



Wildlife Note — 13  
LDR0103

# Woodpeckers

by Chuck Fergus

A drumroll at dawn, a bird in undulating flight through the forest, wood chips littering the ground at the base of a tree — all these signal the presence of a woodpecker, a highly specialized and important member of nature's highly complex world.

Woodpeckers have been around for a long time: their fossil remains date back 25 million years and they're widely distributed, with 45 species in the US and more than 200 worldwide. Nine species either live year-round in Pennsylvania or visit the state in winter. The common flicker (yellow-shafted phase), pileated woodpecker, red-bellied woodpecker, red-headed woodpecker, yellow-bellied sapsucker, hairy woodpecker and downy woodpecker are residents. The black-backed (Arctic) and northern (American) three-toed woodpeckers have been known on rare occasions to get this far south in the winter.

The woodpecker family, Picidae, fills a unique niche in the food chain. Woodpeckers drill into trees to un-

cover insect food, to create nesting shelters and to communicate with other woodpeckers. Several body adaptations make this drilling possible.

A woodpecker has a sharp, stout bill with a chisel-like tip for chipping and digging into tree trunks and branches. In pecking out wood, the bird aims

blows from alternating directions — much like a wood chopper does. Bones between the beak and the unusually thick skull are not as rigidly joined as they are in other birds. Spongy, shock-absorbing tissues connect these flexible joints; strong neck muscles provide force for drilling; and bristly feathers shield the nostrils from dust and wood chips.

The tongue of most woodpecker species is round, horny and rich in tactile cells. The tip is pointed and barbed. After chopping exposes a woodborer's cavity, the long, flexible tongue feels out, impales and withdraws the larvae. The tongue is nearly twice as long as its owner's head and winds around the inside back of the skull when retracted.

To grip trees, a woodpecker has short, muscular legs and sharply clawed feet. On most species, two toes point forward and two backward. This opposed, "yoke-toed" arrangement lets a woodpecker climb with ease. Stiff, pointed tail feathers catch on the rough bark to brace the hammering body. During molt, the two middle tail feathers (the strongest ones) do not fall out until the other 10 have been replaced and can support the bird's weight.

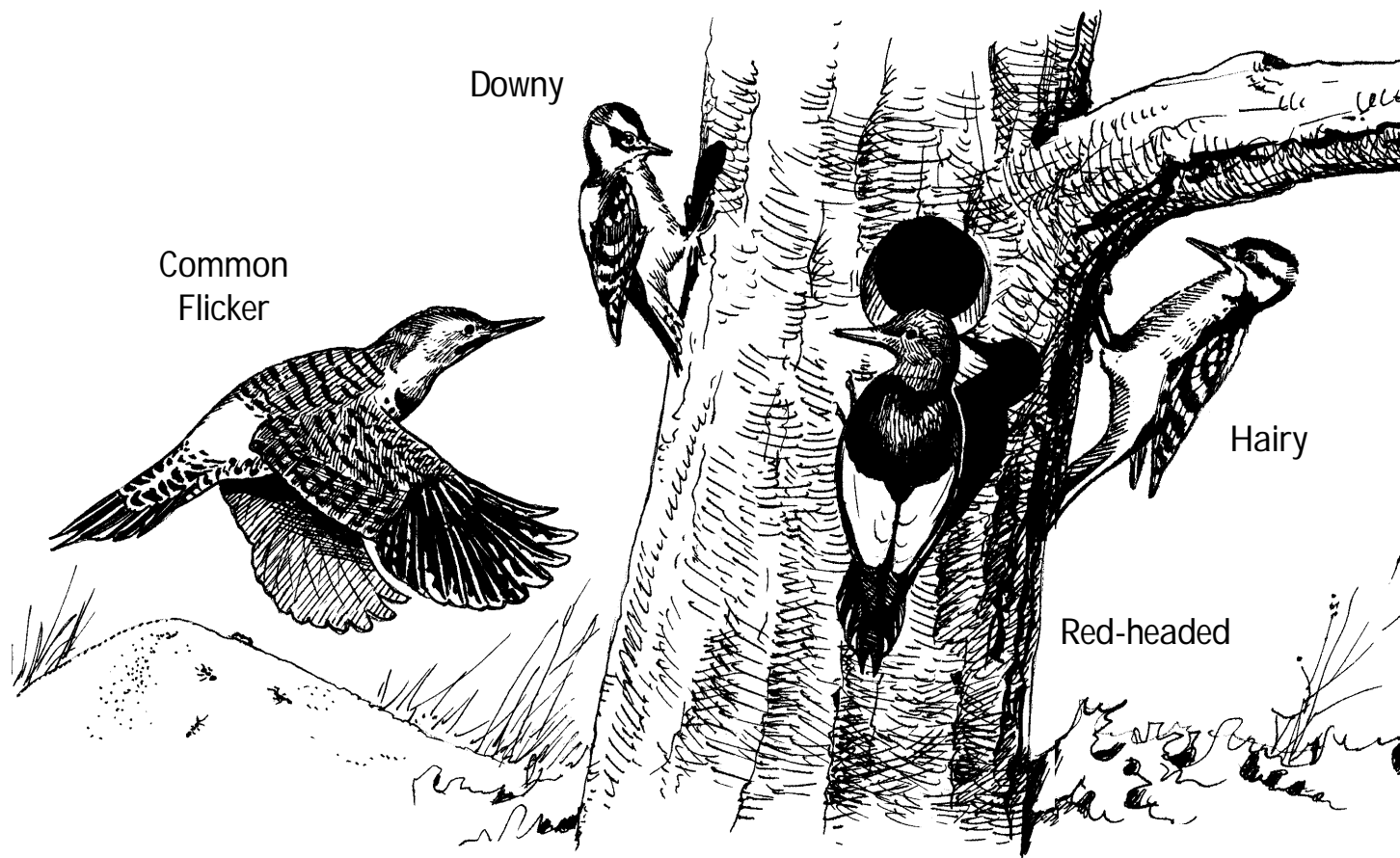
A woodpecker's flight is undulating. The bird usually launches off the side of a tree, pumps its wings four or five strokes, and folds them against its body. During this short pause, the bird loses a few feet of altitude. Then more wing beats to gain altitude, another pause, and so on.

