



Blackbirds, Orioles, Cowbird and Starling



Except for the European starling (*Sturnus vulgaris*), the birds described in this Wildlife Note belong to the family Icteridae, 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. Blackbird species often gather in great flocks during migration and at winter roost sites.

Blackbirds eat mainly insects in summer and seeds in winter. Orioles prefer caterpillars and 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, in which an individual probes its bill into a crevice, vegetation, or beneath a rock or a stick, then suddenly opens its mandibles to push aside or pry away a screening object to expose some edible item like an insect, spider or seed. Blackbirds exhibit a range of nesting habits. Some species place their nests on the ground, while others build them in marsh vegetation or trees, and the brown-headed cowbird does not build a nest, but lays its eggs in other birds' nests.

Bobolink (*Dolichonyx oryzivorus*)

The bubbling song of a male bobolink is one of the most welcome natural sounds of rural Pennsylvania. A visually striking songbird, the bobolink has lots of personality and energy, attracting attention even from people with a passing interest in birds. 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. The male's plumage looks like a tuxedo being worn backwards, giving it the nickname of "skunk blackbird."

brown-headed cowbird

A characteristic bird of hayfields and meadows, 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. Males make themselves even more noticeable by flying over their territories slowly as they sing their babbling loud song. But they are more furtive when approaching the nest site. 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 push back hay growth and delay cutting until after broods have fledged. They are found in suitable habitat in western parts of the state and have expanded to sites with reclaimed surface mine grasslands, as in Clearfield County and surrounding areas. In the southeast, they breed at various sites in agriculture areas. It is much more likely to be found on the plateaus of the state, which are at higher elevations. This species and others of hayfields and open fields can persist only where mowing is delayed after their nesting season. Bobolinks start their southward migration in August and September, settling into Pennsylvania fields and gathering into large flocks. En route

to their wintering grounds, large flocks may damage southern rice fields by feeding on that grain. Bobolinks may travel more than 12,000 miles round trip to and from wintering grounds in South America south of the equator, one of the longest migrations of any songbird. Most cross the Caribbean in flight to their wintering grounds in South America. Bobolinks inhabit grasslands as well as freshwater marshes, rice fields, and sorghum fields during migration and on wintering grounds.

Red-winged Blackbird (*Agelaius phoeniceus*)

The red-winged blackbird is one of the welcome harbingers of spring. The red epaulettes and loud song make the male red-winged blackbird a very conspicuous denizen of the state's farmlands and wetlands. The red-winged blackbird is estimated to be the third most populous bird species in North America, with only the American robin and dark-eyed junco ranking higher. Redwings breed across the continent from southern Alaska, coast to coast in central Canada and the U.S. 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



red-winged blackbird

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 "conk-a-ree", and both sexes sound a harsh *check* as an alarm note.

Redwings begin arriving on the breeding grounds in late February and early March (earlier in mild winters) but the greatest numbers show up in March and April, with males preceding females by a week or two. They inhabit open habitats, particularly large freshwater marshes, but are found in a variety of wetland and agriculture areas including cattail marshes, shrub-swamps, wet meadows, brushy pastures, and uncut 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 waste 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 singing, almost constantly, to attract females and intimidate other males. When venturing across or into other territories to feed, males hide their epaulets by covering the red with adjoining black feathers, making it less likely that they will 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 up to 15 nesting females have been observed within a male's territory. They are highly polygynous and one male may mate with several females, and a female may mate with more than one male. Females first breed at 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.

Red-wings 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, winding plant strips around several stems as a base, or place them in low trees near or over the water; in hayfields and upland sites, females hide their nests in dense vegetation such as grass, grain stalks, 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 snakes, feral cats, crows, marsh wrens, raccoons, and minks. Their nests are also parasitized by brown-headed cowbirds.

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 Mississippi 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. The average life span is two to four years although the oldest red-winged black bird on record was 15 years and 9 months. Although still a common bird, this is one of the several birds of farmland and wetlands that have declined in the last few decades.

Eastern Meadowlark (*Sturnella magna*)

The eastern meadowlark is, perhaps, the most characteristic bird of larger grassland habitats in Pennsylvania. Both males and females have a brown streaked back and a bright yellow breast with a prominent black V; the outer tail feathers are white. As their name suggests, meadowlarks live in pastures, hayfields, fallow fields, and strip mines that have been replanted to grass. In summer they eat grasshoppers, crickets, beetles, ants, caterpillars, and many other insects; they also eat seeds, waste grains, and wild fruits. 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 typically have two mates, rarely three. 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 northeastern United States during the past 40 years as development has drastically reduced open grassland habitat and agricultural land and formerly farmed areas have grown up into brush and woods. A change in farming practices, namely a more frequent mowing of hayfields and more intensely grazed pastures, increased pesticide use, and possibly the density of planted grasses, may be contributing to their decline. Pennsylvania's Wildlife Action Plan lists the eastern meadowlark as a Species of Conservation Concern. According to Breeding Bird Survey data, the number of Atlas blocks with confirmed breeding has declined by 29 percent between the first (1983-89) and second (2004-09) Breeding Bird Atlas periods. Surveys have also indicated a shrinking breeding range, with an estimated range contraction of 15 percent between Atlas periods.

