



Wildlife Note — 44
LDR0103

Blackbirds, Orioles, Cowbird and Starling

by Chuck Fergus

Except for the European starling, the birds described in this Wildlife Note belong to Subfamily Icterinae, the blackbirds, a group found only in the Americas. (The introduced starling is covered here because starlings often join feeding flocks containing several kinds of blackbirds.) In the Northeast, blackbirds live mainly in open areas such as marshes, fields and woods edges. Some blackbirds are drab, while others are brightly colored. Most species are social, living in flocks outside of the nesting season.

Blackbirds eat mainly insects in summer and seeds in winter. Orioles prefer berries to seeds; grackles eat a range of foods including the eggs and nestlings of other birds. Many blackbirds employ a feeding technique called "marina." This is when an individual sticks its bill into a crevice or vegetation or beneath a rock or a stick, then suddenly opens its mandibles to push aside or pry away a screening object to expose an insect, spider, seed or some other edible item. Blackbirds exhibit a range of nesting habits: Some species build their nests on the ground,

while others build them in marsh vegetation or trees, and

the brown-headed cowbird does not build a nest at all, but lays its eggs in other birds' nests.

Bobolink (*Dolichonyx oryzivorus*) —

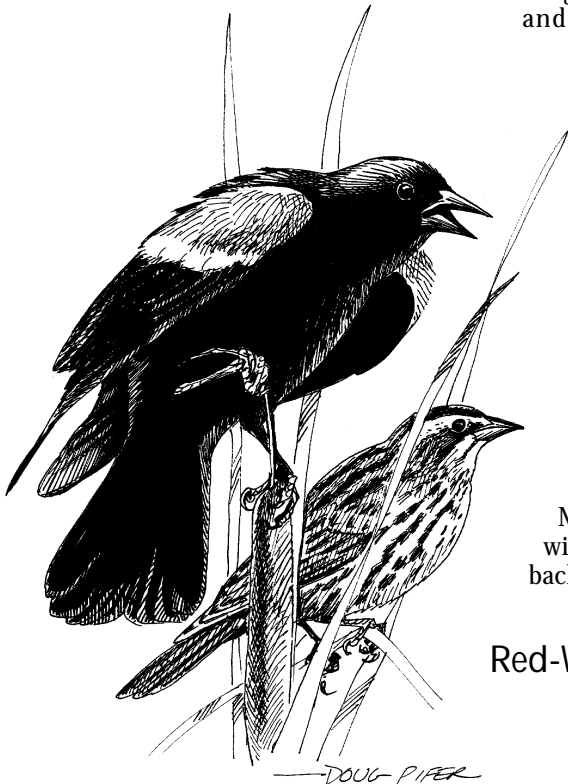
Bobolinks breed across southern Canada and the northern United States. Males are black, with white on the back and yellow on

the nape of the neck; females look like large sparrows. Bobolinks feed on beetles, grasshoppers, caterpillars, ants and other insects, millipedes, spiders, seeds of weeds and grasses, and grain. They nest on the ground in moist meadows and fields of hay, clover, alfalfa or weeds. The adults land away from the hidden nest and walk to it. Most clutches contain five or six eggs. In Pennsylvania bobolinks nest most successfully in the northwest and northeast on farmland at high elevations where cool spring and early-summer temperatures retard hay growth and delay cutting until after broods have fledged. Bobolinks start their southward migration in August and September; en route, flocks may damage Southern rice fields. Most cross the Caribbean and winter in South America.

Red-Winged Blackbird (*Agelaius phoeniceus*) — Many ornithologists believe the red-winged blackbird is the most populous bird species in North America. Redwings breed across the continent and as far south as Costa Rica and the Caribbean Islands. Adults are seven to nine inches long. The jet black male has on each shoulder a vivid red patch, or epaulet, bordered below by a stripe of yellow; females and juveniles lack the epaulets and are drab brown with darker streaks. The male's song is a bubbling *ook-a-lee*, and both sexes sound a harsh *check* as an alarm note.

Redwings arrive on the breeding grounds in late February and early March, with males preceding females by a week or two. They inhabit cattail marshes, swamps, wet meadows, pastures and hayfields; individuals may temporarily leave their home territories to feed in nearby fields. In summer, redwings eat dragonflies, mayflies, caddisflies, midges, mosquitoes, caterpillars, beetles, grasshoppers, cicadas and many other insects. In fall and winter they turn to seeds, which make up about three-quarters of the annual diet. They consume seeds of grasses and weeds, and grains dropped by farm machinery. Flocks of red-winged blackbirds may damage corn, wheat, oats, barley, rice and sunflower crops.

