceae	native
Agalinis fasciculata	false foxglove	Scrophulariaceae	native
Aureolaria grandiflora	yellow false foxglove	Scrophulariaceae	native
Verbascum blattaria	moth mullein	Scrophulariaceae	alien
Verbascum thapsus	woolly mullein	Scrophulariaceae	alien
Solanum carolinense	carolina horse-nettle	Solanaceae	native
Solanum ptychanthum	black nightshade	Solanaceae	native
Boehmeria cylindrica	false nettle	Urticaceae	native
Valerianella radiata	cornsalad	Valerianaceae	native
Glandularia canadensis	rose vervain	Verbenaceae	native
Glandularia pumila	pink vervain	Verbenaceae	native
Phyla lanceolata	northern fog-fruit	Verbenaceae	native
Verbena hastata	blue vervain	Verbenaceae	native
Viola bicolor	johnny-jump-up	Violaceae	native
Viola pedata	bird's-foot violet	Violaceae	native
Viola pubescens	yellow violet	Violaceae	native
Viola sororia	woolly blue violet	Violaceae	native
Viola striata	cream violet	Violaceae	native

Common, specific, and family names are from the Atlas of the Vascular Plants of Arkansas (Gentry et al., 2014). This list contains several species that are not included in the Atlas either because there are no voucher specimens for Washington County, that they do not represent self-sustaining populations, or for other reasons.

Taxonomic name	Common name	% of mix
Achillea millefolium	Yarrow	2
Amorpha canescens	Leadplant	2
Andropogon gerardii	Big bluestem	-
Asclepias tuberosa	Butterfly Milkweed	2
Baptisia australis	Blue Wild Indigo	1
Bidens aristosa	Tickseed Sunflower	1
Bouteloua dactyloides	Buffalo grass	-
Bouteloua gracilis	Blue grama	-
Callirhoe digitata	Wine Cup	0.5
Castilleja coccinea	Indian Paintbrush	1
Chamaecrista fasciculata	Partridge Pea	4
Coreoposis lanceolata	Lanceleaf Coreopsis	5
Coreopsis tinctoria	Plains Coreopsis	3
Dalea candida	White Prairie Clover	5
Dalea purpurea	Purple Prairie Clover	5
Desmanthus illinoensis	Illinois Bundleflower	5
Dracopis amplexicaulis	Clasping Coneflower	5
Echinacea pallida	Pale Purple Coneflower	1
Echinacea paradoxa	Yellow Coneflower	1
Echinacea purpurea	Purple Coneflower	5
Eryngium yuccifolium	Rattlesnake Master	1
Gaillardia pulchella	Indian Blanket	2
Helianthus maximiliani	Maximilian Sunflower	2
Heliopsis helianthoides	False Sunflower	2
Lespedeza capitata	Roundhead Lespedeza	1
Liatris mucronata	Gayfeather	1
Liatris punctata	Dotted Blazing Star	1
Liatris pycnostachya	Kansas Gayfeather	1
Linum lewisii	Blue Flax	5
Lobelia cardinalis	Cardinal Flower	0.5
Monarda citriodora	Lemon Mint	5
Nemophila phacelioides	Baby Blue-eyes	5
Panicum virgatum	Switchgrass	-
Phlox drummondii	Annual Phlox	5
Ratibida columnifera	Mexican Hat	5
Ratibida pinnata	Grayhead Coneflower	5
Rudbeckia hirta	Blackeyed Susan	5
Salvia azurea	Big Blue Sage	1
Schizachyrium scoparium	Little bluestem	
Silphium laciniatum	Compassplant	2
Solidago altissima	Tall Goldenrod	2
Sorghastrum nutans	Indian grass	-

Plants seeded at Lake Fayetteville¹

¹Pennington Tall Grass Prairie seed mix; introduced in Unit 1 in 2011.

