

# EASTERN PHOEBE - SAYORNIS PHOEBE

**Taxonomy:** Kingdom: Animalia Phylum: Chordata Class: Aves Order: Passeriformes Family: Tyrannidae Genus: Sayornis  
Species: S. phoebe

## **Habitat:**

**Biomes:** Eastern Phoebe's breed in wooded areas (particularly near water sources) that provide nesting sites—typically human-built structures such as eaves of buildings, overhanging decks, bridges, and culverts. Before these sites were common, phoebes nested on bare rock outcrops and still do occasionally. They seem to choose nest sites with woody understory vegetation nearby, possibly to make the nest site less visible or to provide perches near the nest for the adult. On migration they use wooded habitats and show somewhat less of an association with water. During winter, Eastern Phoebe's occur in deciduous woods, more often near woodland edges and openings than in unbroken forests.

## **Distribution:**

**In US:** This tyrant flycatcher breeds in eastern North America, although its normal range does not include the southeastern coastal United States. It is migratory, wintering in the southernmost United States and Central America. It is a very rare vagrant to western Europe.

**In Other Countries:** Great Britain, NONE

**Holistic Description:** One of our most familiar eastern flycatchers, the Eastern Phoebe's raspy "phoebe" call is a frequent sound around yards and farms in spring and summer. These brown-and-white songbirds sit upright and wag their tails from prominent, low perches. They typically place their mud-and-grass nests in protected nooks on bridges, barns, and houses, which adds to the species' familiarity to humans. Hardy birds, Eastern Phoebe's winter farther north than most other flycatchers and are one of the earliest returning migrants in spring.

**Species Richness:** NO SUBSPECIES

**Population Dynamic:** CHECK THREATS

## **Evolution and Systematics:**

**Evolution:** Late Pleistocene or Holocene records for Sayornis phoebe from Alabama, Illinois, Missouri, and Virginia.

**Systematics:** The genus Sayornis is in the same subfamily, Fluvicolinae, as the Contopus pewees, Empidonax flycatchers, and various Neotropical genera, although within the subfamily the genus' closest relative may be Pyrocephalus rubinus, the Vermilion Flycatcher. NO HYBRIDIZATION.

**Number of Species:** NO SUBSPECIES

**Number of Genera:** NO SUBSPECIES

## **Physical Characteristics:**

**Size and Length:** Length: 5.5-6.7 in (14-17 cm) Weight: 0.6-0.7 oz (16-21 g)

**Wingspan:** 10.2-11.0 in (26-28 cm)

**Coloration:** The Eastern Phoebe is brownish-gray above and off-white below, with a dusky wash to the sides of the breast. The head is typically the darkest part of the upperparts. Birds in fresh fall plumage show faint yellow on the belly and whitish edging on the folded wing feathers.

**General Body Features:** The Eastern Phoebe is a plump songbird with a medium-length tail. It appears large-headed for a bird of its size. The head often appears flat on top, but phoebes sometimes raise the feathers up into a peak. Like most small flycatchers, they have short, thin bills used for catching insects.

**Special Features of the Body:** NONE

**Special Features of the Head and Sensory Organs:** NONE

**Dentition:** BEAK/LAMELLAE/GIZZARD

**Special Features of the Limbs and Digits:** Three toes in the front and one toe in the back make perching easy for this Eastern Phoebe.

**Any Special Internal Anatomy:** Eastern Phoebe's make extensive use of artificial nest sites, often building their nests beneath eaves, porches, bridges and culverts—an adaptation that has allowed this species to expand its range in the midwestern and southeastern United States.

**Sexual Dimorphisms:** Males tend to be larger and darker than females, but sexes not reliably distinguished by size or plumage. By early summer, bellies of females become lead gray through wear, a character that remains until the Prebasic molt.

**Differences Between Juvenile Stage and Adult:** Juveniles have buff wing bars; young birds in first Basic plumage may retain narrow or partial wing bars. White areas of breast tend to be smaller and grayer than those of adults. Other characteristics are less evident (often only visible in hand) and more variable.

