ABOUT THE COVER: BOBOLINK

To many people the Bobolink's bubbling song and courtship flight on stiff wings low over green meadows are synonymous with spring. Its common name presumably is derived from a word description of the song, "Bob-o'-link" in the poem by William Cullen Bryant "Robert of Lincoln." The striking appearance of a male Bobolink—black below with flashes of white above—has earned it the nickname "skunk blackbird." Other nicknames include "rice bird" for its eating habits during migration and "butter bird" for its enormous premigratory fat deposits.

The Bobolink male is the only North American passerine to be totally black below and light above. He has white scapulars, lower back, rump and upper tail, and a distinctive buff hindneck collar. The species is strongly dimorphic. The female is buffy, and heavily streaked above and on the flanks, and with a distinctive brown striped crown. She resembles an oversized sparrow. Young birds and winter-plumaged males resemble the female, but young birds lack the streaked flanks.

Bobolinks breed in a broad swath across the northern United States and southern Canada in patches where suitable habitat occurs. In Massachusetts they are common in Berkshire County and the Connecticut Valley, and more sparsely distributed elsewhere. They are a premier long-distance migrant, wintering in the grassland pampas of eastern Bolivia, southwestern Brazil, Paraguay, and south to Buenos Aires in Argentina. Their round-trip migration may take them more than 12,000 miles! Experimental evidence suggests they employ an "integrated" navigation system during migration, using the Earth's magnetic field in conjunction with stellar patterns to guide them to their destination.

In spring males arrive first, beginning in the first week of May, and establish territories. The peak of the Massachusetts migration occurs during the second and third weeks of May. As many as 400 have been reported from Plum Island on a single day. In July and August they form large premigratory flocks (more than 1000 birds have been reported in a single day) and are widely distributed in the state where there are weed or agricultural fields. By the end of September they are on their way to South Ameriça.

Bobolinks have a strongly polygynous breeding system, and usually produce a single brood. Males pair with multiple females that nest in their territory, but blood sample analysis has demonstrated multiple paternity for eggs in the same clutch. One study estimated that fifteen percent of the young were sired by males other than the pair-bonded male. What's good for the goose is good for the gander.

The preferred nesting habitat is moist meadows and hay fields. Males are aggressively territorial, and their song serves the dual purpose of territorial defense and mate attraction. The song is musical, complex, and long (three to

four seconds), and may be given either from a perch or in flight. At least nine identifiable calls have also been identified. The males have a variety of nuptial displays, including a song flight in which they hover or bounce along with the downward stroke of the wingbeat emphasized and white scapular feathers prominently displayed. In one display males spread out their tails, partially extend their wings, and erect nape and scapular feathers. Males defend territories by strutting along boundaries, presenting their brightly feathered backs and bill-flipping, among an assortment of displays.

In Massachusetts nesting commences in the first week of June. The female chooses the nest site, collects the nesting material, and builds the nest in one or two days. The nest is a cup of coarse grass, stems, and leaves, lined with fine grass. The clutch is usually five eggs, variable in color from bluish to reddish gray, blotched in reds, browns, and lavender. The female alone develops a brood patch, and does all the incubation, which lasts just under two weeks. In this polygynous system, males with more than one mate mostly help with brooding and feeding the chicks of the primary (first female with which he paired) nest, and to a lesser degree secondary nests. The young are fed exclusively insects and other invertebrates. The young depart from the nest in ten or eleven days, several days before they can fly, but may be fed by adults for up to a month. The young join flocks prior to migration. Bobolinks forage mostly on the ground or low in vegetation on weed seeds or rice, oats, corn, and other agricultural leavings. In fall they may gain a third of their body weight in fat reserves for the long migratory flight.

As ground-nesting birds, Bobolinks are subject to predation by a variety of mammals, and in wet meadows they are subject to flooding and vulnerable to storm damage. Presumably because of their aggressive territorial defense, however, they are seldom parasitized by cowbirds. Sadly, Bobolink populations have been declining in the United States for most of this century due to habitat alteration and persecution in some southern states as an agricultural pest, where they were even slaughtered at night by torchlight. Breeding Bird Census data suggest that significant declines occurred in all of North America during the 1980s. They are still shot as agricultural pests on their wintering grounds in South America, and in North America declining acreage in hay fields and earlier mowing cycles may have contributed to the decline. Locally, Stephen Ells estimated an 80 percent mortality for nestlings and fledglings for hay fields in Lincoln from normal hay-cropping activities (see Ells, 1995, *Bird Observer*, 23:98-112, for a detailed assessment of the problem).

Like most other grassland species, the Bobolink is in trouble, and habitat preservation, altered mowing schedules, and other conservation initiatives will be necessary to keep this beautiful bird our harbinger and symbol of spring.

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