

The

BLUEBIRD



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The Audubon Society of Missouri

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It is the purpose of the Audubon Society of Missouri to further conservation education in all its aspects with particular emphasis on wildlife. This purpose will be implemented by assisting in securing legislative controls, when necessary, the establishment of refuges and in the promotion of habitat improvement. The Audubon Society of Missouri is dedicated to the proposition that only through education can a total conservation consciousness be insured and will constantly try to further this education at all levels.

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EDITORIAL

For many years Missouri's conservation effort has suffered the strangle-hold of open range. Efforts by landowners in these areas to undertake an effective reforestation program have been severely hampered. This Fall one of the first breaks in the long and so far losing battle against open range will occur.

The United States Forest Service has declared that in October all land in the Clark National Forest will be closed to grazing and that penalties will be assessed for violations. In many open range counties the Clark National Forest comprises a considerable portion of total acreage. While it is granted that in isolated instances closing of the open range will prove a hardship on marginable residents to my knowledge most of the free roaming stock tramping down the countryside are the property of the "better fixed" members of the community. In fact, these people are affluent enough to finance an extremely effective lobby in Jefferson City. This is attested by the complete failure of all legislation aimed at curbing open range.

Perhaps this restriction is only the beginning and other actions will quickly follow. Some of the counties where open range is practiced lie in the area included in the proposed Ozarks Rivers Waterways. It is certain that the National Parks Board will prohibit grazing in their holdings. However, it would appear the only practicable stop to this would be fencing, and this would be extremely expensive.

One of the areas that has always disturbed us has been the free ranging of cattle and hogs in some of our state parks. Protests have always met with the same answer, that is, the animals are owned by local residents and that in order to remain effective, the manager must go along with the people in the community. It is stated that if he impounds the animals (and he has the power to do so) and attempts to collect damages from the owners, he will incur the displeasure of the local people and the parks would suffer. This appears to be an illogical argument and while it is granted that at first some people might complain, it would soon be a fact in the community that these parks are opposed to grazing.

We are glad that some parks are under management which strictly enforces the no grazing rule. It is hoped the lead shown by the Forest Service will be closely followed by strict application of no grazing rules in all areas not specifically open to this damaging influence.

CEDAR WAXWING INVASION 1964

Mary Louise Myers, Camp Towanyak

March 25th was a miserable day! Reluctant winter threw the book at us. It rained, sleeted, froze, glazed over, finally even snowed. In fact the roads were so bad early that morning, Jim decided to stay home, and we banded birds instead of his going to work. It was the biggest single banding day we have ever had. Using only live traps (no mist nets) we had a grand total of 64 birds for that one day, and 48 of them were cedar waxwings!

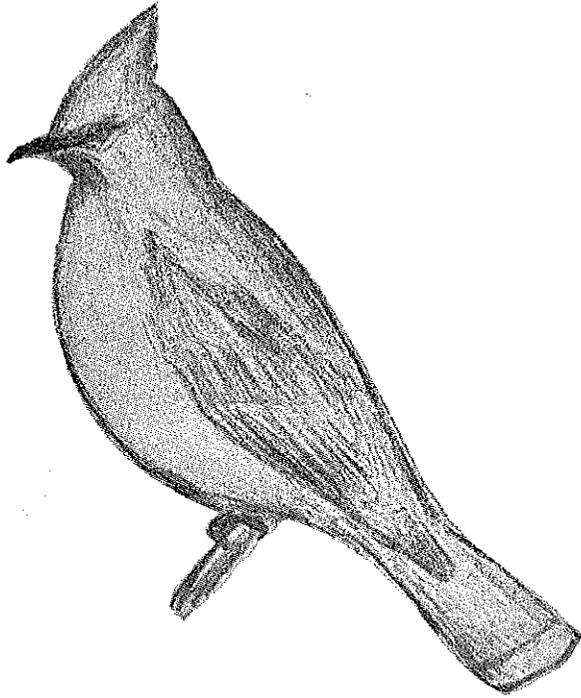
We had never dreamed of a chance to band waxwings. What a thrill to hold one of these lovely birds in our hand and see at such close range its exquisite beauty. Gentle to handle, sleek and perfectly groomed even in the rain . . . just true aristocrats all the way.

This story really began about four days before the storm, when about eight of the birds dropped down into a little dogwood tree just outside the kitchen window. I had put some bunches of bittersweet fruit for the bluebirds earlier in the season, and even though there were nothing but hulls left, how they searched for just one berry that might have been overlooked. I sprinkled a few currents on the ground under the tree and it didn't take them long to clean them up. The next day there were about 15, the next day at least 30, and the next an estimated 75. They ate four boxes of currents on this day alone and would have eaten more. Thus began an episode of our most fascinating and most expensive bit of bird feeding!

