

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Animal Abstract

Element Code: ABPBXA9010

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Dolichonyx oryzivorus*

COMMON NAME: Bobolink, Maybird, Skunk Blackbird, Ricebird, Reedbird, Boblincoln, Meadow-wink, Butterbird

SYNONYMS: *Fringilla oryzivora* Linnaeus

FAMILY: Icteridae

AUTHOR, PLACE OF PUBLICATION: Linnaeus, Syst. Nat., ed. 10, vol. 1, 1758, p. 179.
Based mainly on The Rice-Bird, *Hortulanus caroliniensis* Catesby, Carolina, vol. 1, p. 14, 1731.

TYPE LOCALITY: “in Cuba, In Carolinam = South Carolina.”

TYPE SPECIMEN: USNM 061728 (adult male). C.H. Merriam 85, 17 Jun 1872. Ogden, Weber County, Utah. In Ridgway, Bull. Essex Inst. 5(11): 192, November 1873.

TAXONOMIC UNIQUENESS: This is a monotypic genus.

DESCRIPTION: An 18 cm (7 in) long bird with a stout, relatively short, pointed bill and sharply pointed tail feathers. The breeding male is black below, with a buff to whitish hind-neck, white scapulars, and white rump (looks like he is wearing a tuxedo backward). The early spring male has pale feather edgings. The breeding female is buffy with dark streaks on the back, rump, sides, and head. The juvenile resembles the breeding female but lacks the streaks below. The fall adults and immatures resemble the breeding female but are darker above and richer buff below. They are strongly sexually dimorphic with respect to body mass; mean body weights: breeding females 29.1 g (1.02 oz), breeding males 33.9 g (1.2 oz), migrating females 39.9 g (1.4 oz), migrating males 51g (1.8 oz).

AIDS TO IDENTIFICATION: An 18 cm (7 in) long bird with a stout, relatively short, pointed bill and sharply pointed tail feathers. The breeding female is buffy with dark streaks on the back, rump, sides, and head. The breeding male is black below, with a buff to whitish hind-neck, white scapulars, and white rump (looks like he is wearing a tuxedo backward). The male Bobolink is similar to the male Lark Bunting (*Calamospiza melanocorys*) but has a yellow nape, white rump, and lacks a white wing patch. The female Bobolink is similar to the Grasshopper Sparrow (*Ammodramus savannarum*) but is larger and has streaked flanks. The female Red-winged blackbird (*Agelaius phoeniceus*) has a streaked breast.

ILLUSTRATIONS: Color photo of breeding male (Danzenbaker *in* <http://www.nenature.com/BobolinkPhoto.htm>)
Color photo of breeding female (Danzenbaker *in* <http://www.avesphoto.com/website/NA/species?BOBOLL-2htm>.)
Color photo of non-breeding bird (The Otter Side *in* <http://www.otterside.com/htmfiles/b4-t.htm>)
Color photo (Nickell *in* <http://www.greenbackedheron.com/photo.cfm?photoid=870>)
Color photo (I-bird *in* <http://I-bird.com/Gallery/GALBobolink886.htm>)
Color photo (Sanchez *in* <http://www.utahbirds.org/birdsofutah/BirdsA-C/Bobolink.htm>)
Color drawing of egg (Baicich 1997, pl 61)

TOTAL RANGE: According to “The Birds of North America” (1995), they breed in the U.S and Canada from British Columbia and Alberta in west to w. Newfoundland in east, as far south as West Virginia. Seen as far north as Pt. Barrow, AK, but not known to nest in that state. Isolated breeding populations are found in central Washington, ne. Nevada, n. Utah, e. Arizona, Kansas, n.-central Kentucky. Probably a small breeding population in w. North Carolina. And they winter in south South America east of the Andes principally from e. Bolivia and sw. Brazil south through Paraguay and ne. Argentina to Buenos Aires. Full wintering area may include a broader area but this is the principal wintering area.

RANGE WITHIN ARIZONA: Eastern Arizona in Gila and Apache counties.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: The Bobolink is a long distance migrant; often found in large flocks during their northward migration, which occurs at night. They get their name from the male’s bubbly, gurgling “BOB-O-LINK” call. In migration, Bobolinks are often heard before they are seen, giving a series of “PINK” or “PLINK” flight calls as they fly overhead.