Adults usually breed within 30 miles of where they were hatched. In spring the males perch prominently, displaying their epaulets and calling to attract females and intimidate other males. (When venturing across or



Red-Winged Blackbird

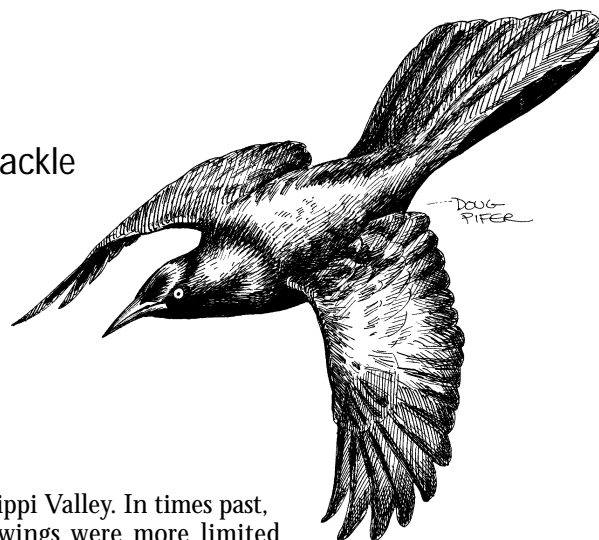
—DOUG PIPER

Common Grackle

into other territories to feed, males hide their epaulets by covering the red with adjoining black feathers, making it less likely that they'll be attacked by resident males.) Each male guards a breeding territory of $\frac{1}{8}$ to $\frac{1}{4}$ of an acre; within this area, one to several females will nest. A male may mate with several females, and a female may mate with more than one male. Females first breed when they're one year old. Yearling males do not often breed, although they continually try to take over older males' territories; sometimes yearlings displace reigning males, but more often they fail and must wander about during summer or until a territory opens up after its owner is killed.

Redwings nest in loose colonies. They aggressively attack crows and hawks to drive them out of the area. Males do not help with nest building. Females attach their open-cup nests to cattail stalks or other marsh vegetation or place them in low trees near or over the water; in hayfields and upland sites, females hide their nests in grass, weeds or shrubs. A female lays three or four pale bluish eggs, blotched with browns and purples. Incubation takes 10 days to two weeks. Both parents feed insects to the hatchlings, and the young leave the nest after about two weeks. In the Northeast, most redwing females raise one brood per year, renesting if a predator destroys an early clutch. Nest predators include crows, marsh wrens, raccoons and minks.

In winter, red-winged blackbirds often feed alongside grackles, cowbirds, starlings and robins. Redwings usually fly between food sources in long, strung-out flocks. At night they roost communally, males grouped separately from females. Most redwings winter in the southeastern United States, with huge concentrations in the lower Mis-

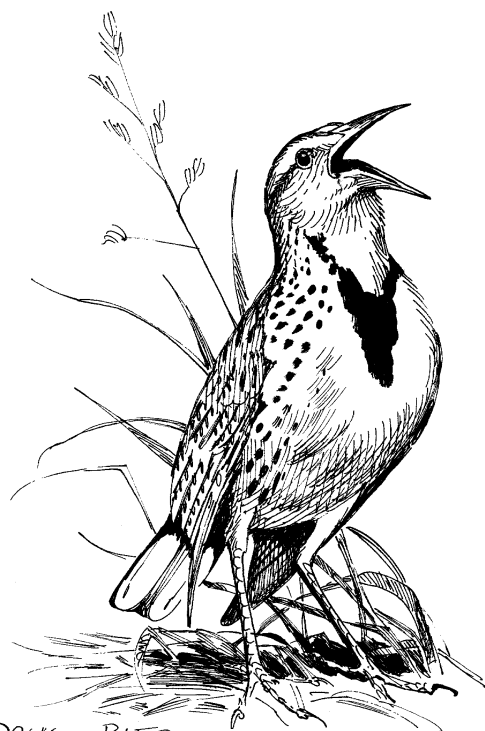


issippi Valley. In times past, redwings were more limited to wetland areas; the population increased after the species began branching out and nesting in agricultural areas. About 40 percent of adult redwings perish each year. The average life span is two to four years.