The next day brought the storm and they came in by the hundreds. Jim made a wooden tray to put on the ground under the dogwood tree and I put out apples, bananas, currents and raisins. They would swoop down on the tray and pile up three deep. Their reputation for politeness and passing a cherry back and forth from one to the other had disappeared. It was every man, or should I say bird, for himself! They soon found my window feeder where I always keep currents for my bluebirds. The latter were having a rough time of it, being completely crowded out. The big, sassy robin who had returned a few weeks earlier, and who had thought HE owned this place, lock, stock and barrel, was a frustrated, nervous wreck! I believe if I could have caught him I would have been tempted to give him a tranquilizer!

Photo by Authors

The day was like a three-ring circus. On the ground, feeding on fruit, were fox sparrows, Harris and tree sparrows, towhees, hundreds of juncos, dozens of cardinals; Dashing in and out for a nut or a piece of suet were the chickadees, titmice, bluejays, nuthatches and woodpeckers; The sunflower feeders were filled to overflowing with purple finches; The robin dashing furiously at a flock of feeding waxwings, scattering them and returning to the tray only to find that in his absence another bunch had been there and he was foiled again! The bluebirds would try to slip in and grab a current or two between robin bombardments and waxwing ampedes.



The waxwings would come in to the tree-trap so fast, and pile up so quick, that it was next to impossible to drop the trap door safely. The birds just seemed to be starved. Such voracious appetites I have never seen. Jim and I drove around the area, looking for multiflora berries on any of the large hedge rows we knew of, but not one berry remained. There had not been any waxwings during the winter months when we usually have them, and none appeared on the Christmas census. The dry summer and fall months had produced few native berries and fruits, and the ones that were produced were shriveled and dried.

It was amazing how much food they could consume. Currents raisins, bananas and apples were their first choices, but they also ate cooked prunes, canned fruits of any kind, cooked cranberries, stale doughnuts, cinnamon rolls, pastries, etc. We were able to buy currents wholesale in 30 pound cartons and I bought over-ripe fruit at the market and day-old bakery goods from the reduced-price shelf. A suet feeder which I fill with a square of a special suet-cake mix became a favorite feeding spot. It has been popular with so many of the birds this winter—more so than any mix I have ever made. I used melted kidney suet, about the same amount of peanut butter stirred into the hot suet, broken peanuts or other nut meats, wheat germ, and then added a few spoonful of Brewer's yeast for extra protein. Juncos, finches, cardinals, titmice, chickadees, jays, all the woodpeckers, brown creepers, nuthatches, and now the waxwings too, eat it. The feeder holds a square about 5" x 5" x 2".

They would empty it in one day. I found myself making up a big batch of this mix every few nights—and at a time of year when ordinarily I would not be making any more until the following winter.

All in all we banded 255 of the waxwings in a little less than a month, banding our last bird on April 23. We could have banded many more—at this time we were still seeing them at our feeders about one banded bird in 8, but the date was getting late . . . camp was getting ready to open and we had other duties that kept us busy. They fed fairly heavily up through the first ten days in May and then began tapering off, although some would still visit the feeder each day. By then the trees were leaved out and it was impossible to estimate the numbers of the flock, although they could be heard in the treetops. At the time of this writing, May 25, we are still hearing a few waxwings in the trees, although I have stopped putting out food for them.

Needless to say, the birds were quite an attraction, and always put on a good show. On weekends our little house became almost like Grand Central. I told my brother about the birds. He is interested in birds, but is definitely NOT a birdwatcher. He came out to see them, then told me he had mentioned it to a friend of his, who immediately asked if I had any "Scandinavian" waxwings among the flock. My brother said he told his friend, "You mean BAVARIAN." And I chuckled as I told him, "And YOU mean Bohemian!" Anyway, there were no Scandinavian, Bavarian OR Bohemians among our flock . . . only the Cedars, and more than enough of them!

EXPERIMENT WITH WAXWINGS

We had cedar waxwings visit us, off and on, during the winter. In late February, however, the waxwings had eaten all the multi-flora berries and persimmon fruit on the place. They would come in during the morning for a bath in the small creek that runs in front of the house, but since they were all out of natural food, they would soon fly away.

We then got the idea that apples nailed up in a tree might be attractive to the birds. For a few days they paid no attention to the apples but finally a few ventured to peck at the fruit. Soon the whole flock of about forty birds would clean up the apples in a lay. So then we started putting the apples on the feeders in the yard and on the window shelf feeders.

Now a flock of twelve to fifteen waxwings fill the window shelf and have become so tame that several of our Burroughs Club members have had them eat from their hands, while many pictures were taken of this thrilling event. Besides the apples we now find that they like bananas, prunes and raisins, so we have added these to their menu.

