

PAINTED BUNTING - PASSERINA CIRIS

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Passeriformes Family: Cardinalidae Genus: Passerina
Species: P. ciris

Habitat:

Biomes: Painted Buntings breed in semi-open habitats with scattered shrubs or trees. Birds from the south-central U.S. breeding population use abandoned farms, strips of woodland between overgrown fields, brushy roadsides or streamsides, and patches of grasses, weeds, and wildflowers. Individuals of the coastal Southeast population breed in scrub communities, wooded back dunes, palmetto thickets, edges of maritime hammocks, hedges, yards, fallow fields, and old citrus groves. The two breeding populations also have separate wintering grounds, though both gravitate toward high grass, shrubby overgrown pasture, and thickets. Eastern breeders winter in shrubby or grassy habitats in Florida and the northern Caribbean. Birds from the south-central U.S. winter in similar habitats in southern Mexico and Central America.

Distribution:

In US: The breeding range is divided into two geographically separate areas. These include southern Arizona, southern New Mexico, southern and eastern Texas, Oklahoma, Arkansas, Louisiana, northern Florida, coastal Georgia, the southern coast and inland waterways such as the Santee River of South Carolina and northern Mexico. They winter in South Florida, Cuba, the Bahamas, along both coasts of Mexico and through much of Central America. Occasionally, they may be vagrants further north, including to New York, Pennsylvania, and New Jersey.

In Other Countries: ^^^^^^

Holistic Description: With their vivid fusion of blue, green, yellow, and red, male Painted Buntings seem to have flown straight out of a child's coloring book. Females and immature are a distinctive bright green with a pale eyering. These fairly common finches breed in the coastal Southeast and in the south-central U.S., where they often come to feeders. They are often caught and sold illegally as cage birds, particularly in Mexico and the Caribbean, a practice that puts pressure on their breeding populations.

Species Richness: 2 SUBSPECIES

Population Dynamic: The male painted bunting was once a very popular caged bird, but its capture and holding is currently illegal. Trapping for overseas sale may still occur in Central America. Populations are primarily declining due to habitat being lost to development, especially in coastal swamp thickets and woodland edges in the east and riparian habitats in migration and winter in the Southeastern United States and Mexico. They are categorized as near threatened by the IUCN and are protected by the U.S. Migratory Bird Act.

Evolution and Systematics:

Evolution: Pliocene fossil from Chihuahua, Mexico, attributed to Passerina, but not identified to any extant species with certainty.

Systematics: The painted bunting was originally described by Carl Linnaeus in his eighteenth-century work Systema Naturae. There are two recognized subspecies of the painted bunting. Traditionally, two subspecies have been recognized: the paler, smaller P. c. pallidior in the West and the darker, larger P. c. ciris in the East. Nevertheless, subspecies differences are weak, with plumage color and size overlapping considerably and varying in a smoothly clinal manner.

Number of Species: 2 SUBSPECIES

Number of Genera: 2 SUBSPECIES

Physical Characteristics:

Size and Length: Length: 4.7-5.1 in (12-13 cm) Weight: 0.5-0.7 oz (13-19 g)

Wingspan: 7-9 inches

Coloration: Males are stunningly colored with blue heads, red underparts, and green backs. Females and immature are a uniform, bright yellow-green overall, with a pale eyering. Though they are basically unpatterned, their overall color is greener and brighter than similar songbirds.

General Body Features: Painted Buntings are medium-sized finches with stubby, thick, seed-eating bills.

Special Features of the Body: NONE

Special Features of the Head and Sensory Organs: Bunting has eyes on the sides of its head. This arrangement gives these birds very little binocular vision, but gives them better vision all around them, which allows them to watch for predators. They get the whole picture all at once. This type of sight is called monocular vision.

Dentition: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: NONE

Any Special Internal Anatomy: NONE

Sexual Dimorphisms: The male painted bunting is often described as the most beautiful bird in North America and as such has been nicknamed nonpareil, or "without equal". Its colors, dark blue head, green back, red rump, and underparts, make it extremely easy to identify, but it can still be difficult to spot since it often skulks in foliage even when it is singing. The plumage of female and juvenile painted buntings is green and yellow-green, serving as camouflage. Once seen, the adult female is still distinctive, since it is a brighter, truer green than other similar songbirds.

