

The tyrant flycatchers — Family Tyrannidae are found only in the New World. The family name stems from the aggressive, almost tyrannical, behavior of some of the birds in this large group of more than 400 species. most of which live in the tropics. Pennsylvania has ten species. Flycatchers are often hard to identify, even for veteran birdwatchers, because the birds are drab (the sexes are colored alike) and tend to stay among thick foliage. For all practical purposes, they are distinguishable only by their songs. Flycatchers are perching birds, members of Order Passeriformes, whose feet have three toes pointing forward and one toe pointing backward, letting them perch easily on branches.

Flycatchers catch and eat flies and many other insects, particularly flying ants, bees and wasps. In forested areas large flycatchers may specialize in larger insects, medium size flycatchers may take slightly smaller prey, and small flycatchers may zero in on the smallest insects. Such feeding stratification reduces competition and lets several species use the same area. Also, different species prefer subtly different habitats, with varying amounts and densities of undergrowth and degrees of canopy shading.

When foraging, a flycatcher sits upright on a perch, scanning its surroundings while waiting for an insect to approach. The bird darts out in swift, maneuverable flight, snatches an insect out of the air with its beak, and eats it on the spot or returns to the perch to eat the meal. Several adaptations help a flycatcher catch insects. Its drab plumage makes the waiting bird hard to see (not just by its prey, but also by hawks that hunt for flycatchers and other small birds). The

bill is flat and wide, suggesting somewhat the bills of swal-

by Chuck Fergus

lows and nightjars, although not nearly so compressed or gaping. Bristles at the corner of the mouth may function as feelers," letting a flycatcher make last-second adjustments before snapping its bill shut on prey. Keen eyesight lets a flycatcher spot insects and judge distances accurately. In addition to catching insects on the wing, flycatchers sometimes hover near foliage and pick off insects and spiders clinging to the vegetation. Some species land and catch prey on the ground. Most of our flycatchers occasionally eat berries and seeds. Of our ten breeding species, most build open cups anchored to small branches of trees and shrubs. One, the yellow-bellied flycatcher, builds an enclosed nest on the ground. The familiar eastern phoebe plasters its nest against a rock wall or on a building rafter. And the great crested flycatcher uses a tree cavity. In most cases, the female does most or all of the incubating, while the male defends the nesting territory and helps feed the young.

Flycatchers advertise their home territories using their voices; some employ a special "dawn song" given just before sunrise and rarely sung later in the day. Because many flycatchers are so similar in appearance, individuals probably recognize their own species by sound. Biologists believe that in at least several types, the distinctive song is innate, not learned, as is the case with most other birds, which learn to sing by listening to adults of their kind.

As insect eaters, flycatchers must vacate northern breeding areas in winter. They migrate at night. The various species winter in open and forested habitats along the Gulf Coast, on the Caribbean Islands, and in Central and South America. In South America, an estimated 10 percent of all birds belong to the tyrant flycatcher family. In much of their wintering range (which is probably their original or ancestral home, whence populations expanded their breeding ranges eons in the past), flycatchers are vulnerable to habitat loss and fragmentation as large forested tracts are logged or converted to agriculture.

Olive-Sided Flycatcher (Contopus cooperi) — Although once fairly common in Pennsylvania, this species may or may not breed in the state today. Its white throat and breast contrast with dark olive sides. A fairly large (seven to eight inches long), big-headed flycatcher, the olive-sided inhabits cool coniferous forests, generally near water. The male sounds a repetitive pip pip pip, plus a song that has been rendered as hic-three-beers. Individuals sit high in dead snags or branches, sally forth to catch prey — mainly wasps, winged ants and bees — and return to the perch to eat. Olive-sided flycatchers place their cup-shape nests in trees 40 to 70 feet above the ground, among dense twigs or needles; three young are usual. The main breeding range is in Canada; the species migrates north through Pennsylvania as late as mid-June and leaves again in mid-August, to winter in the rain forests of South America. This

Eastern Wood-Pewee

long-range migration has earned it the n i c k n a m e "peregrine of flycatchers."

