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Earl L. Hanebrink  
*Arkansas State University*

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## A SURVEY OF ALBINO BIRDS IN ARKANSAS

Earl L. Hanebrink  
Arkansas State University

## INTRODUCTION

It is the purpose of this paper to record the results of a survey made of albino birds in the state of Arkansas. A record of sight identifications and museum specimens were used in this study.

Previous papers concerned with albinism of avian fauna include those of Ruthven Deane (1876, 1879, and 1880), McGregor (1900), and Ross (1963). Nero (1954) made an extensive study on plumage aberrations of the Redwing Blackbird (*Agelaius phoeniceus*) and other related icterids. Weller (1959) reported on albinism in grebes. Various notes appear in the literature concerning albinism of a particular species. This is the first attempt to gather information on albinism in birds from the state of Arkansas.

Quantitative studies of plumage aberrations in wild birds includes a study made by Michener and Michener (1936) and Hicks (1934). The Micheners reported that from 30,000 birds of various species (excluding the House Sparrow, *Passer domesticus*) handled during banding operations, only 17, or about 0.05 per cent, showed any form of albinism. In the study made by Hicks 10,000 European Starlings (*Sturnella vulgaris*) were examined and 11, or 0.1 per cent were found with some form of albinism.

The genetics of albinism was studied by McIllhenny (1940) in the Mockingbird (*Mimus polyglottos*). This trait was found to be inherited as a simple recessive character.

## ACKNOWLEDGEMENTS

I am indebted to many of the members of the Arkansas Audubon Society, wildlife refuge managers, biology staff members from institutions of higher learning, hunters and collectors throughout the state.

Mrs. Ruth Thomas and Mrs. Edith Halberg were most helpful in publicising the study. Mr. J O. Tooley was very cooperative with supplying the writer with several sight records and museum specimens. Dr. Douglas James, Department of Zoology, University of Arkansas was very cooperative in supplying data on museum specimens from the University collection.

With the help from so many this study was made possible. The writer is grateful for their interest and cooperation.

## METHODS

A questionnaire was prepared and mailed to members of the Arkansas Audubon Society, wildlife refuge managers, biology staff members from institutions of higher learning, hunters and collectors throughout the state. The writer was interested in collecting information on sight records and museum specimens collected in the state. Information requested included a description of the bird as to degree and form of albinism, location, date seen or collected and the species.

## DISCUSSION AND RESULTS

The term albinism has been generally applied to animals showing some degree of abnormal white or depigmentation. Pettingill (1956) recognizes four degrees of albinism in birds. (1) Total albinism, when the pigment is completely absent from plumage, irides, and skin; (2) incomplete albinism, when the pigment is completely absent from the plumage, or irides, or skin, but not from all three; (3) imperfect albinism, when the pigment is reduced or diluted in any or all three areas but never completely absent, and (4) partial albinism, when the pigment is completely or partially absent from parts of any or all three areas. This latter type was found to be most frequent by Nero (1954) and Ross (1963). In this study this type made up 43.6 per cent of the total forms of albinism

Sight records do not lend well to the above categories in describing albinism as often the detailed observations are not made and reported. Even in museum specimens some of the necessary information is not recorded when the skin is prepared and it is impossible to determine the color of the irides for proper classification. In this study there was no attempt to separate total albinism from incomplete albinism. It was possible to distinguish from descriptions imperfect from partial albinism. Therefore birds are listed in Table 1 under three headings with no differentiation of complete and incomplete.

A total of 78 specimens of 26 species were reported from throughout the state. These include sight records and museum specimens from 22 counties of the state. The 26 species were represented in 16 different families and from four orders. The most numerous reports of albinism among bird species were found in the House Sparrow (*Passer domesticus*) 14, Mallard (*Anas platyrhynchos*) 9, and the Robin (*Turdus migratorius*) 8. Ross (1963) found more albinism among waterfowl, game birds, blackbirds, and finches than in any of the other families. In his findings the Robin far exceeded any other species in numbers of albinos found. This was followed by the House Sparrow and Common Crow. Deane (1876) states: "the most interesting and striking cases of albinism are those found among the Icteridae and Corvidae".