Woodpeckers feed mainly on wood-boring grubs, insects, insect eggs and pupae. They also consume sap, nuts, and the fruits of some trees and shrubs. Hollow sounds — echoes of the woodpecker's tapping — probably signal the location of a wood borer's channel, and the bird drills up to 100 strokes per minute to uncover the morsel. Even in winter they have no trouble locating insects.

Most woodpeckers "drum" on resonant limbs, hollow tree trunks, drainpipes, garbage can lids, tin roofs, etc. Drumming designates territory and can attract a mate.



Downy



Soft tapping may be a type of communication between mates, or between parents and offspring.

Courtship and nesting habits are essentially alike in all woodpeckers. Much of the rivalry between males is confined to noisy, chattering pursuit. After pair formation, both sexes excavate a nest cavity in a branch or tree trunk. The female usually lays the white, unmarked eggs directly on wood chips left in the bottom of the cavity. Both sexes incubate, with the more aggressive male often staying on the eggs overnight. Young are altricial; for two to three weeks they remain in the nest and are fed predigested food by their parents. In the southeastern states, woodpeckers may raise two broods.

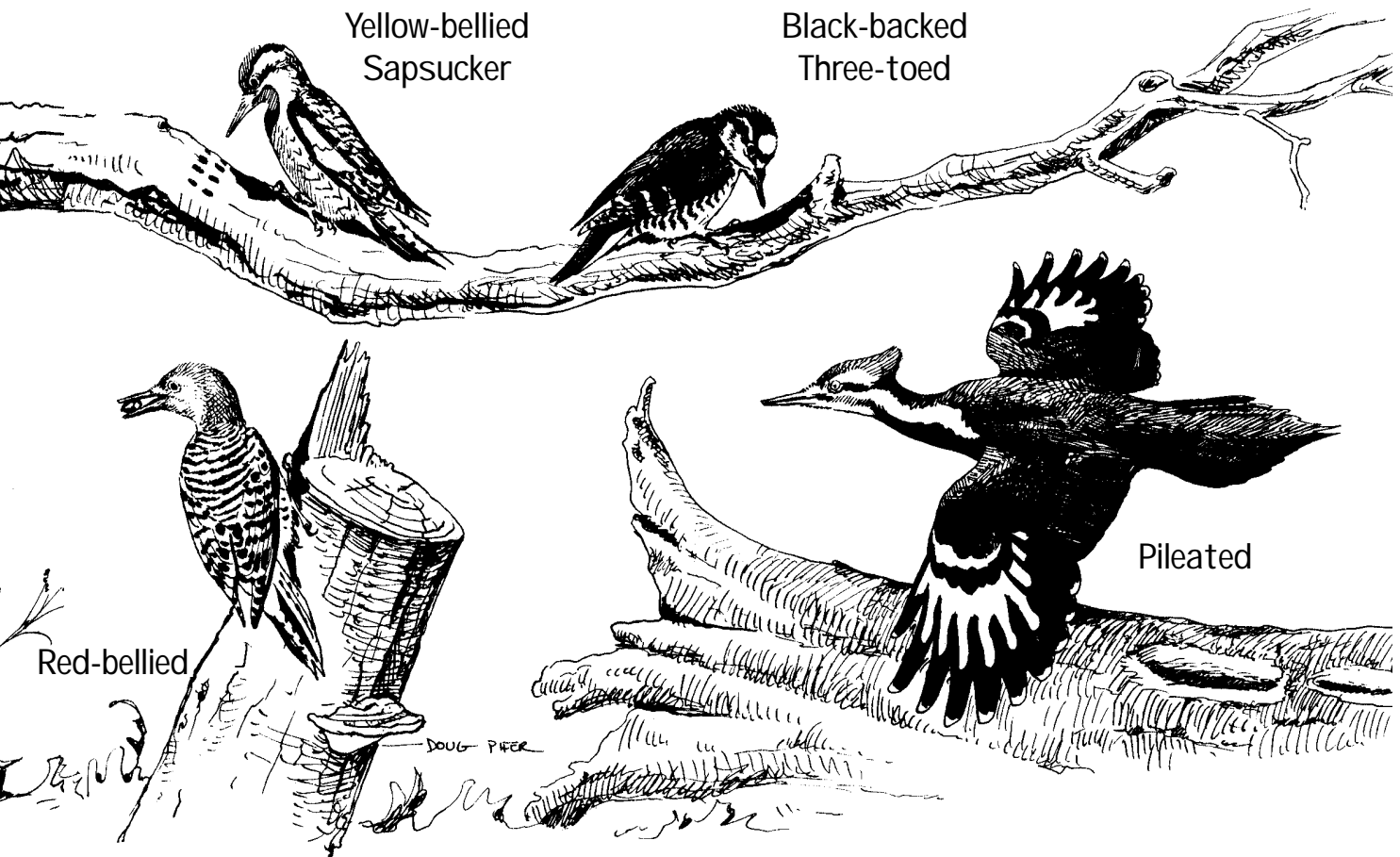
Woodpeckers have definite economic importance. They do punch holes in trees, but rarely in healthy ones. By stripping the bark from a dead or dying tree and cleaning up the resident wood borers or carpenter ants, they prevent these pests from spreading to nearby healthy trees. Woodpeckers also chop out homes for owls, bluebirds, tree swallows, nuthatches, chickadees, red and gray squirrels and flying squirrels. Adversely, woodpeckers sometimes damage utility and other poles.