Eastern
Wood-Pewee
(Contopus
virens) —
The eastern
wood-pewee
b r e e d s
throughout
eastern North
America from
southern Canada to
the Gulf of Mexico. It
is found in all counties in
Pennsylvania. To locate this
drab, olive-gray, sparrow-size bird, lis-

ten for the male's oft-repeated namesake call — peeo-wee — which is given throughout the day but particularly at dawn and dusk. Pewees use almost every woodland habitat, including woodlots, woods edges, mature forests (both deciduous and mixed), parks, and urban areas with shade trees. They perch in one place for an extended period, flying out to snag passing insects; one study found an average perching height of 35 feet above the ground. Pewees eat flies, beetles, small wasps, and moths. They also consume elderberries, blackberries, and fruits of dogwood and pokeweed.

Males defend breeding territories of two to six acres. Pairs begin nesting in late May. The nest is a compact cup woven of plant matter, hairs and spider silk, its outer surfaces studded with lichens; it looks like a larger version of the ruby-throated hummingbird's nest. The three eggs are incubated by the female and hatch after 12 or13 days. Both parents feed the young, which make their first flights at 14 to 18 days. Blue jays are major predators, taking both eggs and young. Most perching birds stop singing regularly in late summer, but male wood-pewees keep up their chanting until the autumn migration. The species departs from Penn's Woods in August and September, with a few individuals hanging on until October. Wood-pewees winter in the tropics from Panama to Bolivia, in shrubby woods and along forest edges.

Yellow-Bellied, Acadian, Alder, Willow, and Least Flycatchers (Empidonax species) — These small flycatchers (around five inches in length) have olive-colored backs and heads, pale breasts, and pale eye-rings and wingbars. They spend much of the day hunting from a perch. When sit-

ting, they occasionally flip their tails up and down. Extremely difficult to identify in the field, they are usually distinguished by voice and habitat.

The Yellow-Bellied Flycatcher (Empidonax flaviventris) lives in the deep shade of coniferous woods and cold bogs. A shy bird and rare in Pennsylvania, it inhabits remote uplands in a scattering of our northern coun-

ties. The call is a quiet, ascending chu-wee. The cup-shape nest is built of rootlets and mosses and is hidden on or near the ground, in a cavity among the roots of a fallen tree, in a hummock of sphagnum moss, or at the base of a conifer. The species nests mainly in Canada, as far west as the Yukon Territory, with all individuals apparently migrating through the East.

> The Acadian Flycatcher (Empidonax virescens) nests mainly in the Southeast U.S., and Pennsylvania is near

the northern limit of its range. The type, or first, example of the species was discovered near Philadelphia in 1807 by the Scottish-born ornithologist Alexander Wilson. The species is misnamed, since it does not inhabit Acadia, the former French colony centered on Nova Scotia. The Acadian flycatcher lives in moist woods near streams and requires large areas of contiguous forest. The male sounds a low, sharp *spit-chee!*

-DOUG PIFER

The Acadian often chooses a beech tree in which to build its frail, hammocklike nest; stems and grasses dangle from the nest, giving it an unkempt appearance. Acadian flycatchers winter mainly in the rain forests of Colombia and Ecuador, where they sometimes follow mass movements of army ants and prey on insects set to flight by the creeping columns.

The Alder Flycatcher (Empidonax alnorum) and the Willow Flycatcher (Empidonax traillii) were, until the 1970s, considered to be one species, Traill's flycatcher (named by John James Audubon for Dr. Thomas Traill, one of his supporters). However, the two types have different voices, use slightly different habitats, build different kinds of nests, and are reproductively isolated. The alder sings fee-bee-o and the willow fitz-bew; the alder builds a loose cup for a nest, usually within a few feet of the ground, while the willow flycatcher's nest is compact and felled, and often situated higher above ground. Both alder and willow flycatchers nest in thickets of willows, alders and other shrubs, but the willow flycatcher tends to use drier, more-open sites. In Pennsylvania, alder flycatchers nest mainly in the north, while willow flycatchers nest statewide, with the fewest records coming from the northcentral region.

