

BLACK PHOEBE - SAYORNIS NIGRICANS

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

Habitat:

Biomes: Black Phoebes are closely associated with water sources, so look for them on cliffs and beaches of the Pacific Ocean, along riverbanks, lake shorelines, ephemeral ponds, parks, backyards, and even cattle tanks. They require a source of mud for nest building. They winter in similar habitats (sometimes at lower elevations).

Distribution:

In US: It breeds from southwest Oregon and California south through Central and South America. It occurs year-round throughout most of its range and migrates less than the other birds in its genus, though its northern populations are partially migratory

In Other Countries: NONE

Holistic Description: The Black Phoebe is a dapper flycatcher of the western U.S. with a sooty black body and crisp white belly. They sit in the open on low perches to scan for insects, often keeping up a running series of shrill chirps. Black Phoebes use mud to build cup-shaped nests against walls, overhangs, culverts, and bridges. Look for them near any water source from small streams, to suburbs, all the way to the salt-sprayed rocks and cliffs of the Pacific Ocean.

Species Richness: 6 SUBSPECIES

Population Dynamic:

Evolution and Systematics:

Evolution: NONE

Systematics: Trend toward reduced amount of white on wing and belly from northernmost populations to those on Isthmus of Tehuantepec, Mexico, with much more restricted amount of white south of there to w. Panama. Abrupt reversal of this trend south of Isthmus of Panama, with birds from e. Panama south having white edging on tertials, inner primaries, and base of outer rectrices. Trend toward more extensive white edging southward; also increased body size north to south in South America.

Number of Species: 6 SUBSPECIES

Number of Genera: 6 SUBSPECIES

Physical Characteristics:

Size and Length: Length: 6.3 in (16 cm) Weight: 0.5-0.8 oz (15-22 g)

Wingspan: 27-28 cm

Coloration: Black Phoebes are mostly sooty gray on the upperparts and chest, with a slightly darker black head. The belly is clean white, and the wing feathers are edged with pale gray.

General Body Features: Black Phoebes are small, plump songbirds with large heads and medium-long, squared tails. They often show a slight peak at the rear of the crown. The bill is straight and thin.

Special Features of the Body: NONE

Special Features of the Head and Sensory Organs: The sharp, pointed beaks assist them in catching the insects with an accurate target and breaking the shells before consuming.

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 Black Phoebe.

Any Special Internal Anatomy: NONE

Sexual Dimorphisms: The sexes are identical and plumage does not vary seasonally. Male and female during breeding season (Mar-Aug) distinguished by cloacal protuberance (male) and brood patch (female). Males are slightly larger and weigh more than females.

Differences Between Juvenile Stage and Adult: Juvenile has buffy cinnamon feather tips on body and buffy cinnamon wing-bars. Iris brown; legs, feet, and mandibles black. Juveniles have browner plumage, cinnamon-brown feather tips on their body, and brown wing-bars.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: Black Phoebes are primarily monogamous and pairs stay together for as long as 5 years. Experienced breeders stay on or near their territories from previous years and often raise two broods in a single season. When courting, males approach a perched female with showy, fluttering flight and hover beside her, chasing her if she leaves her perch. He also performs a

display flight near a nest site, in which he fans his tail and flutters his wings, zig-zagging or spiraling upwards as high as 100 feet; he then perches in a treetop and starts to sing. Pairs aggressively defend their territories from other Black Phoebes, maintaining a distance of several hundred feet between nests. They also chase away other flycatchers and songbirds, such as Western Wood-Pewees, Rough-winged Swallows, Barn Swallows, House Finches, White-crowned Sparrows, Brewer's Blackbirds, and Yellow-rumped Warblers. To show aggression, they flick or droop their wings, raise their crests, and pump or fan their tails. When threatened by aerial nest predators—such as Cooper's Hawks, Northern Harriers, American Kestrels, Loggerhead Shrikes, and Western Scrub-Jays—Black Phoebes usually sound an alarm call and flee. They are more assertive against terrestrial predators like red foxes, coyotes, and ground squirrels, sometimes swooping down and snapping their bills to deter an intruder. Black Phoebes are nonsocial outside of the breeding season.

Locomotion: The phoebe can be recognized by a characteristic "tail-wagging" motion, in which the tail is lowered and the tail's feathers fanned out. It accomplishes almost all locomotion by flight, which is direct, with steady wing beats.