**Behavior:**

Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: Eastern Phoebe sit alertly on low perches, often twitching their tails as they look out for flying insects. When they spot one, they abruptly leave their perch on quick wingbeats, and chase down their prey in a quick sally—often returning to the same or a nearby perch. Less often, they hover to pick insects or seeds from foliage. Phoebes rarely occur in groups, and even mated pairs spend little time together. Males sing their two-parted, raspy song throughout the spring and aggressively defend their territory from others of their Eastern Phoebes, though they tolerate other species. Both sexes, but particularly the female, attempt to defend the nest against such predators as snakes, jays, crows, chipmunks, mice, and House Wrens.

Locomotion: Eastern Phoebes hop when they move on a flat surface, but this is an exceedingly rare event. The birds rarely even move from limb to limb in vegetation or even pivot on a perch. Movement from one perch to another is accomplished via flight. Flight is direct, non-undulating, and with steady wing beats. The birds hover occasionally when feeding, nest-building, or rebuffing a predator. Flight to the nest is a low swoop, close to the ground, with a sudden upsweep to the nest rim; leaving the nest is by the reverse procedure, a free-fall with a leveling out 0.5 m or less from the ground.

Communication and Perception: Males sing a raspy, two-parted song that gives them their name: "fee-bee." It lasts about half a second. They also sing a variant of this song with a stutter or two between the two syllables; this is more often heard during or after aggressive interactions.

Home Range: A highly territorial species; territory centers on the nest site; because they defend the surrounding feeding area as well. When nests are on rock outcrops, placement is sometimes closer than is normally observed on structures. Concurrent active nests on outcrops have been reported 13 m.

Degree of Sociality: Solitary year-round, although they tolerate a mate during the breeding season. Interaction with or acknowledgment of other species, except for predators, is minimal; other species that come too close to the actual nest may elicit an aggressive reaction.

Level of Aggression: Especially early in the breeding season, significant territorial disputes occur among males, involving much vocalization and sometimes spirited chases, rarely physical contact. Combatants may lock bills, tumble to the ground, then chase. Intra-pair aggression is common, with a female regularly attacking her mate if he approaches her, or in apparently misdirected aggression during predator intrusions near the nest.

Migration: Short to medium distance migrant. Eastern Phoebes are among the first migrants to return to their breeding grounds in spring—sometimes as early as March. They migrate south in September–November, finding wintering habitat in the central latitudes of the United States south to Mexico.

**Predators:**

Predators: Northern Saw-whet Owl, Merlin, Sharp-shinned Hawk, Raccoons, Black Rat Snake, Coyote, Blue Jay, American Crow, Eastern Chipmunk, White-footed Mouse, House Wren.

Anti-Predator Defenses: Response of adults to predators varies among individuals, from apparent indifference (frequent in egg stage) to aggressive scolding with the Chip Call (common) and flights at the intruder (rare but most frequent in nestling stage). The female is much more aggressive toward potential predators than the male, and her excited Chip Calls may or may not attract the male, which, even upon arrival, may actively join in the aggression or patrol at a distance with an occasional chip. No distraction displays have been observed or reported. Tail-pumping may be a predator avoidance behavior, notifying potential predator that it has been detected.

**Diet and Nutrition:**

Adult Diet: Flying insects make up the majority of the Eastern Phoebe's diet. Common prey include wasps, beetles, dragonflies, butterflies and moths, flies, midges, and cicadas; they also eat spiders, ticks, and millipedes, as well as occasional small fruits or seeds.

Juvenile Diet: ^^^^^^

Special Adaptations for Getting Prey: Flycatching the principal mode of feeding; large quantities of flying insects in diet. Also pursues flying insects to the ground, captures ground-dwelling invertebrates by pouncing, and picks invertebrates from leaves and twigs while hovering.

**Reproduction:**

Mode of Reproduction: Monogamous

Mating System: Apparently monogamous in most cases, but observations of proximate nests and a single marked male feeding at both.

Mating Season: February to May

Courtship: No stereotypic courtship displays described.

Territoriality: HOME RANGE

**Mating:** Copulation usually takes place in the early morning when the female approaches the male during his predawn song. Several different vocalizations are used, none predictably. The male accompanies the female almost continuously during nest building, undoubtedly mate guarding. Periodic attempts to copulate during the day are always rebuffed by the female.