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Edson (1928) records the most unusual occurrence of partial albinism among 500 Brewer's Blackbirds (*Euphagus cyanocephalus*) in which seemingly 40 per cent of its members showed partial albinism.

Chapman (1939) states "albinism is not unfrequent among birds and may occur in any species. It is however, rarely complete but more frequently affects a part of the plumage". Chapman believes albinism is more or less a degenerate condition and may be due to excessive inbreeding among a comparatively limited number of very local individuals.

ANNOTATED LIST ACCORDING TO FAMILY  
ANATIDAE

Mallard (*Anas platyrhynchos*) Linnaeus. A total of nine specimens were reported, five of which were complete and four imperfect. Mr. J. O. Tooley reports observing a complete albino mallard on Bayou Meta in November 1949. Recorded from Arkansas County.

Mrs. Howard Stern reports one complete albino mallard killed and mounted by a hunter in Jefferson County. A second male was reported by Dr. Russell fide Mrs. Howard Stern from Jefferson County. This duck had pronounced variation in the shading of the neck and the head. The ring was visible. The bird was mounted but later disposed of.

Bobby Moore and James Houston report observing a mallard at Big Lake Wildlife Refuge on 10 January 1967. This duck was completely white.

Bill Baker and Pete Garris reported a complete albino mallard seen in November 1966 from Jefferson County. The location of this sight record was approximately two miles from Humphrey.

Dr. Rex Hancock has two mounted mallards in his office. These were killed in November 1962. The male and hen are imperfect albinos. Both are light honey colored. From the same area Andy Smith killed a complete albino mallard hen during the same hunting season. These were collected near Stuttgart in Arkansas County.

Dennis Holland, Refuge manager at Holla Bend National Wildlife Refuge reported a hen mallard first observed on 6 November 1966 and last seen 17 January 1967. This specimen had honey colored wings. Other parts were of typical coloration including the bill. This report is recorded from Pope County.

CATHARTIDAE

Marsh Hawk (*Circus Cyaneus*). Pete Garris and Bill Baker reported a complete albino from Arkansas County. This specimen was

observed two miles south of Stuttgart during the month of December 1966.

#### PHASIANIDAE

Bob-White (*Colinus virginianus*). One partial albino Bob-White was reported from Craighead County during the fall of 1966 — Anonymous.

Mrs. Howard Stern reported two imperfect albino Bob-Whites from Jefferson County. These specimens were extremely light buff colored.

J. O. Tooley reported a complete albino Bob-White observed for two months near Carlisle in January and February 1950. This report is from Lonoke County.

#### MELEAGRIDIDAE

Wild Turkey (*Meleagris gallopavo*). One specimen, a partial albino was reported by R. R. McMaster, Refuge Manager at the White River National Wildlife Refuge in Arkansas County. The date of observation was 8 December 1965.

#### PICIDAE

Pileated Woodpecker (*Hylatomus pileatus*). J. O. Tooley reported a sight record of a partial albino seen in February 1964. The location was approximately 15 miles southeast of Monticello in Drew County.

Red-headed Woodpecker (*Melanerpes erythrocephalus*). One observed three times in December of 1966 by H. W. McMillan of Arkansas County. As far as could be ascertained the specimen was a complete albino.

#### ALAUDIDAE

Horned Lark (*Eremophila alpestris*). Dr. Douglas James reports a sight record of a partial albino seen on 9 January 1964 from Washington County.

#### HIRUNDINIDAE

Tree Swallow (*Iridoprocne bicolor*). One complete albino was reported by Mrs. Howard Stern from Jefferson County. Colored slides were taken of this bird.

#### CORVIDAE

Blue Jay (*Cyanocitta cristata*). Four partial albinos were reported. Mrs. Howard Stern reported one observed from Jefferson

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County. Sterling Lacy reported a partial albino Blue Jay recorded during the summer of 1966 from Magnolia in Columbia County. Jesse H. Crossett of Little Rock reported a Blue Jay with a white head and some white on the back as a daily visitor at a feeder in his yard in February of 1968. Mrs. Louise Miller reports a Blue Jay with head completely white, including the throat and area normally incircled by the dark collar. The bird was first observed in November 1964.