Differences Between Juvenile Stage and Adult: The plumage of female and juvenile painted buntings is green and yellow-green, serving as camouflage.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: Males vigorously defend territories of about 3 acres, fighting other males by pecking, grappling, and striking each other with their wings. Their fights end with lost feathers, wounds, eye damage, and sometimes death. A male may also dive at and hit a flying female, driving her to the ground and pulling at her feathers. When courting, however, the male goes to great lengths to ingratiate himself with his prospective mate. Among other displays, he spreads his feathers like a miniature male turkey, while the female pecks at the ground. The species is mostly monogamous, but occasionally two females will nest on one male's territory. Though severely territorial during the breeding season, Painted Buntings may form small flocks on the wintering grounds, often joining other seed-eating species.

Locomotion: Generally hops, but may walk in performing some displays.

Communication and Perception: The Painted Bunting's song is a series of short, musical phrases of thin, sweet, high-pitched notes lasting about 2 seconds. When establishing territorial boundaries in the spring, a male may sing 9–10 songs per minute from several perches within his territory. Neighboring males often sing back and forth at each other, a territorial behavior called countersinging.

Home Range: In Oklahoma, 1 measured territory was 1.13 ha, a size similar to "several" others. Vigorously defends territories and chases trespassing males; vigorous response to intruders has served as means to capture males by using cage birds or mounts as decoys for traps.

Degree of Sociality: Strongly territorial at beginning of breeding season. Juveniles form flocks when becoming independent of adult care; by Aug, flocks >50 birds noted in Georgia. Adults may be found in small flocks on overwintering grounds.

Level of Aggression: Male-male fighting—involving pecking, buffeting with wings, and grappling—can occur in spring, ending in lost feathers, wounds, eye damage, and sometimes death. Flutter-Up Display. Aerial interaction between males; birds approach each other with feet extended to grapple; may ascend with audible wing beats as high as 5 m before dropping to ground to disengage. Male dives and hits flying female, drives her to ground and while on her back, pulls at her remix or rectrix for several seconds before flying off; 7 of 8 observed instances involved female other than mate.

Migration: Short- to medium-distance migrant. Western populations migrate to staging areas in Arizona and northwestern Mexico, where they molt before continuing to Central America—an unusual phenomenon for a songbird. Eastern populations molt on the breeding grounds and migrate to southern Florida and some Caribbean islands. Painted Buntings migrate at night.

Predators:

Predators: Common predators at the nest of eggs, young, and brooding females are large snakes, including coachwhip snakes, eastern kingsnakes, eastern racers and black rat snakes. Bird-hunting raptors, including short-tailed hawks, Accipiter hawks, and even the small passerine loggerhead shrike, may hunt painted buntings, including the conspicuous breeding-plumaged male

Anti-Predator Defenses: Male Painted Buntings seen to follow Blue Jays (*Cyanocitta cristata*) and Common Grackles with loud calls, when these potential predators were near bunting nests. Adults gave Alarm Notes and "frantic flutterings" in response to a coachwhip snake. When disturbed at the nest, female silently leaves, but male may respond from cover with "sharp, scolding, jerky manner".

Diet and Nutrition:

Adult Diet: Painted Buntings eat seeds for most of the year, switching to mostly insects in the breeding season. They forage on the ground for seeds of bristle grass, pigweed, wood sorrel, spurge, panic grass, St. John's wort, sedge, dock, pine, rose, wheat, or fig. They may fly up to grab a plant stem and drag it to the ground, holding it in place with one foot while eating the seeds. During the breeding season they catch grasshoppers, weevils and other beetles, caterpillars, bugs, spiders, snails, wasps, and flies. In addition to ground foraging, in the breeding season they also forage in marshes and in trees, sometimes over 30 feet off the ground. The buntings may pull invertebrates from spiderwebs, or even dive straight through a web to steal a spider's prey.

Juvenile Diet: Caterpillars, grasshoppers, and small beetles

Special Adaptations for Getting Prey: Diurnal forager; uses variety of methods to acquire food. When collecting seeds from weak-stemmed herbs, flies up from the ground to grab the stem with its bill and then drags it back down; then places one foot on the stem and eats the seeds.

Reproduction:

Mode of Reproduction: Monogamous

Mating System: Mostly monogamous, but some polygyny. In Oklahoma, only 1 instance of 2 females nesting on territory of a single male.