**Nest Placement:** Eastern Phoebe build nests in niches or under overhangs, where the young will be protected from the elements and fairly safe from predators. They avoid damp crevices and seem to prefer the nests to be close to the roof of whatever alcove they have chosen. Nests are typically less than 15 feet from the ground (in a few cases they have been built below ground level, in a well or cistern).

**Nest Description:** Only the female builds the nest, often while the male accompanies her. She constructs the nest from mud, moss, and leaves mixed with grass stems and animal hair. The nest may be placed on a firm foundation or it may adhere to a vertical wall using a surface irregularity as a partial foundation. The female may at first need to hover in place while she adds enough of a mud base to perch on. Nests can take 5–14 days to build and are about 5 inches across when finished. The nest cup is 2.5 inches across and 2 inches deep. Unlike most birds, nests are often reused in subsequent years—and sometimes used by Barn Swallows in some years.

**Egg-Laying:** Clutch Size: 2-6 eggs Number of Broods: 1-2 broods Egg Length: 0.7-0.8 in (1.8-2.1 cm) Egg Width: 0.6-0.7 in (1.4-1.7 cm) Incubation Period: 15-16 days Nestling Period: 16-20 days Egg Description: White, sometimes speckled with reddish brown

**Hatching and Incubation/Gestation:** Helpless, eyes, closed, with sparse gray down.

**Development:** ALTRICIAL. The eyes are closed, and hatchlings are naked except for very sparse gray down. Eastern Phoebe young have an average of 337 neossophtes in 20 tracts. Skin is a deep pink, which fades after a day. They are capable of tee begging vocalization and have an orange gape with yellow gape flanges.

**Parental Care:** Brooding is largely a continuation of incubation, although the length of attentive periods decreases and their number increases. Females continue to brood young periodically for at least 8 d, with attentive periods gradually decreasing with time and varying inversely with ambient temperatures. Both adults feed young, beginning with the hatching of the first one. Females feed young more than males do; although ratios vary greatly.

**Lifespan:** Up to 10 years.

#### **Conservation:**

**Official Federal Status:** Least Concern

**Special Statuses in Individual States:** NONE

**Threats:** Eastern Phoebe populations were stable overall between 1966 and 2015, with small declines in Canada, and small increases in the U.S., according to the North American Breeding Bird Survey. Partners in Flight estimates a global breeding population of 32 million with 76% spending some part of the year in the U.S., 33% wintering in Mexico, and 24% breeding in Canada. The species rates an 8 out of 20 on the Continental Concern Score. Eastern Phoebe is not on the 2016 State of North America's Birds' Watch List. Historically, phoebe numbers and range increased as people spread across the landscape and built structures the birds could use as nest sites. Many people enjoy having phoebes nesting nearby, but sometimes homeowners remove nests out of concerns over sanitation or general appearance, as also happens with birds such as American Robins and Barn Swallows. Even if there are suitable structures for nest sites, phoebes also depend on low woody plants for foraging perches, so clearing of understory plants can reduce habitat quality for them. Nest sites can be created in large circular culverts by adding nest platforms, and these have proven to be readily adopted by phoebes.

**Conservation Efforts:** ^^^^^

#### **Extra Facts:**

1. In 1804, the Eastern Phoebe became the first banded bird in North America. John James Audubon attached silvered thread to an Eastern Phoebe's leg to track its return in successive years.
2. The use of buildings and bridges for nest sites has allowed the Eastern Phoebe to tolerate the landscape changes made by humans and even expand its range. However, it still uses natural nest sites when they are available.
3. Unlike most birds, Eastern Phoebes often reuse nests in subsequent years—and sometimes Barn Swallows use them in between. In turn, Eastern Phoebes may renovate and use old American Robin or Barn Swallow nests themselves.
4. The Eastern Phoebe is a loner, rarely coming in contact with other phoebes. Even members of a mated pair do not spend much time together. They may roost together early in pair formation, but even during egg laying the female frequently chases the male away from her.
5. The oldest known Eastern Phoebe was at least 10 years, 4 months old. It had been banded in Iowa in 1979, and was found in 1989 in Alberta.

**Notable Species:** NONE