Common Crow (*Corvus brachyrhynchos*). Charles Green reported an imperfect albino crow sighted four miles west of Searcy. This bird remained in the area approximately four months during 1965. It was described as being a dirty cream color. This report is from White County.

#### MIMIDAE

Mockingbird (*Mimus polyglottos*). J. O. Tooley reported a complete albino Mockingbird seen at the Drew Memorial Hospital in July of 1958. This record is from Drew County.

A partial albino Mockingbird was observed by John Giudice in the spring of 1967 in Stuttgart (Arkansas County). Mrs. Pearl Brosius of Little Rock wrote that a pure albino Mockingbird had lived in her yard during the summer of 1967.

#### TURDIDAE

Robin (*Turdus migratorius*). A total of eight specimens have been reported, three of which were complete and five were partial albinos. Dr. Douglas James reported a complete albino Robin in the University of Arkansas collection (UAZ No. 690 Juv.) collected 23 June 1932. Dr. William Scarlett reported a complete albino from Conway (Faulkner County) seen during the summers of 1966 and 1967.

A partial albino Robin was reported by Dr. Douglas James as seen on the University of Arkansas campus during several breeding seasons in the 1950's.

A nesting partial albino Robin was reported by Roy Smith of Bauxite (Saline County) in the summer of 1966.

Dale Jackson reported an incomplete albino Robin with back and tail white and breast of a pale orange color seen in July 1967 at Conway Arkansas (Faulkner County).

Cecil Bittle reported that a partial albino female Robin raised two clutches of young on the Experiment Station Campus at Hope during the summer of 1967. The wings, head and tail of this bird were white and the breast was a pale orange. Eyes and beak were normal. Paul Klipsch of Hope, Arkansas has an excellent color slide

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taken of this bird at her nest feeding the young. This record is from Hempstead County.

In June 1967 Dr. George W. Harrod observed an albino Robin in his garden between his home and that of his sister, Mrs. Homer C. Richie, located about five miles east of Conway. This bird was mated to a Robin of normal color.

J. O. Tooley reported a partial albino Robin seen at the Wilmar school grounds in Drew County during March 1952. This bird remained in the area for nearly two weeks.

#### BOMBYCILLIDAE

Cedar Waxwing (*Bombycilla cedrorum*). Dr. William Scarlett reported a partial albino seen on 18 February 1962 at 1016 N. Taylor Street in Little Rock by Mr. and Mrs. Ross Jamison, Mr. Henry Halberg and Mrs. William Scarlett. This bird was of a creamy white color with the exceptions of a brownish crest and colored wax tips on the wings.

Mr. G. W. Click fide Mrs. Howard Stern reported a complete albino associated with other Cedar Waxings on 22 March 1967 from Columbia County.

#### LANIIDAE

Loggerhead Shrike (*Lanius ludovicianus*). One total albino was collected by J. O. Tooley at Wilmar in Drew County. This specimen was mounted (ASUM. Jov.) and is located in the albino case at the Arkansas State University Museum. This specimen was collected 1 July and described by Hanebrink (1968b).

#### STURNIDAE

Starling (*Sturnus vulgaris*). Three records of partial albinos were reported. Dr. Henri Crawley, Department of Biology, Arkansas Polytechnic College reported a captured partial albino that was kept in the science building for approximately two months during January and February 1960. This bird died and was disposed of.

John Giudice observed a partial albino Starling in the late fall of 1966 at Stuttgart (Arkansas County).

A third partial albino was observed by Ben Armstrong in Jonesboro on 7 January 1968. This bird was feeding with a flock of about 50 Starlings in a backyard. The bird was of normal color with the exceptions of white in the wings and belly region.

#### PLOCEIDAE

House Sparrow (*Passer domesticus*). A total of seven partial, six complete and one imperfect House Sparrows were recorded.

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John Giudice reported a complete albino sighted three miles east of Stuttgart in the spring and summer of 1967 (Arkansas County).

During the fall and winter of 1965 a complete albino House Sparrow was observed in Jonesboro (Craighead County) — Anonymous.