REPRODUCTION: Bobolinks breed in open grassland, preferring moist, lush areas, meadows, cultivated clovers and grain and also in grassy marshlands. They prefer tall grass areas, flooded meadows, prairie, deep cultivated grains and hayfields. They nest on the ground in a small hollow in an area of concealing herbaceous vegetation. They tend to return to breed in the same area in successive years, especially if that site has had good Bobolink productivity. The nest is a shallow hollow, sometimes made by the bird, containing a thin, shallow cup of dead grass and weed stems; lined with finer grasses. Their clutch size is 4-7 (usually 5-6). The incubating is done by the female and lasts 11-13 days. The young are tended by both parents and leave the nest at 10-14 days (still unable to fly). The eggs are sub elliptical to oval and are smooth and glossy. They are very pale blue or greenish, sometimes tinted by a brownish or purplish wash; boldly but sometimes sparsely blotched, mottled and scrawled, and sometime with finer speckling and spotting of medium to deep brown,

purplish-brown, or blackish-brown. They measure 22x16 mm. The nestlings are altricial and downy and their flesh is pink. The down is buffish and the mouth is yellowish and the gape flanges are cream. An intriguing aspect of Bobolink nesting behavior is that sometimes more than two adults will feed the young at a single nest. This phenomenon, known as cooperative breeding is rare among long-distance migrants. The "extra" adult at the nest--the so-called helper--can be either male or female. Several explanations exist for this behavior. Genetic analyses have suggested that in the case of a male helper, both males present at the nest could have sired one or more of the young in the nest. Because Bobolinks have a strong tendency to return to areas where they have bred successfully or where they were reared, helpers may be offspring from the previous year of one or both of the other adults. Alternatively, they may be unrelated adults that have lost their own young and yet still have the biological urge to feed young. They are semi-colonial at their breeding grounds.

One of the most interesting features of the Bobolink's breeding behavior is the tendency for some males to form a pair bond with more than one female in a single nesting season. Some males may have up to four females nesting simultaneously in their territory--an arrangement known as polygyny. Polygynous males are most likely to be older, more experienced males that can lay claim to the best territories. They devote most of their time and attention to the first mate of the season and their young, assisting with the feeding and defense of young at other mates' nests only as time and resources permit.

FOOD HABITS: They eat insects, seeds and grain.

HABITAT: Herbaceous wetland, cropland-hedgerow, grassland-herbaceous. In migration and winter they can be found in rice fields, marshes and open woody areas. They breed in open grassland, preferring moist, lush areas, meadows, cultivated clovers and grain and also in grassy marshlands. They prefer tall grass areas, flooded meadows, prairie, deep cultivated grains and hayfields.

ELEVATION: In British Columbia it occupies fields between 984-2,624 ft (300-800 m). In Arizona they have been found from 4,840-7,020 ft (1475-2140 m) based on AGFD HDMS unpublished records (2002).

PLANT COMMUNITY:

POPULATION TRENDS: According to NatureServe (2002), the populations in the eastern U.S. have declined since the early 1900's. And the North American Breeding Survey data indicate a significant population decline in North America in recent decades, particularly in central North America. The primary reason for decline in the Midwest is habitat loss. Decline is also attributed to decrease in hayfield area, earlier and more frequent hay cropping, and shift from timothy and clover to alfalfa; earlier, agricultural practices that converted wooded land to open land resulted in an increase in range.

There is little information on how Bobolink populations are affected by changes on the South American wintering grounds. It is apparent, however, that as more land has been converted to rice production in this region, Bobolinks have increasingly earned the reputation as agricultural pests. Farmers in Argentina have tried to reduce Bobolink invasions, using shotguns to kill them, and cannon to frighten them away. Coincidentally, Bobolinks are also trapped and sold as pets in Argentina. Ironically, whereas Bobolinks are considered agricultural pests in South America, they now are considered beneficial to agriculture in the United States and Canada. This is because insects constitute the bulk of the Bobolink's diet during the breeding season and most of the insects they eat are harmful to crops. Also, at this time of the year, the majority of the plant material eaten by Bobolinks consists of weed seeds or seeds of plants that are of no commercial value.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: WSC (AGFD, WSCA in prep)
[Endangered, TNW AGFD 1988]
OTHER STATUS: None