eastern meadowlark



Rusty Blackbird (*Euphagus carolinus*)

Probably the least known of the state's blackbirds, the rusty blackbird is a regular passage migrant and uncommon winter visitor in Pennsylvania. The males are black with a greenish gloss while females are buffy colored with a gray rump. Both sexes have thin, slightly decurved bills and a pale eye, compared to the dark eye of a red-winged blackbird. They are smaller and have shorter tails than common grackles. The rusty blackbird nests in the vast northern forests of New England, Canada, and Alaska and winters in southeastern United States, primarily in the swampy forests of the Atlantic Coast and Mississippi Valley. In between, they migrate through the Great Lakes region and Mid-Atlantic states including Pennsylvania. This species forages in wet fields, swamp edges, wet woods, and riverine habitats but will roost in different locations, mostly in wooded areas but sometimes open fields. They feed primarily in very shallow water where they pick up various invertebrates, berries, and mast including broken or soaked acorns. They wade in water, regularly turning over leaves with their beak under the water surface. Pennsylvania is at the northern extreme of the rusty blackbird's winter range, mostly in the southern counties. A bird of the difficult to access boreal forests and southern swamps, the rusty blackbird is tough to study and remains one of the most poorly understood birds of the continent. This swamp songbird may have the greatest decline of any North American bird of the last century. For that reason, the scientific

community is giving this species greater priority for research, monitoring, and conservation. The reasons for this decline are not well-understood, but habitat loss, blackbird control, and environmental toxins are among the possible causes. Due to an overlap in habitat preferences, its fate is tied to that of other better-known birds of the riparian forest and wetlands such as the wood duck, American black duck, and American woodcock.

Common Grackle (*Quiscalus quiscula*)

Grackles are sleek black birds with purple, green, and bronze highlights in their plumage. They are the largest members of the blackbird family in Pennsylvania. Adults are about one foot in length and have long wedge-shaped tails. Females are slightly smaller with duller colors. Grackles live well in human landscapes, thriving in agricultural areas, city parks, suburbs, towns, or cemeteries. In natural settings they prefer open woodland, forest edges, wetland marshes and swamps, riparian areas, grasslands, and farming areas. They are absent from large forest tracts. They forage mainly on the ground and eat mostly seeds, with a preference for cultivated grains. In agricultural areas it can be a significant pest species and foraging flocks often target corn crops. The grackle's diet includes 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 "readle-eak". Unlike many bird species, female common grackles also sing, although less often than males.

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

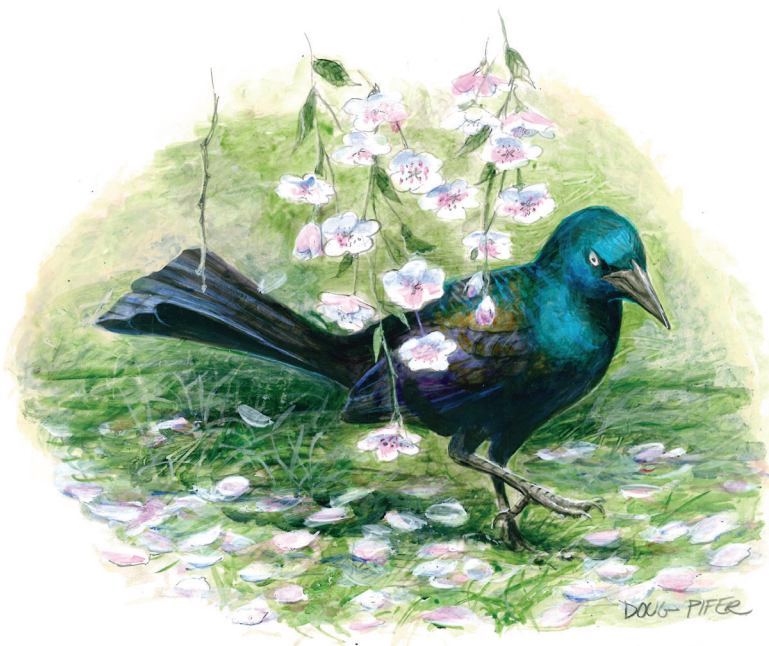
small area right around their nest. These colonies may have a negative effect on other nesting birds in the neighborhood. Grackles are among the first spring arrivals and nest from April into June. The female builds a cup-shaped nest out of grasses and mud. The typical clutch has four or five eggs. Only 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 Pennsylvania, but some remain in the state. The majority of those wintering in the state are found in the Piedmont region of southeastern Pennsylvania where mixed flocks may reach hundreds of thousands of birds.