Scientific name	Common name	Habitat	Obs.
Didelphis virginiana	Virginia Opossum	prairie, forest	DC
Cryptotus parva	Least Shrew	prairie	DJ
Scalopus aquaticus	Eastern Mole	Prairie	DC
Lasiurus borealis	Eastern Red Bat	Prairie	KW
Dasypus novemcinctus	Nine-banded Armadillo	prairie	DC
Sylvilagus floridanus	Eastern Cottontail	grassland	DC
Tamias striatus	Eastern Chipmunk	forest	DC
Marmota monax	Woodchuck	forest	DC
Sciuris carolinensis	Eastern Gray Squirrel	forest	DC
Sciuris niger	Eastern Fox Squirrel	forest	DC
Glaucomys volans	Southern flying squirrel	forest	DJ
Castor canadensis	Beaver	lake	DC
Reithrodontomys fulvescens	Fulvous Harvest Mouse	prairie	DJ
Peromyscus leucopus	White-footed Mouse	prairie, forest	DJ
Peromyscus maniculatus	Deer Mouse	prairie	DJ
Sigmodon hispidus	Hispid Cotton Rat	prairie	DJ
Mus musculus	Common House Mouse	prairie	DJ
Canis latrans	Coyote	prairie	DC
Procyon lotor	Raccoon	prairie, forest	DC
Odocoileus virginianus	White-tailed Deer	prairie, forest	DC

MAMMALS AT LAKE FAYETTEVILLE

An analysis of small mammal populations and abundances in the old-field prairie and forest area at the environmental center was carried out by Professor Douglas James and students as part of his University of Arkansas mammalogy course. Prairie data were obtained in 1983 and from 1998 to 2010 and forest data from 1998 to 2008. Eight species were identified (six in prairie trappings) of which Hispid cotton rat and Fulvous harvest mouse were most abundant. Three species were found in forest of which White-footed mouse was the most common. They observed a progressive increase in the mammal population as the old fields changed to prairie. Other mammals have been recorded incidentally during birding field trips.

Scientific name	Common name
Plestiodon fasciata	Five-Lined Skink
Scincella lateralis	Ground Skink
Sceloporus undulatus	Fence Lizard
Apalone spinifera	Spiny Softshell
Chelydra serpentina	Common Snapping Turtle
Trachemys scripta	Red-eared Slider
Graptemys spp.	Map Turtle
Terepene carolina	Three-toed Box Turtle
Elaphe obsoleta	Black Rat Snake
Coluber constrictor	Black Racer
Lampropeltis getula	Speckled Kingsnake
Nerodia sipedon	Midland Watersnake
Nerodia erythrogaster	Yellow-bellied Watersnake
Diadophis punctatus	Ring-necked Snake
Storeria occipitomaculata	Red-bellied Snake
Thamnophis sirtalis	Eastern Garter Snake
Agkistrodon piscivorus	Cottonmouth
Agkistrodon contortrix	Copperhead
Opheodrys aestivus	Rough Green Snake
Lithobates catesbeianus	Bullfrog
Lithobates clamitans	Bronze Frog
Lithobates sphenocephalus	Southern Leopard Frog
Lithobates palustris	Pickerel Frog
Acris blanchardi	Blanchard's Cricket Frog
Pseudacris triseriata	Western Chorus Frog
Pseudacris crucifer	Spring Peeper
Hyla versicolor	Gray Treefrog
Anaxyrus americanus	American Toad
Gastrophyrne carolinensis	Eastern Narrowmouth Toad

REPTILES AND AMPHIBIANS AT LAKE FAYETTEVILLE

Identifications by Steven J. Beaupre (reptiles) and John Wilson (amphibians). Rough Green Snake by H. David Chapman.

CONCLUSIONS

In this article I have described the history and fauna and flora of Lake Fayetteville Park, a jewel in the Fayetteville Public System enjoyed by thousands of local people and many others from outside our area. As the Fayetteville, Springdale, Rogers, and Bentonville conurbation grows in size the need for parks like Lake Fayetteville becomes ever more important. It is extraordinary how many different recreational activities and functions Lake Fayetteville serves considering its relatively small size. Some of these activities are incompatible and in conflict with its role in preserving a natural environment. The environmental center plays a vital role in allowing young people to make contact with nature. The certificate signed by Governor Bill Clinton states that the site is "A registered Arkansas Natural Area" and that the owner is preserving the property as a significant part of Arkansas natural heritage. Paula Marinoni has written an article "Preserving Lake Fayetteville Park" which was published in the Northwest Arkansas times on February 28, 1999. She wrote "it is imperative that we, as a community and as a region elevate our sights on what will be preserved for future generations. Will it be possible to preserve land where animals, nature and humans can function in symbiotic harmony, where children and adults can learn to look, linger and listen? We already have such a place at Lake Fayetteville Park."