A complete albino House Sparrow was reported by Mr. and Mrs. Larry Burns on their farm in Craighead County during August 1967.

Mr. and Mrs. Charles Wheeler and Mrs. William Scarlett observed a complete albino House Sparrow in Little Rock during the early 1960's (Pulaski County).

J. O. Tooley reported a partial albino House Sparrow in his backyard on 5 December 1967 (Drew County).

Two partial albino House Sparrows were reported by Mr. G. W. Click and Mrs. Louise Miller fide Mrs. Howard Stern from Jefferson County. In one of these the plumage was normal except for the area, which was white beginning just below the head extending down the back, but not all the way to the tail. The white area was bilaterally asymmetrical in that the white extended farther down on the right side than on the left side of the body. This was a male House Sparrow. The second report was of a bird with white blotches on the back. These birds were recorded from Jefferson County on 28 January 1966 and February 2, 1968.

Mr. Alonzo Roberts of Springdale observed and reported two complete albino House Sparrows seen during the summer of 1967. The first bird, a dingy white bird was caught in a trap. It was observed to have pink eyes. A second clean white bird appeared later in the summer. Both birds disappeared in the fall.

A female House Sparrow of normal color except for a pure white tail with one middle dark feather lived in the yard of the W. W. Kimbrough Sr. home near Fayetteville since the early summer of 1967.

Mrs. C. G. Womble reported a partial albino House Sparrow from Warren (Bradley County). As far as can be ascertained this bird was hatched during the early breeding season of 1966 and has remained in the area for two months. Coloration reported for the bird was that it had a white tail and rump patch. Other parts of the plumage was of normal color.

Syd McMath reported a partial albino House Sparrow from Hope (Hemstead County). This bird was observed during the winter of 1966. In this specimen most of the back feathers were white and some of the rectrices were also white.



Mrs. William Scarlett reported a partial albino seen in Little Rock (Pulaski County). This bird was observed in the early 1960's. Coloration was normal with the exceptions of several white blotches on the body.

Imperfect albinism was observed in a House Sparrow by the writer during early September 1967. This bird was seen from the roadside between Monette and Blytheville (Mississippi County). The bird was of a uniform buff color and was found perched on a telephone wire with a flock of other House Sparrows.

### ICTERIDAE

Red-winged Blackbird (*Agelaius phoeniceus*). One partial albino Red-winged Blackbird was reported by Mr. and Mrs Larry Burns on their farm in Craighead County. This bird was entirely white with the exceptions of the red epaulets of the wings.

Jane E. Stern and Rachael Blaser fide Mrs. Howard Stern reported from Jefferson County a normal colored Red-wing except for white feathers in the tail. This bird was sighted on 17 May 1964 in Lincoln County.

Common Grackle (*Quiscalus quiscula*). A total of eight specimens have been reported. Four of this total were complete, three partial and one imperfect.

A complete albino Common Grackle was taken from a flock of Common Grackles in November of 1963 near Gibson Switch in Craighead County. This specimen has been mounted (ASUM) and is placed in the albino case at the Arkansas State University Museum. The descriptions and measurements have been described by Hanebrink (1968a). A second albino Common Grackle was seen by Robert Lowery near Gibson Switch on 29 January, 1968. This bird was among some 500 Common Grackles feeding in an open field.

An albino Common Grackle was seen on 24 November 1967 by Lowell Smith fide Haldor Wilkes near Violet Hill in Izard County.

Dr. William Scarlett reported a complete albino Common Grackle in his back yard in Little Rock on 9 January 1968. This bird was feeding on grain which was scattered on the ice. This bird was among other Common Grackles.

A partial albino Grackle was observed by the writer near Cash in Craighead County during the early winter of 1964. This bird had white feathers in the retricies. It was amongst a large flock of Common Grackles feeding in a cut over soybean field.

Jimmy Bragg reported a Common Grackle seen approximately three miles southwest of Weiner in Poinsett County on 25 November

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1967. In this specimen most of the tail feathers were white and there was also some white on the belly region.

J. O. Tooley reported a partial albino Common Grackle seen in his backyard in March 1951. This bird remained in the area for approximately two weeks. This report is from Wilmar in Drew County.