The Least Flycatcher, Empidonax minibus, is the smallest of the Eastern Empidonax flycatchers and probably the most common. It lives along woodland edges and often perches in the open. The male calls out an emphatic chebeck!, accented on the second syllable. The least flycatcher eats small wasps, winged ants, midges, flies, beetles, caterpillars, grasshoppers, spiders, and berries. The species sometimes nests in loose colonies. The nest, a neat cup, is usually placed in a vertical fork of a branch in a small tree or sapling. The three to five eggs are incubated for 13 to 15 days. The least flycatcher's breeding range stretches from western Canada to Nova Scotia and south in the Appalachians to Tennessee and North Carolina. Empidonax minimum is fairly common across much of Pennsylvania, except for the southeast, where it is absent. In autumn, adults migrate ahead of juveniles to wintering grounds in Mexico and Central America.

Eastern Phoebe (Sayornis phoebe) — Anyone who has spent time at a woodland cabin has probably come to know this jaunty medium-size (six and a half to seven inches) flycatcher. Phoebes breed statewide in Pennsylvania, except in heavily urbanized areas. They eat a variety of insects, including small wasps, bees, beetles, flies and moths. They often take prey from vegetation and from the ground, and they eat seeds and berries. The female builds a nest out of mud, moss, leaves, grass and hair, tucking





the cup-shape structure into a sheltered spot beneath a rock ledge, against a stone wall, on a bridge beam or barn or porch support. A pair may use the same nest several years in a row.

The female lays four or five eggs and incubates them for around 16 days. Both parents feed the nestlings, which fledge some 16 days after hatching. Eastern phoebes typically rear two broods per summer. One of the harbingers of spring, the first male phoebes arrive around mid-March; they announce themselves with repeated *fee-bee* calls and the species' characteristic up-and-down tail-flicking. In the Northeast, populations have risen since settlement, with phoebes taking advantage of nest sites created by human construction. The species winters in the Gulf states and Mexico.

Great Crested Flycatcher (Myiarchus crinitus) — Our largest (eight to nine inches) flycatcher, the great crested sports a yellow belly, a gray breast, and rusty-red tail and wing feathers. When agitated, individuals erect a head crest. The species breeds in mature woods throughout Pennsylvania and eastern North America and can also be found in wooded suburbs, farm woodlots and orchards. Great crested flycatchers feed among the treetops, hopping from limb to limb and snapping up caterpillars, katydids, crickets, beetles and spiders, and by flapping out into openings and clearings to take moths, butterflies, beetles, bees and wasps. In late summer and fall, many wild fruits are eaten.

The call is a loud, insistent wheep! Great crested fly-catchers defend their territories against intrusions by squirrels and other birds. They nest in tree cavities, including old woodpecker holes, as well as hollow fenceposts and artificial nesting boxes. (One nest was even found in the barrel of a cannon in Gettysburg National Military Park.) Both male and female bring in grass, weeds,



bark strips, rootlets, and feathers, often building up this cushion as high as the entry hole. They have the curious habit of placing a shed snakeskin or scrap of cellophane among the nest material; some ornithologists speculate that the crinkly foreign matter may deter nest predators. Great crested flycatchers depart from Pennsylvania in September en route to wintering grounds in southern Florida and from Mexico to Colombia.

Eastern Kingbird

Eastern Kingbird (*Tyrannus tyrannus*) — This bold, aggressive flycatcher breeds in open country across North America. Look for kingbirds in scattered trees along roads and streams, orchards, fencerows and forest clearings. The bird gets its name because it dominates other birds, including many larger than itself, driving them away from its territory. Of all the flycatchers, kingbirds are among the easiest to locate and observe. They are about eight inches long and are dark gray and white, with a white-tipped tail and a small red streak on the head. Roger Tory Peterson described the species' call as "a rapid sputter of nervous bickering notes." Kingbirds feed on beetles, wasps, bees, winged ants, grasshoppers, honeybees and many other insects.

Kingbirds often attack crows, hawks and owls, flying high in the air, getting above the larger birds, and diving at them repeatedly. After driving off an adversary, a kingbird may perform a display known as "tumble flight," in which it glides back to the earth in stages, sometimes tumbling in midair. After mating, the female does not let the male help her build the nest and may actually drive him away until after the eggs hatch. The nest is a bulky cup seven to 30 feet-up in a shrub, tree or snag. The two to five eggs hatch after 16 days. Both parents feed the nestlings, which can fly after around 17 days; they may be fed by their parents for a month after fledging, with family members sounding rapid kitterkitter calls back and forth. Kingbirds have a very different lifestyle on their wintering range in South America, where they coexist in flocks and switch to a diet of berries.

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

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