Eastern Meadowlark (*Sturnella magna*) — Both males and females have a brown-streaked back and a bright yellow breast with a prominent black V; the outer tailfeathers are white. Meadowlarks live in pastures, hayfields, fallow fields, and stripmines that have been replanted to grass. In summer they eat grasshoppers, crickets, beetles, ants, caterpillars and many other insects; they also eat seeds and waste grains. Males arrive in the spring two to four weeks before the females and stake out territories, which average seven acres. The males perch on phone poles, trees and fenceposts, singing their sweet, slurred, whistling song. Sixty to 80 percent of males have two or three mates. The female builds a ground nest in grass or weeds 10 to 20 inches high; the nest, usually in a slight depression, is made of dry grasses with a woven dome-shaped roof and a side entry.

Females lay eggs from late May through June. Early mowing of hayfields destroys many nests. The three to five eggs are white, heavily blotched with brown. The female incubates her clutch for about two weeks. After the young hatch, both parents feed them insects. Fledglings leave the nest after 10 to 12 days and are fed by their parents for another two to four weeks. Some females raise two broods over the summer. In August, meadowlarks abandon their breeding territories and forage in small flocks. In September and October most shift southward, migrating at night and feeding during the day. Some meadowlarks winter in eastern and western Pennsylvania, although most go farther south. The population has declined in the Northeast over the past 40 years as development has wiped out agricultural land and formerly farmed areas have grown up into brush and woods.

Common Grackle (*Quiscalus quiscula*) — Grackles are sleek black birds with iridescent purple, green and bronze highlights in their plumage. Adults are about one foot in length and have long wedge-shape tails. Grackles live in suburbs, towns, farming areas and streamside groves. They



Eastern Meadowlark

Brown-Headed Cowbird

forage mainly on the ground and eat insects (beetles, grubs, grasshoppers, caterpillars and many others), millipedes, spiders, earthworms, crayfish, minnows, frogs, the eggs and young of other birds, and even small rodents. In spring, males display in front of females by raising their bills, fluffing out their feathers, spreading their tails, and singing a loud, ascending reedeleek.

Unlike most other songbirds, grackles remain social throughout the year. Most nest in colonies of 10 to 30 pairs, usually in evergreen trees, where mated pairs defend only a small area right around their nest. Grackles nest from April into July. The female builds a cup-shaped nest out of grasses and mud. The typical clutch has four or five eggs. Only the female incubates, and the eggs hatch after 12 to 14 days. Both parents feed the young, which fledge after 16 to 20 days. In the fall, grackles roost in large flocks, along with starlings, red-winged blackbirds and cowbirds. Most grackles winter to the south of us, but some stay on here.

Brown-Headed Cowbird (*Molothrus ater*) — The brown-headed cowbird is a bird of farms, fields and woods edges. Males have black bodies and brown heads; females are brownish gray. Seeds of grasses and weeds, plus waste grains, make up about half of the birds' diet in summer and more than 90 percent in winter. Cowbirds also eat insects, particularly grasshoppers, beetles and caterpillars. In the past, cowbirds followed bison herds on the Great Plains, where they were known as "buffalo birds."

In spring, the male cowbird displays for females by fluffing up his body feathers, spreading his wings and tail, and singing a bubbly *glug-glug-glee*. The species builds no nest. The cowbird is a brood parasite: The female lays eggs in the nests of other birds who, guided by their instincts, raise



the young cowbirds as their own. Ornithologists believe that cowbirds did not live in forested Pennsylvania before European settlement, a theory bolstered by the fact that few of our native songbirds have evolved defense behaviors against its parasitism. Today, cowbirds are common breeders statewide, mainly in farmland and in areas where development has fragmented the forest, giving them access to the nests of woodland birds. Cowbirds have been reported to parasitize more than 220 different species. In the Northeast, cowbirds particularly plague warblers, vireos, flycatchers, finches, thrushes and sparrows.

A female cowbird will sneak in to a nest that is temporarily unoccupied, quickly lay an egg, and fly off, sometimes after removing or eating one of the host's eggs. Cowbird eggs are whitish, with brown and gray spots. Young cowbirds, hatched and fed by the host parents, grow rapidly; they monopolize food and may even crowd the other young out of the nest. Juvenile cowbirds fledge 10 to 12 days after hatching. In one study, a successfully raised cowbird caused a reduction in the brood of a host pair by only one fledgling. Other ornithologists cite cowbird predation as a major factor — along with habitat loss — in declines of many species, including the wood thrush. A female cowbird may lay up to 40 eggs in one season; of these, two or three will yield young that ultimately mature to adulthood. Cowbirds migrate in large flocks in spring and fall. They winter mainly in the southern states and in Central America. Often they share huge winter roosts with starlings and other blackbirds.