Edith Chapman fide Ruth Thomas reported a Common Grackle with light buff head and a pinkish white body in Little Rock 25 February 1968.

Brewer's Blackbird (*Euphagus cyanocephalus*). One bird was reported in the Arkansas Gazette on 25 February 1968 fide Ruth Thomas. This bird was at the Jack K. Crabtree home in North Little Rock on 2 January 1968. The bird was described as having a light brown head and white body.

Brown-headed Cowbird (*Molothrus ater*). An imperfect albino Brown-headed Cowbird was collected by Robert Lowery from a flock of mixed blackbirds near Gibson Switch in Craighead County on 11 December 1966. This specimen (ASUM No. 225) is of a faded buff color. The head and neck are very light orange-buff colored. Wing coverts, secondaries and primaries are edged with buff. The remaining feathers are of a dirty white. Eyes, bill and tarsus are pigmented.

#### FRINGILLIDAE

Cardinal (*Richmondia cardinalis*). A complete albino Cardinal was reported by Mrs. Ora Reinhardt. This bird was reported to have nested in a yard in Nashville (Howard County). The bird was described by Miss Jamie McConnell fide Ruth Thomas as cream colored with pale pink trimmings (Arkansas Gazette, Feb. 11, 1968).

A complete albino Cardinal was observed in North Little Rock (Pulaski County) by several bird watchers and was reported by Dr. William Scarlett.

Purple Finch (*Carpodacus purpureus*). On 20 January 1967 Mrs. Ruth Thomas banded an imperfect albino Purple Finch from her yard at Morrelton. This bird was described to be conspicuously paler than its companions. The brown coffee-like color had a great amount of white in it. The bird remained nearby for two weeks and was last seen in a neighbors yard before disappearing from the area. This report is from Conway County.

Slate-colored Junco (*Junco hyemalis*). Two albino records were reported for this species. Dr. Douglas James reported a partial albino collected on 1 January 1952 from Washington County (UAZ, 209 male).

The second report was a sight record of a complete albino from J. O. Tooley. This bird was seen by the local Game Warden and was called to the attention of Mr. J. O. Tooley. The bird was found in a flock of other Slate-colored Junco's.

Field Sparrow (*Spizella pusilla*). Mrs. Ruth Thomas reported a Field Sparrow of a faded washed-out color from a winter flock seen in the early 1930's. This bird had cream colored wings with other pale features and would be classed as an imperfect albino. This report is from Morrelton of Conway County.

White-throated Sparrow (*Zonotrichia albicollis*). Mrs. Terrell Marshall reported a partial albino White-throated Sparrow from Little Rock (Pulaski County) seen on 14 November 1967. The head of this bird was reported to be white except for the yellow spot before the eye and the narrow black line back of the eye. The white head had a few dark spots. The throat patch was well defined and the remaining plumage was of normal color. A second report by Mrs. John F. Rea fide Ruth Thomas came from Little Rock. This bird was seen in the winter of 1967.

Mrs. Harry Meek of Little Rock fide Ruth Thomas reported a complete albino White-throated Sparrow that remained in the area throughout the winter.

Mrs. George and Rachael Blaser fide Mrs. Howard Stern reported a White-throated Sparrow from Jefferson County observed 21 December 1966. This bird was observed by Mrs. Blaser on the Pine Bluff Christmas Count, 1966. It was described as being mottled with white on the back and wings. The head was lighter than normal. The white throat was clear. This bird was associated with a dozen or more other White-throats.

Song Sparrow (*Melospiza melodia*). One complete albino Song Sparrow was reported by Mrs. Curtis Jeffries. This bird was first encountered during late fall of 1956 and regularly occurred during subsequent winters until 1959. This report is from Phillips County.

#### SUMMARY

A study was made of sight records and museum specimens of albino birds in the state of Arkansas. The birds were classified into three categories namely: complete, imperfect, and partial albinism.

A total of 78 specimens of 26 species were recorded. The 26 species are represented in 16 different families of four orders.

The House Sparrow, Mallard, Robin, and Common Grackle were found to be the most numerous species encountered with some form of albinism.