MANAGEMENT FACTORS: The Bobolink is vulnerable to the early mowing of hayfields, which directly affects reproductive activities including courtship and nest success. The keys to management are providing large areas of suitable habitat (native and tame grasslands of moderate height and density with adequate litter), controlling succession and protecting nesting habitat from disturbance (haying, burning, moderate or heavy grazing) during the breeding season. Treatments can be performed in the spring (several weeks prior to the arrival of adults) or in the fall after the breeding season.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP: Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:

- Arizona Game and Fish Department (AGFD). 1988. Threatened Native Wildlife in Arizona. Arizona Game and Fish Department. Phoenix, Arizona. P. 16.
- Arizona Game and Fish Department. In prep. Wildlife of special concern in Arizona. Arizona Game and Fish Department Publication. Phoenix, Arizona. 32pp.

- Baicich, P.J. et al. 1997. A Guide to the Nests, Eggs, and Nestlings of North American Birds. Second Edition, Natural World Academic Press. San Diego, California, Pp. 310-311, pl 61.
- British Columbia Government. Available:
<http://www.for.gov.bc.ca/tasb/legsregs/fpc/fpcguide/other/species/species-22.htm>.
- Danzenbaker, M. Available:<http://www.nenature.com/BobolinkPhoto.htm>
- Danzenbaker, M. 1996. Available:
<http://www.avesphoto.com/website/NA/species?BOBOLL-2htm>.
- Deinlein, M. 1997. Smithsonian Migratory Bird Center. Bobolink. Available:
<http://natzoo.si.edu/smbc/Featuredbird/featurebird.asp?bird=Bobolink>
- I-bird. 2000. Available:<http://I-bird.com/Gallery/GALBobolink886.htm>
- Martin, S.G., and T.A. Gavin. 1995. Bobolink (*Dolichonyx oryzivorus*). In The Birds of North America, No. 176 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, and The American Ornithologist's Union, Washington, D.C.
- National Geographic. 1999. Field Guide to the Birds of North America. National Geographic Society, Third Edition, Washington D.C. Pp. 434-435.
- NatureServe Explorer: An online encyclopedia of life [web application]. 2001. Version 1.6. Arlington, Virginia, USA: NatureServe. Available: <http://www.natureserve.org/explorer>. (Accessed: November 26, 2002).
- Nickell, K. 2002. Green Backed Heron. Bobolink, Available:
<http://www.greenbackedheron.com/photo.cfm?photoid=870>.
- Sanchez, M. 2000. Available:<http://www.utahbirds.org/birdsofutah/BirdsA-C/Bobolink.htm>
- Sibley, D.A. 2000. The Sibley Guide to Birds. Alfred A. Knopf, New York, New York, P. 509.
- The Otter Side, Bobolink. Available:<http://www.otterside.com/htmlfiles/b4-t.htm>
- USGS. Bobolink. Available: <http://www.mbr-pwrc.usgs.gov/id/fram1st/account/h49040id.html>
- WordNet.19971 Available:
<http://dictionary.reference.com/search?q=Dolichonyx%20oryzivorus>

MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

According to Deinlein 1997, the Bobolink is seen as many different things by humans: source of inspiration for poetry, a despised target of rice farmers, a menu item, and a popular commodity in the pet trade. Bobolinks were dubbed ricebirds before the turn of the century when rice production was a thriving industry in the southeastern United States, principally in Georgia and South Carolina. Huge flocks would descend upon the rice fields while on migration to fatten up for the remainder of the trip. Since they were capable of doing great damage to the crop, they were shot and otherwise killed by the hundreds of thousands. In 1912, a South Carolina game warden reported that in a single year, over 720,000 ricebirds had been killed and then shipped from the port of Georgetown to market, where they were sold as food. Known as reedbirds in the northeastern U.S., Bobolinks also were slaughtered

there to be served in restaurants. Bobolinks are still collected as food in Jamaica, where they are called butter birds--a commentary on how fat they are as they pass through on migration.

Revised: 2002-11-27 (AMS)

To the user of this abstract: you may use the entire abstract or any part of it. We do request, however, that if you make use of this abstract in plans, reports, publications, etc. that you credit the Arizona Game and Fish Department. Please use the following citation:

Arizona Game and Fish Department. 20XX (= **year of last revision as indicated at end of abstract**). X..X (= **taxon of animal or plant**). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.