The Pennsylvania Game Commission manages state game land woodlots and forests with the needs of woodpeckers — and wildlife — in mind. When marking tracts scheduled for timber cutting, PGC foresters leave a proportion of food-bearing trees and shrubs, as well as "wolf" trees (older trees, often dying, which do not make good

lumber). Wolf trees have many limbs and cavities that provide shelter and nesting space for many species of wildlife.

**Red-Headed Woodpecker** (*Melanerpes erythrocephalus*) — Length, 8 - 9 inches; wingspread, 18 inches. The head of an adult of this species is scarlet, and that of a juvenile, brown. Body plumage is black and white, with a large white wing area visible when the bird flies. Like the flicker, the red-headed woodpecker does a lot of feeding on the ground. It eats beetles, ants, grasshoppers, caterpillars and other insects, along with acorns, corn, wild fruits and apples. Redheads store acorns in tree cavities during winter and defend these food caches against squirrels and other birds. Habitat is open forestland, farm woodlots, towns and parks. This bird often perches in the open. Nest: 8 - 80 feet up, often in an oak and occasionally in a fencepost. Starling competition for nesting sites may be reducing this species' numbers. Eggs: 4 - 7, usually five, with a 14-day incubation period. In spring, the redhead is an uncommon migrant in late April and early May; in summer, a breeding resident; in fall, an uncommon migrant from September to early November; and a winter resident. Call is a raucous *kwrrk*.