Mac MacElree

BEWICK'S WREN RETURNS TO ST. LOUIS COUNTY

One of the more pleasant surprises of the birding year was the return of the Bewick's wren as a nesting bird to our home. Fifteen to twenty years ago the Bewick's was the "summer" wren in St. Louis County. However, as population concentration increased this wren was replaced by the more urbanized house wren. This spring a loudly singing Bewick's visited our backyard. This is not unusual as a few appear at this time each year. This bird did not leave but persisted its singing and investigating throughout late April and into May. Finally it was joined by a female and a nest was quickly made in a house usually occupied by house wrens. The birds remained and were busily feeding young when we departed on a two-week vacation. When we returned they were gone to be heard from no more. House wrens continue to dot the neighborhood and the box used by the Bewick's is a favorite examination point for these curious birds. During the period both the Bewick's and the house wrens were present I noticed no territorial squabbles. Perhaps the belief that the house wrens "run" the Bewick's out of the area is entirely wrong. Maybe the Bewick's leave when urbanization depletes open territory and house wrens move into the void.

NEW ISSUE OF MAMMAL GUIDE

I have received a copy of the second edition of the Peterson series, "A Field Guide to the Mammals" by Burt and Grossenheider. The text has been brought up to date and improved. New items covered are habits, habitats, and young. This has increased the size of the book by 60 pages and has made it a more usable book. Illustrations by our president, Dick Grossenheider make this volume especially cherished by Audubon members. I suggest you bring a new copy to the State Meeting for Dick to autograph.

STATE MEETING

At our last annual meeting a committee was appointed to investigate other camps at the Lake of Ozarks State Park and to make recommendations as to a change if found advisable. As a result, after 11 years, the meeting will be moved from Camp Clover Point to Camp Rising Sun. This camp, as I understand, is smaller but will accommodate our group, and the facilities are newer. This year's meeting will be the weekend of October 10 and 11. Plan to attend.

One of the more interesting parts of Audubon publication is the notes of members on observed activities of birds. Any unusual or interesting occurrence should be shared with others by writing a note for the BLUEBIRD.

SUMMARY OF TOWER FATALITIES AT COLUMBIA, MO.

by David A. Easterla, Kansas City
Kansas College

The phenomenon of why multitudes of migrating birds suddenly come crashing into a tall, lighted television tower on a cloudy, foggy night with a low cloud ceiling is slowly being unraveled by ornithologists. The most recent evidence suggests that for some unknown reason, rare meteorological conditions these lighted towers probably attract migrating birds that are already traveling in small aggregations. However, this leaves unexplained the fatalities of red bats which supposedly travel by sonar rather than by sight.

The writer was involved in the collecting of specimens at two large tower fatalities (1960-61) and had records of two other fatalities that had occurred at Columbia, Missouri. To the best of my knowledge, these kills are the only major ones that have been recorded in the Columbia area. A summary is given of the 3,735 individuals collected which represent 77 different species. The four most common species represented were yellowthroat (764), ovenbird (505), catbird (393) and red-eyed vireo (306). The abundance of these species was in general agreement with similar kills in nearby states.

Tower fatalities probably represent samples of nocturnal migration as nearly random as possible. Thus, these kills should give a good idea of the actual ratio of species abundance in a given area at a given time. Most species and their numbers occurred in ratios that would be expected from recorded field observations of the Columbia area. However, several unusual occurrences were noted. A total of 41 Philadelphia vireos were collected in comparison to three warbling, three yellow-throated and 11 solitary vireos. Field observation records indicate that the Philadelphia vireo is much more uncommon. Also, the northern waterthrush outnumbered the Louisiana waterthrush 171 to 25. Perhaps the former species is often overlooked; another consideration would be the different times of migration for the different species. Despite what the books say, the bobolink was recorded as a fall migrant in three out of the four kills for a total of 24 birds. This species in fall plumage is tough to identify and could be passed as another species.

The generally considered rare sharp-tailed sparrow was represented by ten specimens at two different kills. The occurrence of 49 scarlet tanagers to six summer tanagers also seems outstanding. The occurrence of certain denizens of the night such as Chiroptera and Caprimulgiformes certainly seems surprising and would seem to indicate complete, utter confusion just previous to death. The most probable reason for the more primitive birds (grebe, bittern, teal) being recorded only on October 5 is that these species tend to be later migrants along with the sparrows which also were represented at the October kill.

Also of interest were certain species which are normally considered to be day migrants: mourning dove, chimney swift, belted kingfisher, flicker, cedar waxwing and meadowlark. Are nocturnal migrations of these species unusual as generally thought or are we ill lacking vital knowledge as to their migratory habits?



A TUSKED MONSTER IN MINIATURE

M. L. & L. F. Pinkus

If you have ever happened upon a White Grub with the sprouts of the fungus *Cordyceps ravenelli* growing out of the corners of its mouth where the maxillae should be, you too, have undoubtedly thought that you had discovered a rare find. Indeed it took a good deal of searching through entomological literature to convince me that this was no strange new species.