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BIBLIOGRAPHY

¹Chapman, H. D. (2011). The History of Lake Fayetteville. Flashback 61, No. 3, Fall 2011.

- ²An archeological survey of the Botanical Garden Society of the Ozarks Park at Lake Fayetteville. Smith, M. D., May 12, 1999. Arkansas Archeological Survey, 2475 N. Hatch Avenue, Fayetteville.
- ³A cultural resources survey of the proposed Lake Fayetteville hiking trail extension, Washington County, Arkansas. Guendling, R. L., May, 2012. AAS Project #12-04. Arkansas Archeological Survey, 2475 N. Hatch Avenue, Fayetteville.
- ⁴Plat Book of Original Entries. Washington County Archives, 208 North College, Fayetteville.
- ⁵Abstract of Original Entries Lands. Washington County Archives, 208 North College, Fayetteville.
- ⁶Obituaries of Washington County Arkansas, Vol. 1. 1841-1892. (Easley, B. P., McAnelly, V. P. Eds) Heritage Books, Inc., Bowie, MD. 1996.
- ⁷Early mills of Washington County (pp. 1-5). Lynch, B. B., In: Flashback, (Newhouse, K. Ed), Washington County Historical Society. Vol. 25, No. 1, February, 1975.
- ⁸Township Plats from Field Notes Property of Washington County, Washington County Clerk's Office, 280 North College, Fayetteville.
- ⁹Langtree, C. 1866 Map of Arkansas. McCowan, G. Special Collections, University of Arkansas Libraries. Fayetteville. 1866.
- ¹⁰Springdale: The courage of Shiloh. Brotherton, V., In: Making of America Series. Charleston, SC. Arcadia. 2002.
- ¹¹Checklist of Heads of Families in early Census Records of Washington County Sheriff's Census of 1829. Washington County Historical Society, Blair Library, Fayetteville.
- ¹²Family maps of Washington County, Arkansas. Boyd, G. A. Arphax Publishing Co., Norman, OK. 2006.
- ¹³History of Benton, Washington, Carroll, Madison, Crawford, Franklin, and Sebastian Counties, Arkansas. The Goodspeed Publishing Company, Chicago. 1889.
- ¹⁴Atlas map of Washington County Arkansas. Skelton, G. V. 1894. Special Collections, University of Arkansas Libraries, Fayetteville.
- ¹⁵History of Washington County Arkansas. (Neal, J. C. Ed), Shiloh Museum, Springdale, AR. 1989.
- ¹⁶Thomas Andrew Henson (pp. 17-21). Rothrock, T., In: Flashback (W. J. Lemke, Ed), Washington County Historical Society. Vol. 10, No. 2, April 1960.
- ¹⁷Thomas A. Henson, mid 1800s. Courtesy Shiloh Museum of Ozark History / Washington County Historical Society Collection (P-1652). Springdale.
- ¹⁸Bookout family, Fayetteville about 1911. Courtesy Shiloh Museum of Ozark History / Frances Lee Drain Dockery Collection (S-90-21N155:4). Springdale.
- ¹⁹David Bridenthal (pp.73-78) Rothrock, T., In: Arkansas Historical Quarterly, Vol. 17, 1958.
- ²⁰The Clear Creek Academy (pp. 19-21). Rothrock, T., In: Flashback (W. J. Lemke, Ed), Washington County Historical Society. Vol. 8, No. 1, January 1958.
- ²¹Clear Creek Academy Reunion, Washington County, 1898. Courtesy Shiloh Museum of Ozark History/Mary K. Bradford Collection (S-83-104-11).
- ²²Two family histories. Part II. The Cardwells (pp. 32-48). Plumlee, R., In: Flashback (Newhouse, K.

Ed), Washington County Historical Society. Vol. 35, No. 2, May 1985.