Mating Season: April to May

Courtship: Male gives Courtship Display on ground (mostly), where he “flattens himself out, spreads his wings and tail, and fluffs his plumage much like a miniature turkey gobbler. The display actions are rather jerky and stiff, with alternating periods of activity and stillness”. Male hops about close to female with body low on flexed legs, neck stretched, and head up and back, fluttering wings.

Territoriality: HOME RANGE

Mating: Wing-Quiver Display increases, and wings are alternately extended above the back; male walks toward the female with both wings extended over the back, and when <1 m from the female flies to and hovers over her; either copulation follows or the female drives off the male. Female crouches with head back and tail up and forward.

Nest Placement: Both members of a pair search through dense foliage for nest sites. They usually choose a spot 3–6 feet off the ground—sometimes as high as 50 feet when there is no low vegetation—with nearby perches and open feeding grounds. Common nest plants include Spanish moss, mulberry, mesquite, elm, Osage-orange, greenbrier, oak, myrtle, and pine.

Nest Description: In as little as 2 days, the female builds a well-constructed nest that is firmly attached to a supporting plant. Forming an inner cup 2 inches wide and 1.5 inches deep, she weaves together some combination of weed stems, leaf skeletons, bark strips, twigs, rootlets, grasses, and sometimes tissue paper or rag scraps. She binds the materials with cobwebs and sometimes lines the nest with horsehair.

Egg-Laying: Clutch Size: 3–4 eggs Number of Broods: 1–3 broods Egg Length: 0.7–0.8 in (1.8–2.1 cm) Egg Width: 0.6–0.6 in (1.4–1.5 cm) Incubation Period: 11–12 days Nestling Period: 9 days Egg Description: Grayish or pale bluish white, with fine speckles of brown and gray.

Hatching and Incubation/Gestation: Helpless and nearly naked, with some light down, weighing less than a tenth of an ounce.

Development: Altricial (nearly naked and helpless) and nidicolous (confined to nest). About 2 g; scant, light down.

Parental Care: Female frequently broods between feedings. Care provided by female only; identified food items included caterpillars, grasshoppers, and small beetles in s. Oklahoma, caterpillars and beetle larvae in s. Missouri.

Lifespan: The painted bunting can live to over 10 years of age, though most wild buntings probably live barely half that long. Status

Conservation:

Official Federal Status: Least Concern

Special Statuses in Individual States: NONE

Threats: Painted Buntings are still fairly common, but populations have been dropping for several decades. The North American Breeding Bird Survey estimated a decline of 62% between 1966 and 1995, but the 1966–2014 survey does not find significant decreases, suggesting that populations may have stabilized, or at least the decline has slowed, since 1995. Partners in Flight estimates a global breeding population of 13 million, with 80% spending at least part of the year in the U.S., and 51% in Mexico. The species rates a 12 out of 20 on the Continental Concern Score, and is not on the 2014 State of the Birds Watch List. Painted Bunting is listed as Near Threatened on the IUCN Red List. Eastern populations suffer from habitat loss and degradation as humans destroy swampy thickets and woodland edges for urban development. Other important sites for conservation include molt staging habitats in Arizona and northwestern Mexico. Loss of riverside thickets in those areas may be hurting western Painted Bunting populations. In addition to facing habitat destruction, Painted Buntings are popular cage birds and are often trapped on their wintering grounds and sold illegally.

Conservation Efforts: ^^^^^

Extra Facts:

1. The western population of Painted Buntings begins its fall migration before molting, molts in staging areas in northern Mexico, then continues to migrate further south. This migration-molt pattern is common among waterfowl but very rare among songbirds. In contrast to the western population, the eastern population of Painted Buntings molts on its breeding grounds before migration.

2. The French name of the Painted Bunting, *nonpareil*, means “without equal,” a reference to the bird’s dazzling plumage.
3. In 1841 John James Audubon reported that “thousands” of the colorful birds were caught every spring and shipped from New Orleans to Europe, where they fetched more than 100 times the price when sold as cage birds. They are still illegally trapped and sold in large numbers in Mexico, Central America, the Caribbean, and to a lesser extent in Florida, despite efforts by conservationists to curb illegal trade.
4. The oldest recorded wild Painted Bunting was at least 12 years old, as reported from a Florida banding study.

Notable Species:

1. *P. c. ciris* – (Linnaeus, 1758): nominate, breeds in the southeastern United States
2. *P. c. pallidior* – Mearns, 1911: breeds in south central US and northern Mexico