That veteran entomologist, C. V. Riley was just as astounded as I, at his first example of this parasitized May Beetle larva. In 1865 in the "Practical Entomologist," Riley states that a correspondent informed him "large numbers of such specimens were turned up by the plough in his fields." Three years later, Riley reports that the parasitic fungus has "generally attacked and killed the grubs in several counties" in Missouri. And J. W. Folsom in "Entomology with Reference to its Practical and Economic Aspects" reproduced the excellent illustration from Riley's article.

Summer nights still bring the "June beetles" banging against our screens and buzzing around our lights, so it seems probable that this extraordinary fungus is not so widespread as we might like it to be. It is known to appear from the bodies of various larvae, pupae, and imagines. The characteristic fructifying sprouts give the insect the appearance of a creature with terrible tusks whose purpose it is to uproot the earth.



Spring Survey

SPRING SURVEY MARCH 1 TO MAY 31, 1964

Compiled by
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During March, rainfall in Missouri was above normal and temperature slightly below normal. Rainfall in April was also above normal, and temperatures were slightly above normal. May was very warm with 21 days above normal. It was also very dry and only a heavy rain near the end of the month kept the annual figure above normal.

The general opinion of spring migration was a continual trickle of birds with no waves or piling up. This was true of ducks in March or warblers in May.

Unusual birds worthy of special attention are Lazuli bunting at Kansas City, lark bunting at St. Joseph, an anhinga at Duck Creek and probably the first authentic record for fish crow in Missouri.

We would like to welcome David Plank of Salem, Missouri as a new reporter.

Loons through Cormorants—Common loons were generally scarce. Only one was seen in the St. Louis area and that was on the late date of May 22 at Horseshoe Lake recorded by Helen Hill and Kathryn Arhos. There were four individuals reported from Kansas City, where they are rated rarer than eastern Missouri. One was seen on April 5 at Lake Waukomis (D.E.), two at Lake Jacomo on May 10 and another on May 16 (E.N.) and one was seen at Lake Trenton on April 28 (L.A.). As during last spring, horned grebes were rare. Only one was seen at St. Louis on April 14 (E.C., S.J.H., etal) and one at Springfield on March 21 and April 7 (M.W., F.S.). Two were observed at Trimble Wildlife Area on April 12 by F. Bart. In contrast to last spring when no eared grebes were reported, many were seen in western Missouri. One was seen at Springfield on April 7 (M.W., F.S.) and two at Lake Trenton on April 16 (L.A.). They first appeared at Lake Jacomo on April 5 (E.N.) then increased to nine by April 24 and were last seen here on May 2 (D.E.). Five more were observed at Trimble Wildlife Area on May 9 (D.E.). Most of the grebes reported were in breeding plumage. This represents much above normal numbers for this species. Pied-billed grebes arrived on time in early March and were reported in normal

numbers. Few stayed behind for nesting, mainly due to lack of marsh habitat. The four white pelicans, which wintered at Montrose, stayed until March 15 (S.H.). F. Lawhon found pelicans and cormorants scarce because of large numbers of fish killed by low water and a very cold winter. 400 pelicans were the peak at Squaw Creek on April 5 to 12 and five were last seen on April 30 (H.B.). 800 were observed at Sunshine Lake on April 19 and fourteen stayed until May 2 (D.E.). Twelve pelicans were at Lake Trenton on April 16 (L.A.). A lone non-breeder was observed at Moredock Lake on the Illinois levees (J.W.,S.J.H.,R.A.etal) during late May. Cormorants were reported scarce again this spring by all reporters. We are aware of only four authentic anhinga records during this century for Missouri. The last of which, however, was as late as 1956. John Rogers reports one at Duck Creek on May 11-13 and 26.

Hérons—Hérons on the whole are down, more so in western Missouri than eastern. The same reason was given by many reporters "lack of habitat". Great blues were first seen at St. Louis on March 14 (J.W.), at St. Joseph on March 17 (F.L.) and at Columbia March 17 (A.J.), but are scarce except in a few river rookeries. Little blues are scarce everywhere. Although a few are nesting at Grand Marais in East St. Louis, Ill. (S.J.H.), the population at Moredock Lake was a maximum of 25 compared to several hundred last spring. A small flock of cattle egrets appeared on the Illinois levee in late April, but did not stay. A lone adult was seen on the levee June 1 (W.G.). Common egrets arrived at Kansas City on April 18 (D.E.), at Squaw Creek on April 12 (H.B.), at Springfield on April 30 (I.F.) and at St. Louis on April 2 (S.J.H.). The breeding population at Grand Marais has been reduced because of the cutting of trees in the rookery (W.G.). A snowy egret was reported from Lake Springfield on May 2. They were first seen in St. Louis on April 11 and were commonly seen on the levee after April 25. Night herons were likewise scarce. The black-crowned population was also reduced at Grand Marais State Park. Surprisingly, there was not one report of a black-crowned at Kansas City (D.E.). Ten were first seen at Squaw Creek on April 26 (F.L.,H.B.), but never numbered more than that. One yellow-crowned turned up at Squaw Creek on April 24 (H.B.) and two at Mud Lake on May 10 (D.E.) American bitterns were scarce in western Missouri. Only one was reported at Columbia (A.J.), but they were fairly common in the St. Louis area. Last bitterns were practically non-existent. A few stayed at Squaw Creek and Lake Contrary to breed. White ibises had avoided the St. Louis area until 1962. Now for three successive years they have been recorded. An adult white ibis was observed in the Illinois levee area on May 2 and 3 (W.G. etal), which seems extremely early for a southern wanderer.