Brown-headed Cowbird (*Molothrus ater*)

The brown-headed cowbird is a bird of farms, fields, suburbs, 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." They captured the insects that were disturbed by the grazing bison. Cowbirds may forage in pastures alongside cows and horses in this same manner.

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. Most species fail to recognize the parasitic egg. Today cowbirds are common breeders statewide, absent only from large contiguous tracts of forest. Fragmentation of these large forest blocks with land development and energy development may enable cowbirds to expand into this forest habitat in new places and negatively impact forest songbird species, many of which are of conservation concern. 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 into 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. They typically hatch faster than the eggs of their host species. 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. Cowbirds



common grackle

migrate in large flocks in spring and fall. They are short-distance migrants and winter throughout their Pennsylvania breeding range, particularly in the Piedmont and Coastal Plain and in the southern states and in Central America. Often they share huge winter roosts with starlings and other blackbirds.

Orchard Oriole (*Icterus spurius*)

Although not as conspicuous or well-known as the Baltimore oriole, the orchard oriole is a strikingly handsome songbird that is being found in an increasing number of locations. It is the smallest oriole in North America. The adult male has a chestnut body and black back and wings while the female is olive and yellow. Second-year males are often overlooked or misidentified because they have a greenish-yellow plumage and a black-bib. Yet, they also will sing as loudly and vigorously as the adult-plumaged males. This nearly robin-size oriole inhabits open areas, including parks, old orchards, yards, farms, and shade groves, with scattered large trees. It has a preference for riparian habitats, lake shores, marshes and floodplains, but avoids deep woods. In Pennsylvania, the species breeds most commonly across the southern two-thirds of the state and has expanded north into northwest and center portions of the state as illustrated in the Second Breeding Bird Atlas. Orchard orioles feed on insects, berries, nectar, and flowers. They are especially likely to feed on weevils and caterpillars including those that are harmful to crops. They also are adept at taking nectar from tubular flowers like trumpet creepers. During migration, they eat a lot of mulberries and cherries. Pairs are thought to be monogamous. Males sing a very lively, loud warbling song, often from a prominent perch. Like Baltimore orioles, orchard orioles also chatter and call in scolding notes. The female builds a hanging basket-like nest among dense leaves in a fork of a tree branch, usually 10 to 20 feet above ground. Their nests are not as elongated as the Baltimore oriole's basket nests. The three to seven eggs are incubated for 12 to 15 days. Both parents feed the young, which leave the nest about two weeks after hatching. Brown headed cowbirds often parasitize Orchard oriole nests. Orchard orioles typically invest a short amount of time on breeding grounds, the majority arriving in late April and early May and some returning to wintering grounds as early as mid-July. Long distance migrants, orchard orioles winter in Mexico and Central America.

Baltimore Oriole (*Icterus galbula*)

The Baltimore oriole is one of the most dramatically colored and well-known songbirds of North America. This oriole not only lives in forest edge and riparian forests, but readily adopts park settings and yards with large trees. 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 and immature males have yellow orange breast and underparts with a grayish head and back. Baltimore orioles breed throughout eastern North America in open woods, residential areas, parks, fence rows, and tall trees along streams (often sycamores or willows; formerly elms)

orchard oriole



were a favorite before disease killed most American elms). In the west, it is replaced by the very closely related Bullock's oriole (*Icterus bullockii*). These species hybridize and they have sometimes been combined into one species called the northern oriole, this name persisting in some books. Adults feed on insects, particularly caterpillars; spiders; snails; berries, including mulberries, serviceberries, and blackberries; cultivated fruits; and flowers. With their long pointed bills, Baltimore orioles are adept at consuming hairy and spiny caterpillars including pests such as tent caterpillars and webworms. So, orioles are not only attractive additions to a yard and garden, but they also have economic value to the property owner. Its diet varies with the seasons, Baltimore orioles visit feeding stations for sugar water and pieces of fruit, especially oranges and bananas.

The species is best known for its sack-like 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 soft 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. The song of the Baltimore oriole is a series of rich whistled notes that are fairly easy to imitate. They also keep contact with a simple "hulee" note and make many rattling chatter notes. The nest can be located by the begging notes of young orioles. Both



Baltimore oriole

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 Florida, the Caribbean, 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 and are closely associated with human environments. They inhabit farmland, suburbs, cities, and woods edges, and are least numerous in or are absent from marshes and extensive forests. They use open, grassy areas to forage and cavities in trees or buildings for nesting. 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, preempting them before native cavity nesters start claiming territories. Starlings nest in woodpecker holes, crevices 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 male fills the nest cavity with grasses, weed stems, twigs, old cloth, and dry leaves, and then lines a central cup with fine grasses and feathers. The female assists with nest building and arranges the finishing touches. 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 eastern bluebirds. European starlings aggressively compete for a cavity, often evicting other species, along with eggs or nestlings, from their nests.

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. European starlings are long-lived and one documented bird lived 15 years 3 months in the wild.



European starling