Partial albinism was found to be the most common form making up 43.6 per cent followed by complete with 38.4 per cent and imperfect with 18.0 per cent.

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TABLE I

A LIST OF ALBINO BIRDS RECORDED FROM ARKANSAS

| Species                   | Complete<br>and<br>Incomplete | Imperfect         | Partial           |
|---------------------------|-------------------------------|-------------------|-------------------|
| Mallard                   | 5                             | 4                 | 0                 |
| Marsh Hawk                | 1                             | 0                 | 0                 |
| Bob White                 | 1                             | 2                 | 1                 |
| Wild Turkey               | 0                             | 0                 | 1                 |
| Pileated Woodpecker       | 0                             | 0                 | 1                 |
| Red-headed Woodpecker     | 1                             | 0                 | 0                 |
| Horned Lark               | 0                             | 0                 | 1                 |
| Tree Swallow              | 1                             | 0                 | 0                 |
| Blue Jay                  | 0                             | 0                 | 4                 |
| Common Crow               | 0                             | 1                 | 0                 |
| Cedar Waxwing             | 1                             | 0                 | 1                 |
| Mockingbird               | 2                             | 0                 | 1                 |
| Robin                     | 3                             | 0                 | 5                 |
| Loggerhead Shrike         | 1                             | 0                 | 0                 |
| Starling                  | 0                             | 0                 | 3                 |
| House Sparrow             | 6                             | 1                 | 7                 |
| Red-winged Blackbird      | 0                             | 0                 | 2                 |
| Common Grackle            | 4                             | 1                 | 3                 |
| Brewer's Blackbird        | 0                             | 1                 | 0                 |
| Brown-headed Cowbird      | 0                             | 1                 | 0                 |
| Cardinal                  | 1                             | 1                 | 0                 |
| Purple Finch              | 0                             | 1                 | 0                 |
| Slate-colored Junco       | 1                             | 0                 | 1                 |
| Field Sparrow             | 0                             | 1                 | 0                 |
| White-throated Sparrow    | 1                             | 0                 | 3                 |
| Song Sparrow              | 1                             | 0                 | 0                 |
| <b>Total Species (26)</b> | <b>30 (38.4%)</b>             | <b>14 (18.0%)</b> | <b>34 (43.6%)</b> |

CITED LITERATURE

- Chapman, Frank. 1939. Handbook of birds of Eastern North America. Dover Publ. Inc. N. Y. 581 p.
- Deane, Ruthven. 1876. Albinism and melanism among North American birds. Bull. Nutt. Orn. Club, 1:20-24.
- \_\_\_\_\_. 1879. Additional cases of albinism in North American birds. Bull. Nutt. Orn. Club, 4:27-30.
- \_\_\_\_\_. 1880. Additional cases of albinism in North American birds. Bull. Nutt. Orn. Club, 5:25-30.
- Edson, J. M. 1928. An epidemic of albinism. Auk, 45:377-378.
- Hanebrink, Earl L. 1968a. Two albino icterids collected from North-eastern Arkansas. The Migrant, 39:14-15.
- \_\_\_\_\_. 1968b. An albino Loggerhead Shrike collected from Drew County, Arkansas. The Migrant (In press)
- Hicks, L. E. 1934. Individual and sexual variations in the European Starling. Bird Banding, 5:103-118.
- McGregor, Richard C. 1900. A list of unrecorded albinos. Condor, 2:86.
- McIllhenny, E. A. 1940. Albinism in the Mockingbird. J. of Heredity, 31:433-438.
- Michener, H., and Josephine R. Michener. 1936. Abnormalities in birds. Condor, 38:102-109.
- Nero, Robert W. 1954. Plumage aberrations of the Redwing (*Agelaius phoeniceus*). Auk, 71:137-155.
- Pettingill, Olin Sewall, Jr. 1956. A laboratory and field manual of ornithology. Burgess Publ. Co., Minneapolis, Minn. 248 p.
- Ross, C. Chandler. 1963. Albinism among North American birds. Cassinia No. 57:2-21.
- Weller, M. W. 1959. Albinism in *Podiceps grisegena* and other grebes. Auk, 76:520.