Waterfowl—Waterfowl was generally considered down from last year. This could, however, be explained by an almost complete lack of piling up. Geese were fairly normal except for white-fronted, which were much above last spring. At Squaw Creek there was a peak of 2,710 in early March compared with only 460 last spring. Twenty-four were seen at Swan Lake, Illinois (S.J.H.) compared to

none last year. Puddle ducks remained the same as last years in total numbers. Wood ducks had young out of the nest by May 30 at Moredock Lake, but their numbers are much reduced from last year due to the drying of the marsh. An old squaw spent the month of March at Duck Creek (D.E.). Gene Wilhelm reports three white-winged and one common scoter on Alton Lake on March 15. Red-heads again show gains. Over 100 were observed at East St. Louis on March 8 (S.J.H.,J.W.etal) and 36 at Lake Jacomo on March 7 (D.E.). There was a good flight of red-breasted mergansers. A total of 70 were seen in one day in mid-March (S.J.H.,J.W.) and a pair was observed at Sunshine Lake on April 19 (D.E.).

Hawks—Turkey vultures were about normal. First dates were at Cuiver River State Park on March 9 (J.W.), at Swan Lake, Illinois on March 16 (S.V.) and at Columbia on March 1 (A.J.). No black vultures were seen this spring on the levees. Mississippi kites were first seen on the levees on May 16 when three birds were observed (W.G.,E.C.,S.J.H.,J.W.etal). Three Mississippi kites were reported at St. Joseph by John Hamilton near his home (fide F.L.).

Sharp-shinned hawks were normal except at St. Louis, where they were above normal. At least 8 individuals were counted, easily outnumbering Cooper's hawks. This is a complete reversal during the last two years (E.C.). Red-tailed hawks were common as usual with 20-30 seen per day at St. Louis in late March (J.W.). Harlan's hawks were reported from St. Louis and Columbia and were particularly common near Squaw Creek. Broad-winged hawks are having a good year, particularly in eastern Missouri. They were first observed in Kansas City on April 15 by M. L. Myers and were nesting in St. Louis on April 16 (J.W.) and at Swan Lake, Illinois on May 2 (S.V.). Swainson's hawks were less common and late. First dates were at Sedalia, Missouri on April 26 (D.E.), St. Clair County on April 14 (S.H.) and Springfield on May 2 (I.F.). Rough-legged hawks were reported in normal numbers during March.

An immature golden eagle was observed at Swan Lake, Illinois on March 16. Bald eagles were last seen at Swan Lake, Illinois on April 4 (S.J.H.) and on April 7 at Squaw Creek (H.B.). Marsh hawks were common at Taberville Prairie in May where they are again nesting (D.E.). Ospreys were generally reported as scarce. Falcon, as usual, were rare. A peregrine was seen at Coolie Lake on May 9 (D.E.), two were seen at Squaw Creek on March 22 (D.Kelly), one at Columbia on April 19-20 (A.J.), one on the Illinois levee on April 25 (S.J.H.) and one at Squaw Creek on April 29-30 (H.B.). The only pigeon hawk was one on Alton Lake on April 14 (E.C.etal).

Prairie Chicken through Rails—The only prairie chicken report was 3 at Taberville Prairie on May 3 (D.E.). Bob-whites were down slightly, but near normal, except at Swan Lake, Illinois where lack of flooding for two years has helped the population (S.V.).

Completely out of state, but of interest is a whooping crane which was observed on April 23 ten miles south of Levenworth, Kansas by Dennis Marquis.

All rails were well under last year's numbers, probably due to lack of marshes. Dick Vasse, (mgr. of Swan Lake, Illinois Refuge) flushed a yellow rail on the Batchtown unit on May 12. White patches in the wings were clearly seen. For the third consecutive year a purple gallinule has been observed at Duck Creek (Rogers). However, nesting has still not been proven. Common gallinules, as most marsh birds, were well below last year's numbers.