- ²³Chasing guerrillas in Arkansas (pp. 15-20). Lewis, A. B., In: Flashback (Lemke, W. J. Ed), Vol. 10, No.3, July 1960.
- ²⁴The Butterfield Overland Mail in Arkansas. Lemke W. J. and Worley, T. R. Arkansas History Commission, Old State House, Little Rock. 1957.
- ²⁵Researching lost facts (pp. 27-38). Lynch, B. B., In: Flashback (Newhouse, K. Ed), Washington County Historical Society. Vol. 25, No. 3, August 1975.
- ²⁶Gladden, Woolsey, Woolum, Woosley, and Zion: facts and folklore of the 19th century stage coach routes in Washington County (pp. 101-114).Sanders, K. In: Flashback (Nutt, T. E. Ed), Washington County Historical Society. Vol. 59, No. 3, Fall 2009.
- ²⁷Plat book of Washington County Arkansas. 1908. North West Publishing Co. Des Moines IA. Special Collections, University of Arkansas Libraries, Fayetteville.
- ²⁸Lucas, Sarah Elizabeth "Lizzie". Annotated Madison County, Arkansas Obituaries: 1920-1929 (p. 131). In: Deaths column. Springdale News, February 10, 1928.
- ²⁹Sanders, Eli H. Obituaries of Washington County (p. 92), Vol. 4, 1909-1912.
- ³⁰General Highway Maps of Washington County, Arkansas dated 1947, and 1949. In Arkansas Highway Department Maps, Drawer 2-10, Folder 3, Washington County. Reproduced with permission of Special Collections, University of Arkansas Libraries, Fayetteville.
- ³¹Aerial photograph AWE-4C-8, November 26, 1941. Photograph reproduced with permission of Special Collections, University of Arkansas Libraries, Fayetteville.
- ³²Fayetteville's Water System on the West Fork of the White River (pp. 3-23). Erwin, S., In: Flashback (Alison, C. Y. Ed), Washington County Historical Society. Vol. 61, No. 1, Spring 2011.
- ³³Map of landholdings at proposed site of Lake Fayetteville. Courtesy of Jill Goddard, City of Fayetteville Engineering Department.
- ³⁴Waterworks Improvement 1953. Clear Creek Pumping Station and Force Main. Sullivan & McGoodwin Consulting Engineers, Fayetteville. January 1953.
- ³⁵Aerial photograph AWE–3N-100, August 10, 1954. Photograph reproduced with permission of Special Collections, University of Arkansas Libraries, Fayetteville.
- ³⁶Aerial photograph 1982 (MC735). Box 2, folder 21, item 8-5. Photograph reproduced with permission of Special Collections, University of Arkansas Libraries, Fayetteville.
- ³⁷Photograph of Samuel Dellinger. Picture Collection No. 226. Special Collections, University of Arkansas Libraries, Fayetteville.
- ³⁸Proposed Lake Fayetteville Nature Center. In: Samuel Dellinger Papers, MC 204, Box 23/7. Special Collections, University of Arkansas Libraries, Fayetteville.
- ³⁹Lake Fayetteville Environmental Study Center. Fayetteville Public Library.
- ⁴⁰Fayetteville Public Parks and Recreational needs. Northwest Arkansas Regional Planning Commission. March 1979, University of Arkansas, Libraries, Call number F419-F3-F395.
- ⁴¹Hulsey, A. H. (1956). Limnological studies in Arkansas VI. Physical, chemical, and biological features of Lake Fayetteville in its first year of impoundment. MS thesis, University of Arkansas Libraries, Fayetteville.
- ⁴²Jackson, D. C. (1977). Littoral and limnetic zooplankton dynamics in Lake Fayetteville, Arkansas. MS thesis, University of Arkansas Libraries, Fayetteville.

- ⁴³Hunter, C. G. (1995). Trees, shrubs, & Vines of Arkansas. Second edition. The Ozark Society Foundation, Little Rock, Arkansas.
- ⁴⁴Hunter, C. G. (1988). Wildflowers of Arkansas. Second edition. The Ozark Society Foundation, Little Rock, Arkansas
- ⁴⁵Arkansas Audubon Society. (2004). Arkansas bird records database. Version 1.1. URL: <u>http://www.arbirds.org/data/</u>.

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