Orchard Oriole (*Icterus spurius*) — The adult male is chestnut and black, and the female is olive and yellow. This robin-size oriole inhabits open areas, including parks, old orchards, and shade groves, with scattered large trees; it avoids deep woods. In Pennsylvania, the species breeds most commonly across the southern part of the state. Orchard orioles feed on insects, berries, nectar and flowers. Pairs are thought to be monogamous. The female builds a hanging basketlike nest among dense leaves in a tree, usually 10 to 20 feet above ground. The 3 to 7 eggs are incubated for 12 to 15 days. Both parents feed the young, which leave

Baltimore Oriole

the nest about two weeks after hatching. Brown-headed cowbirds often parasitize orchard oriole nests. Long-distance migrants, orchard orioles winter in Mexico and Central America.

Baltimore Oriole (*Icterus galbula*) — Also called the northern oriole, the male of this species has a brilliant orange body and a black head (black and orange were the heraldic colors of Lord Baltimore, an English colonist and founder of present-day Maryland). The female is yellow-orange. Baltimore orioles breed throughout eastern North America in open woods, residential areas, parks, fencerows and tall trees along streams (often sycamores or willows; formerly elms were a favorite before disease killed most American elms). Adults feed on insects, particularly caterpillars; spiders; snails; berries, including mulberries, serviceberries, and blackberries; cultivated fruits; and flowers. Baltimore orioles visit feeding stations for sugar water and pieces of fruit.

The species is best known for its sacklike hanging nest, intricately woven by the female out of plant fibers, pieces of string, grapevine bark and grasses. A central chamber is lined with hair, fine grasses and cottony plant matter. Nests are usually hung at the ends of pliant branches, probably to deter predators, including snakes, blue jays and crows. Females lay three to six eggs that hatch after 12 to 14 days. Both parents feed the nestlings, which leave the nest after two weeks. Flocks depart from the breeding range quite early, in July and August. The species winters in southern Mexico, Central America and northern South America, where the birds feed on insects and nectar.

European Starling (*Sturnus vulgaris*) — From 100 birds released in the 1890s in New York City's Central Park have descended more than 200 million starlings populating North America today. Starlings are chunky birds with short tails and long straight bills; airborne, they show a distinctly triangular shape. The plumage is black with iridescent highlights. Starlings are adaptable, hardy and wary. They inhabit farmland, suburbs, cities and woods edges, and are least numerous in or are absent from marshes and extensive forests. Starlings eat almost equal amounts of animal and plant food, including beetles, grasshoppers, ants, flies, caterpillars (gypsy moth and tent caterpillars are frequent prey), earthworms, grains, cherries and mulberries. When foraging on lawns in winter, starlings are usually gaping, probing their bills into the soil and prying apart grass roots to uncover beetle larvae.

Starlings begin defending nest cavities in late winter, pre-empting them before native cavity-nesters start claiming territories. Starlings nest in woodpecker holes, crev-



European
Starling

ices in trees and buildings, and bird houses. In April, males perch outside the cavities; when they see other starlings, they sing and windmill their wings to attract a mate. The male's song includes shrill squeals, squawks and imitations of other birds' songs. The female fills the nest cavity with grasses, weed stems, twigs, old cloth and dry leaves, then lines a central cup with fine grasses and feathers. She lays four to six eggs, which are an unmarked pale bluish green. Both parents incubate the eggs, and they hatch after about 12 days. The nestlings are fed by both parents and leave the nest three weeks after hatching. By now their droppings have so fouled the cavity that the adults go in search of another nest hole in which to rear a second brood: Often they drive native birds from their nests, including woodpeckers, nuthatches, great crested flycatchers, tree swallows, house wrens and bluebirds. Harassment by starlings may have caused recent declines in populations of the northern flicker and red-headed woodpecker.

Starlings feed in flocks and roost together at night. In late summer and fall, their roosts may contain thousands of birds. Some individuals shift southward for the winter, while others remain in the Northeast; many roost in cities, where buildings give off heat, and then fly out into the surrounding agricultural land to feed during the day. Of the starlings that are alive in January, about half die in the coming year, with one third of the deaths happening in January and February. The average adult's life span is one and a half years.

Wildlife Notes are available from the
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