Shorebirds—Shorebirds were difficult to evaluate and impossible to compare with last year due to the general lack of mud flats. The first golden plover was listed at Squaw Creek on March 13 (H.B.), but were more common state-wide during April. 200 were found in St. Charles County on April 11 (E.C.etal). A late golden plover with three black-bellied plovers was observed near the Mississippi River in Mississippi County on May 30 by Jim Haw. Black-bellied plovers were seen at Trimble and Squaw Creek from May 10-23 (D.E.,E.N.,Cole,Kelly). There was a high count of 150 birds on May 16 (H.B.). Two ruddy turnstones were at Trimble on May 9 and one at Squaw Creek on May 16 (D.E.). A total of 14 were observed at East St. Louis, Illinois on May 24. This was a very high count for the area (fide S.J.H.). Woodcocks were commonly reported from most reporters from early March on. They displayed at Dr. Elder's home at Columbia from March 13 to April 5 (A.J.). Common snipe was first reported at Squaw Creek on March 15 (H.B.) and at St. Louis on March 18 (J.W.). April of course was the peak. There were 75 at Weldon Springs on April 11 (J.C.) and 200 at Squaw Creek on April 8 to 30.

The first record for St. Louis of a whimbrel since 1954 was established at Moredock Lake on May 24. It was first found by S.J.H. and J.W. etal and later seen by E.C. and R.A. Ten upland plovers were observed in Shelby County on May 31 (J.C.). This, undoubtedly, represents nesting birds. The first stilt sandpiper (2 birds) in eight years was observed at Lake Springfield on May 9 (I.F.). Willet records include one at Lake Jacomo on April 21 and three at Squaw Creek on May 16 (D.E.), two at Creve Coeur Lake on April 28 (Van Benthuyzen) and two at Weldon Springs on April 19 (early for St. Louis) (J.C.). A high count of twelve white-rumped sandpipers was made at Moredock Lake in May (S.J.H.) and 500 were reported at Squaw Creek on May 15-20 (H.B.). This is high, even for Squaw Creek. 20 short-billed dowitchers were scoped on May 16 at East St. Louis, but long-billed dowitchers were scarce (S.J.H.,J.W.). Baird's sandpipers were rare from all points. Two seen at Columbia (A.J.) was twice as many as Squaw Creek (one only on May 10). By May 24 semipalmated sandpipers outnumbered all other shorebirds put together at St. Louis. The only buff-breasted sandpiper was two at Squaw Creek on May 23 (E.N.).

Only one marbled godwit was reported, at Trimble on May 10 (D.E.). The first Hudsonian godwit for St. Louis since 1955 was found on the levee area on May 24 (S.J.H.,J.W.etal). 20 Hudsonian godwits were found at Trimble on May 9 (D.E.), two were found at Sugar Lake on May 17 (E.N.) and the astonishing number of 110 was counted at Squaw Creek on May 16 (D.E.etal). Only one

underling was reported and that was at Squaw Creek on May 16-17 (D.E.). Wilson's phalaropes were missing from eastern Missouri, at unusually common in western Missouri. They were recorded at Springfield (I.F.), Kansas City (D.E.) and Squaw Creek (H.B.). The peak at Squaw Creek was 300 individuals May 10-15. 12 were still present on May 28.

Gulls and Terns—The gull flight was far from spectacular and no rarities were recorded. The Mississippi flight was continuous with no large numbers present at one time. Late ring-billed and herring gulls were observed on the Mississippi near Batchtown on May 15 (S.V.). Franklin's gulls were near normal. There was one at St. Charles County on April 4 (S.J.H.), one on the Mississippi near Swan Lake, Illinois on April 17 (S.V.), one at Columbia on March 21 (A.J.); two at Beverly and Sugar Lakes on April 18 (D.E.) and as many as 200 at Squaw Creek the first half of May with 62 remaining until May 24 (H.B.). The only Bonaparte's gull was one on the levee in early April (W.G.). Terns were confusing. They were about normal in Kansas City, but elsewhere Forster's were early on April 7-18 and then there was a gap of several weeks before the other four species were recorded. Black terns, especially, had a heavy flight at the end of May.

Cuckoos through Swift—Black-billed cuckoos were above normal during migration. The only roadrunner reported was near Boaz on May 9 (I.F.). An unusual number of barn owls were reported, which is probably due to increased coverage. Nesting barn owls were reported from the Illinois levees, Kansas City, Schell-Osage Wildlife Refuge and Sikeston, Missouri. The snowy owl at St. Joseph stayed until March 23 (F.L.). A belated report of a snowy owl indicated an additional winter bird was observed at Schell-Osage on January 6 by Assistant Manager Lewis (fide D.E.). A minimum of 5 short-eared owls were seen at Schell-Osage on March 8 (S.H.). Chuck-will's widows were first reported at Salem, Missouri on April 1 (D.P.) and Kirkwood, Missouri on April 21 (J.W.). The first whip-poor-will at Salem was on April 6 (D.P.) and Weldon Springs on April 11 (J.W.), also at Columbia on April 7 (A.J.). Whip-poor-wills were down at Springfield (I.F.) and chuck-will's widows were down in Gasconade County (R.A.), while both were doing well at St. Joseph (F.L.). The earliest chimney swift was at Swan Lake, Illinois on April 3 (S.V.), but were generally a week later for most reporters.