**Yellow-Bellied Sapsucker** (*Sphyrapicus varius*) — Length, 7 - 8 inches; wingspread, 14 inches. Plumage varies within the species, but the narrow longitudinal wing



stripes — visible when the bird is at rest — and the finely mottled back are good field marks. (The back coloration blends well with tree bark.) The belly is tinged yellow, and the head is red, black and white. Sapsuckers drill parallel rows of holes in live trees (up to 30 holes per day) and return later to drink sap and catch small insects attracted to the sweet liquid. The bushy tongue of a sapsucker effectively soaks up sap. Other foods include beetles, ants, caterpillars, insect eggs, spiders; the cambium (layer beneath the bark) of maple, aspen, birch, fir, hickory, beech, pine, oak and other trees; fruits and seeds.

Sapsuckers inhabit forests, orchards and woodlots. Nest: a gourd-shaped cavity excavated 8 - 40 feet up a tree; aspen and other trees afflicted with tinder fungus are often chosen as nest sites, because the fungus creates a soft center that is easily dug out. Eggs: 4 - 7, usually five or six, with a 12- to 13-day incubation period. The sapsucker is the most migratory of our woodpeckers. In spring, it is a common April migrant; in summer, a rare breeding resident (breeds mainly across the northern US and southern Canada); in fall, a common migrant in September and October; and in winter a rare resident, as most individuals move farther south. Call is a jay-like mewing note. Also, sapsuckers tap in a distinctive rhythm, two or three series per minute; they do not drum.

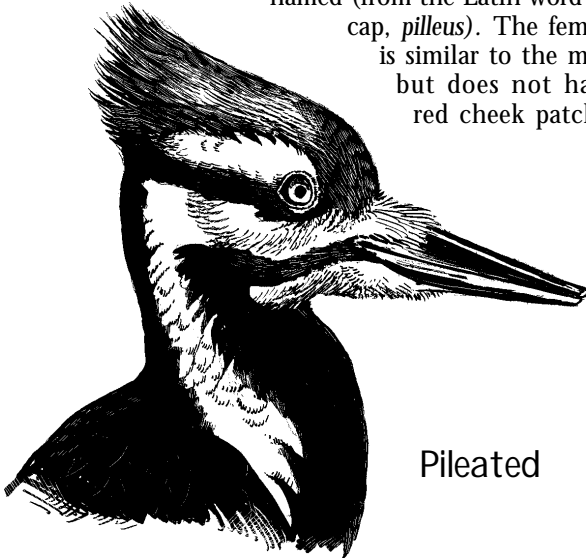
**Hairy Woodpecker** (*Picoides villosus*) — Length, 8 - 9 inches; wingspread, 15 inches. This woodpecker has a

vertical white stripe down the center of its back, black wings stippled with white on the upper sides, white feathers forming the outer edge of the tail and white breast. Sexes are similar, but the female lacks the male's small red patch on the back of the head. Larger size and a proportionately longer bill distinguish it from the downy woodpecker. The hairy eats beetle larvae, ants, caterpillars, adult beetles, spiders, etc.; also seeds and fruits. Primary habitat is forest land and wooded swamps. Nest: 5 - 30 feet up; the male may also dig a roosting cavity. Eggs: 3 - 6, commonly four, with a 12-day incubation period. The hairy woodpecker is found throughout the eastern US; in Pennsylvania, it is an uncommon resident in all seasons.

**Common Flicker** (*Colaptes auratus*) — Length, 8 - 10 inches; wingspread up to 20 inches (about the size of a blue jay). Flickers, also known as yellow hammers, have brown backs, no white on the wings, a prominent black band high on the breast, and bright red on the nape of the neck. The male has a black "mustache" mark extending from the bill back onto the throat. In flight, the white rump patch and yellow underwings show up well. Flickers are often seen on the ground or on sidewalks eating ants, a preferred food. Their saliva neutralizes the formic acid which ants contain. They also eat beetles, grasshoppers, crickets and other insects. In fall and winter, they eat poison ivy fruits, berries, corn and sumac seeds. Favored habi-

tat is woodland, orchards, woodlots and yards. Nest: a hole opening into a cavity, 2 - 60 feet up a tree. The cavity takes up to two weeks to build. Eggs: 3 - 10, usually 6 - 8, with an 11- to 12-day incubation period. Starlings may drive flickers out of their newly-dug cavities. In spring, flickers are common migrants from March to April; in summer, breeding residents (they breed east of the Rockies and across Canada and Alaska); in fall, common September or October migrants; and in winter, rare residents. Flickers winter principally in the southern US. Call: a loud flick or flicker, 2 - 7 times per minute; also a shrill, descending kee-oo.