Accomplishes most locomotion via flight; rarely moves on ground or even pivots or adjusts feet while perched. Rarely hops on ground, but occasionally lands on ground near potential prey and hops several centimeters to capture prey item. Flight movements are direct, with steady wing beats and no undulations in flight path. Hovers during cold periods while gleaning prey from various substrates (e.g., fishing over water) or sometimes within clouds of flying insects; also during Nest-Site-Showing Display and during vertical zigzag flight display during breeding season.

Communication and Perception: Black Phoebes give tsip calls throughout the year during flight, foraging, and predator interactions. When chasing mates or intruders, they give a tweedle-deedle-eeek call. During the breeding season males address females with soft, wheezy chatters.

Home Range: Territories are aggressively defended against conspecific intruders. Minimum distances reported between nests range from 40 to 160 m. Territorial maintenance consists primarily of mutual avoidance, except during establishment of territories when direct confrontations, flight displays, and chases take place with regularity.

Degree of Sociality: Nonsocial, except in association with mate during breeding season. In small percentage of breeding territories, apparently unpaired adult birds are present during breeding period; their role is unknown. May occasionally forage near previous year's mate during nonbreeding season.

Level of Aggression: Aggressive displays include wing-flicking, wing-drooping, crest-raising, tail-pumping, tail-fanning, and chasing. Territorial disputes sometimes involve face-offs between birds after chases, if intruder remains. Birds may flutter from perch to perch maintaining separation of 0.5–2.0 m, crests erected, tails pumping and fanning briskly; wings are fluttered during movements and drooped while sitting; movements of <1 m occur every 3–4 s, and combatants may move all over bush or tree in 1 minute or less. Dispute may be settled with rush and chase by territorial bird. Chases normally include Bipeaked Vocalizations.

Migration: Resident or short-distance migrant. Black Phoebes don't leave their breeding ranges entirely, but their numbers increase in winter in the southern parts of their range, indicating some individuals migrate southward. Some Black Phoebes move up to higher elevations for the breeding season and then back downslope for the rest of the year.

Predators:

Predators: Cooper's Hawk, Northern Harriers, American Kestrels, Scrub Jays, Corvids, Loggerhead Shrikes, Californian Ground Squirrels.

Anti-Predator Defenses: Incubating birds, when disturbed by potential nest predator, frequently leave nest and perch at a distance (5–10 m away) with little vocal activity. During nestling stage, adults respond to potential predators with Simple Vocalization and usually patrol (10–12 m away) while calling frequently; may swoop down at terrestrial predators and snap bill. No distraction displays reported.

Diet and Nutrition:

Adult Diet: Black Phoebes eat insects and other arthropods almost exclusively. Their diet includes bees, wasps, flies, beetles, bugs, grasshoppers, damselflies, dragonflies, termites, and spiders. Black Phoebes perch within about 7 feet of the ground or the water and keep a sharp eye out for prey. Once they spot something, they sally from perches to either take prey from the air, glean it as it crawls, or snatch it from the surface of a pond. They are capable of seizing small minnows from just below the water's surface. On rare occasions they eat small berries. They feed mainly during the day but occasionally hunt for insects around electric lights in the evening.

Juvenile Diet: ^^^^^^^

Special Adaptations for Getting Prey: Forages throughout day and occasionally in evening around electric lights. Usually initiates flight from low perch. Visually locates prey from perch and pursues it until capture, in short (<2.0 m), direct flights. Eats small prey in flight; carries larger prey to perch, beats it, and then swallows it whole. Individuals move among perches while foraging and return to same perch infrequently.

Reproduction:

Mode of Reproduction: Monogamous

Mating System: Primarily monogamous; female probably chooses mate. Polygyny uncommon; out of several hundred nestings, only 1 verified case and 1 suspected case. Infrequent switching of sites and mates by either sex; pair bonds may last as long as 5 yr.

Mating Season: Mid-Feb to Late-May

Courtship: Courting males engage in Nest-Site-Showing Displays mid-Feb–early Mar. Male flies to nest site and hovers for 5–10 s, holding body vertically and fanning tail in front of old nest or section of bare wall; female often immediately follows male, either landing on old nest or hanging from wall of nest site. Frequently, male repeatedly hovers and lands on old nest before returning to perch above nest site. Flight displays often start with male leaving perch at nest site and hesitantly flying almost straight up, with tail fanned and wings fluttering; may also make series of short zigzags or spirals. Climb sometimes accompanied by Bipeaked Vocalizations. Climb ends with bird reaching plateau at 20–30 m from ground; bird then either flutters to top of nearby tree, singing Primary Song.