Woodpeckers through Crow—Most woodpeckers were about normal. Wintering redheaded woodpeckers were few, but came back strong in late April and were reported down only at Joplin by Mrs. Devers. A western kingbird was found at Columbia on May 5 (A.J.). Two were nesting at Mud Lake near Kansas City on May 16 (D.E.) and a dozen or more are setting up housekeeping at St. Joseph (F.L.).

Scissor-tailed flycatchers continue to expand and increase. The first spring record for Columbia was made by Wally George on May 21. They were found at their old haunts at Springfield, (M.W.), Joplin (Devers) and Taberville Prairie (D.E.). It was in the Kansas City area where the increase was noticeable. There were six



different reports of singles or pairs as far north as four miles south of Squaw Creek (D.E., E.N., Cole et al). Other flycatchers were normal. Late olive-sided included one at Camp Towanyak (M.L. Myers) and one at the Lake of the Ozarks on May 30 (D.E.). Swallows numbers were normal. Tree swallows were early at Schell-Osage on March 8 (S.H.) and cliff swallows were down in the St. Louis area (S.J.H.). The earliest purple martin was at Swan Lake, Illinois on March 13. Another very early martin appeared at Trenton on March 15, but disappeared when cold and snow hit on March 17 (L.A.). A melanistic blue jay was studied on April 14 at Kansas City by Mrs. Wanda Beades. A similar bird was observed in the same area on January 1, 1963. An acceptable record for the fish crow in Missouri has been established. Two were seen and heard at Big Oak State Park on March 29 (D.E.). Fortunately, this is by far too early for any young crows to be out of the nest. This does not sound too unusual since this species is now common at Reelfoot Lake, which is only ten miles distant as the crow flies.

Nuthatches through Pipit—As expected, a fine spring flight of red-breasted nuthatches developed. Wintering birds had mostly left by March, but the southern migrants came through in good numbers in late April and early May. Dates were April 17 and May 3 at Swan Lake, Illinois (S.V., R.A.), Springfield, May 4 (M.W., F.S.), Trenton, April 22-30 (L.A.), Kansas City, May 2 (Throm) and May

(D.E.). They were common in St. Louis during late April and up to at least May 10. Wrens were near normal, which means the Carolina is still very scarce. All western Missouri reporters report rushes down to some extent from last year. St. Louis experienced good numbers of all thrushes. Swainson's were abundant in late April and by May 3 were far out-numbered by gray-cheeked. However by May 10 another wave of Swainson's arrived and far outnumbered the olive-backed. The veery was above normal at Kansas City and St. Louis. There were good reports on bluebirds, but time is needed to see how the nesting season develops. Five young bluebirds were out of the nest at Salem by May 24 (D.P.). Cedar waxwing reports varied considerably. Apparently there wide movement of various sized flocks. The only Sprague's pipit was one at Springfield on May 2 (I.F.).

Vireos and Warblers—Because Jim Rising will do a complete analysis on the vireo-warbler flight, this will be a very general report. Good movement started in St. Louis by mid-April. They slowed down slightly the last week in April, but came in strong again by May 1 and continued in good numbers until May 15. Then, except for late strays, the migration was over. Four Philadelphia vireos found in one tree at St. Louis was very unusual. There were reports of almost 20 Cape May warblers. This is about ten times normal. Cape Mays were also reported at Springfield on May 4 (M.W.) and at St. Joseph on May 6 (F.L.). In St. Louis black and white, blackburnian and orange-crowned warblers were noticeably below normal. A Connecticut warbler on May 3 at Forest Park (Wilhelm) is a record early date.

The general comment from Kansas City was that the birds tickled through instead of in waves. The comment from Lawhon at St. Joseph was the same. Even so, Kansas City listed 34 species, many of which are uncommon or rare. The outstanding find must be the male black-throated blue at Mt. Washington Cemetery on May 16 (A. Gillett). Parula and northern water thrushes were noticeably down at Kansas City (D.E., Pucci). Hilty reports warblers abundant with no waves. Mrs. Devers reports large numbers of warblers at Joplin. Irving Fay has trouble finding warblers in the country, but Mrs. Weber and Mrs. Shumate reported 21 species at residential Springfield. Dave Easterla, who traveled many hundreds of miles over Missouri in late May, reports all nesting warblers very common. Swainson's warblers were again reported at Big Oak State Park.