**Pileated Woodpecker** (*Dryocopus pileatus*) — Length, 12 - 17 inches; wingspread, up to 27 inches; crow-size but with a long, slender neck. The largest American woodpecker (except for the rare, if not extinct, ivorybill woodpecker). Also called the Indian hen and log cock, a pileated woodpecker has a solid black back and tail and a conspicuous red crest for which it is named (from the Latin word for cap, *pilleus*). The female is similar to the male but does not have red cheek patches



and has less red in the crest. Flight is strong, with irregular wing flapping accompanied by white flashing of wing undersurfaces. Foods include ants, beetles, wood-boring larvae and wild fruits. Pileated woodpeckers inhabit mature coniferous and deciduous forests, valley woodlots and remote mountain territory. Nest: a new hole excavated each year in the same nest area, 15 - 70 feet up (average 45 feet). The entrance hole is usually oval, and the cav-

ity is 10 - 24 inches deep. Eggs: 3 or 4, incubated 18 days. These birds are uncommon residents in all seasons. They do not migrate but breed all over the eastern US and Canada. A pileated's powerful beak can break loose fist-size chunks of wood; the bird twists its head and beak as it strikes to add leverage. Pileateds cut large rectangular holes in dead trees, spars, live conifers and utility poles. They drum loudly and rapidly, then more slowly, trailing off softly at the end. Call: *wick-uh wick-uh wick-uh*, in a series; also *kuk, kuk, kuk, kuk-kuk-kuk*.

**Red-Bellied Woodpecker** (*Melanerpes carolinus*) — Length, 8 - 9 inches; wingspread, 17 inches. This woodpecker has a "ladder back" (a pattern of black and white bands like a ladder), red cap and back of neck, and a breast tinged a very light red. The female's crown is gray, the immature's entire head is brown, and the male's crown and neck are red. Foods: acorns, beechnuts, hickory nuts, grapes and corn; mulberry, poison ivy and dogwood fruits; beetles, wood-boring larvae and ants. Red-bellied woodpeckers inhabit coniferous and deciduous forests, woodlots, orchards and yards. Nest: 5 - 70 (usually less than 40) feet up a tree or utility pole. Eggs: 3 - 8, commonly four or five, with two weeks incubation. Uncommon residents in all seasons, red-bellied woodpeckers mainly occur in the southern half of the state and along the western border. They're more common south and west of Pennsylvania. Call: a low, hoarse *chuh chuh*; also a rattling noise.

**Downy Woodpecker** (*Picoides pubescens*) — Length, 5 - 6 inches; wingspread, 11½ inches. The downy — most common of the eastern woodpeckers — resembles a small hairy woodpecker, with a similar white back stripe and white breast. The male has a red patch on the back of his head, similar to that on the hairy. Bill length of the downy is less than the width of its head, while that of the hairy is equal to or greater than the width of its head. The downy's outer tail feathers are barred with black (in the hairy woodpecker, these are solid white).

Food: wood-boring larvae, moths, beetles, ants, aphids, spiders, poison ivy and dogwood fruits, berries, corn, apples and acorns. Habitat: open forests of mixed growth, orchards, suburbs and parks. Nests are usually dug in rotting wood, 3 - 50 feet above the ground and often on the underside of an exposed limb. Eggs: 3 - 6, usually four or five, incubated 12 days. The downy woodpecker is a common resident in all seasons. In winter, it can often be found in fields with dried corn stalks, or visiting suet feeders. Calls: a soft *pik* and a rattling sound.

Wildlife Notes are available from the  
 Pennsylvania Game Commission  
 Bureau of Information and Education  
 Dept. MS, 2001 Elmerton Avenue  
 Harrisburg, PA 17110-9797  
[www.pgc.state.pa.us](http://www.pgc.state.pa.us)  
 An Equal Opportunity Employer