Territoriality: HOME RANGE

Mating: NONE

Nest Placement: The male shows possible nest sites to the female by hovering in front of them for 5-10 seconds each. The female makes the final decision about where to nest. Black Phoebes originally nested in places like sheltered rock faces, streamside boulders, and tree hollows but have adjusted well to human-made structures such as building eaves, irrigation culverts, and abandoned wells. They often reuse the same site (or even the same nest) year after year.

Nest Description: The nest is a mud shell lined with plant fibers, plastered to a vertical wall within an inch or two of a protective ceiling. The nest measures 3–8 inches from top to bottom and 3–7 inches across, with an inner cup that's about an inch deep and 2.5 inches across. Nests are usually 3-10 feet up, over the water or ground. Even those built over the ground are always located near sources of water and mud. The female does all of the nest construction (or refurbishment), finishing in 1–3 weeks.

Egg-Laying: Clutch Size: 1-6 eggs Number of Broods: 1-3 broods Egg Length: 0.7-0.8 in (1.7-2 cm) Egg Width: 0.5-0.6 in (1.3-1.5 cm) Incubation Period: 15-18 days Nestling Period: 18-21 days Egg Description: Pure white and glossy, sometimes with light spots around the large end.

Hatching and Incubation/Gestation: Helpless and lightly covered with gray down, with eyes closed.

Development: Hatchlings altricial, eyes closed; mass averages 1.5 g (n = 24), approximately 71% of fresh-egg mass. Behaviors observed soon after hatching include rhythmic pedaling of legs, grasping motions with claws, gaping and raising of heads, and weak peeping. Nestlings 1 d old usually rest on abdomen and head with bill pointing posteriorly and tucked beneath belly. Skin and tarsi colored orange flesh; viscera clearly visible through skin of abdomen.

Parental Care: Brooding primarily by female, but in instances where male incubated, male may share brooding duties with female. Both adults feed nestlings; carry insects to nest in bill. Feed nestlings by regurgitation for first 5 d after hatching.

Lifespan: Up to 8 years old.

Conservation:

Official Federal Status: Least Concern

Special Statutes in Individual States: NONE

Threats: Black Phoebes are numerous and their numbers steadily increased from 1966 to 2014, according to the North American Breeding Bird Survey. Partners in Flight estimates a global breeding population of 6 million, with 18% spending some part of the year in the U.S., and 50% in Mexico. They rate a 9 out of 20 on the Continental Concern Score and are not on the 2014 State of the Birds Watch List. Black Phoebes have responded well to the increase in suitable nest sites brought along by human development, including buildings, culverts, and bridges. Their close association with water means it's important to protect water quality and wetland habitats.

Conservation Efforts: ^^^^

Extra Facts:

1. Although it mostly eats insects, the Black Phoebe sometimes snatches minnows from the surface of ponds. It may even feed fish to nestlings.
2. The male Black Phoebe gives the female a tour of potential nest sites, hovering in front of each likely spot for 5 to 10 seconds. But it's the female who makes the final decision and does all the nest construction.
3. Black Phoebes don't usually venture outside their breeding and wintering areas, but on rare occasions they are seen as far east as Florida. One misplaced bird showed up in Minnesota in the fall.

4. One pair of Black Phoebes got some unwanted house guests when a pair of House Finches moved into their nest. The finches added 5 eggs to the 6 phoebe eggs already there, and the two females alternated incubation duties for an entire week before both species abandoned the nest.
5. The oldest Black Phoebe on record was at least 8 years old when it was recaptured and released during banding operations in California.

Notable Species:

Subspecies	Range	Appearance
<i>S. n. semiatra</i>	Southwest United States to western Mexico, including Baja California.	Most white on belly of all subspecies; pale edging on wings and tail.
<i>S. n. nigricans</i>	Nominate subspecies; northeast, central, and southern Mexico.	Less white on belly than <i>semiatra</i> ; white forms an inverted "U" instead of "V".
<i>S. n. aquatica</i>	Chiapas, Mexico, through Nicaragua.	White only on midbelly and vent.
<i>S. n. amnicola</i>	Costa Rica and Chiriquí Province, Panama.	Darkest subspecies; less white on abdomen.
<i>S. n. angustirostris</i>	Eastern Panama south through central Bolivia. Sometimes considered separate species with <i>S. n. latirostris</i> .	Extensive white edging on primary and tertial rectrices.
<i>S. n. latirostris</i>	Bolivia and northwest Argentina. Sometimes considered separate species with <i>S. n. angustirostris</i> .	Extensive white edging on rectrices and underwing lining.