Troglodytidae—Bobolinks were commonly reported by all reporters. Western meadowlarks were above normal at St. Joseph (F.L.) and were nesting at Trimble Wildlife Area (D.E., Cole). A late western meadowlark was found in St. Charles County on May 3 (J.W., S.J.H.). Yellow-headed blackbirds were numerous at Coolie Lake, but did not stay (D.E.). Two were found at Contrary Lake and built up to ten pair by May 28 and are apparently staying to nest. (D.E., F.L.). All blackbirds were reported in normal numbers. **Redeaters**—A Lazuli bunting, considered a vagrant, was found at Camp Towanyak (Kansas) on May 11 by M. L. Myers and K. Wahl.

Two evening grosbeak reports were made. Five were seen on the Mississippi River near Swan Lake, Illinois on April 3 (S.V.). Also five birds were seen at Mrs. Andereck's sunflower feeder at Trenton, Missouri from April 13 to May 2. The late date for purple finch was May 6 at Kansas City (Cole). Pine Siskins were not reported in St. Louis after March 1, but 50 were seen at Beverly Lake on April 18 and three at Memorial Park Cemetery on May 6 (D.E.). Likewise, wintering crossbills had left St. Louis and Columbia by March, but 16 were at Memorial Park in early March of which four birds stayed until April 5 (D.E.). A spotted towhee (subspecies) was found at Coolie Lake on the late date of May 10 (Bart). An adult male lark bunting was studied at the entrance road to Squaw Creek on May 17 by D. Easterla, D. Kelly and C. Davis. This is the third record for the state.

Savannas sparrows were generally common except at Columbia where they were down (A.J.). Several singing Henslow's sparrows were noted at Taberville Prairie where they nested last year. A pine woods sparrow was seen at Rockwood Reservation on April 9 (S.J.H.) and another was found entangled in vines at the home of Roger Taylor in St. Louis on April 17. The bird was not harmed and later released. Pine Woods were reported as a common species at Salem, Mo. (D.P.). The only clay-colored sparrow at St. Louis was one on April 18 (S.J.H. et al). They were common at Kansas City, but were missed at St. Joseph. Harris's sparrow reports differed considerably. They were completely missing from St. Louis, Columbia and Springfield. Irving Fay reports that there have been no recent records. Dave Plank reports several from March 1-9 and a few stragglers April 21 and 26. Hilty reports 30 at Lowry City on April 19. They were normal at Kansas City with the last date May 9 (Cole). White-throated sparrows were common throughout the state with one late date of May 26 at Springfield. They were above normal at Joplin, but scarce at Springfield. Fox sparrows were near normal, but above normal at Columbia (A.J.) and scarce at Springfield (I.F.). Dave Plank has an interesting observation of song sparrows in the Salem area. They are a common winter resident, but are one of the first to leave in spring. This year no song sparrows were seen after March 21. The longspur report was short and snappy. One Lapland seen in St. Charles County on April 5 (J.W.), and one at Springfield on April 7 (M.W.,F.S.). 300 Smith's longspurs were observed near Trimble on March 22 (F.L.).

LaVera Andereck	L.A.	Steve Hilty	S.H.
Richard Anderson	R.A.	Alice Jeffrey	A.J.
Harold Burgess	H.B.	Floyd Lawhon	F.L.
Earl Comfort	E.C.	Earl Newton	E.N.
Jim Comfort	J.C.	David Plank	D.P.
David Easterla	D.E.	Fern Shumate	F.S.
Irving Fay	I.F.	Sally Vasse	S.V.
Wally George	W.G.	Margaret Weber	M.W.
Steve J. Hanselmann	S.J.H.	John Willet	J.W.

We believe those concentration of waxwings at feeders in the Kansas City area was important. Their apparent hunger indicates that natural food was extremely short this early spring and we wonder what happened to those birds who did not find a feeding tray.

Another chapter is being written in the metamorphosis of the August A. Busch Wildlife Area. This fall dove hunting will be allowed. There seems to be nothing we or anyone else can do to convince the Commission that this area can best serve as a demonstration and education showplace. We appreciate the agencies acute shortage of dollars but believe a bit of long range planning would disclose their mission in the future is going to have to include, and not as a minor appendage, a discharge of their responsibilities to the people of Missouri who do not hunt.

Bluejays are common summer residents in suburban St. Louis as are grey squirrels. A nesting pair of bluejays is constantly on the lookout for the squirrels and is very vigorous in the defense of its nesting area. A pair of jays raised young in a catalpa tree at our backdoor. About two weeks after the young had left the nest a squirrel ventured out on the limb where the nest was located. Two jays (the nesting pair) became very excited and succeeded in driving the squirrel from the empty nest. It would appear the jays nest protective response is strong enough to carry beyond its actual need.

*THE AMERICAN BISON IN PIONEER MISSOURI

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(Continued)

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