AMERICAN WOODCOCK - SCOLOPAX MINOR

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Charadriiformes Family: Scolopacidae Genus: Scolopax Species: S. minor

Habitat:

Biomes: Woodcocks nest in young, shrubby, deciduous forests, old fields, and mixed forest-agricultural-urban areas across the eastern United States and southern Canada. They display in forest openings and old fields in the springtime, and they often use clearings for roosting in the summer. On the western edge of their range, they may depend on moist, wooded riverside areas and wet meadows in young woodlands. Woodcocks spend the winter in similar habitats in southern part of breeding range, also moving into additional wintering habitat in Texas and on the southern edges of the Gulf States.

Distribution:

In US: This bird is a small chunky shorebird species found primarily in the eastern half of North America.

In Other Countries: NONE

Holistic Description: Superbly camouflaged against the leaf litter, the brown-mottled American Woodcock walks slowly along the forest floor, probing the soil with its long bill in search of earthworms. Unlike its coastal relatives, this plump little shorebird lives in young forests and shrubby old fields across eastern North America. Its cryptic plumage and low-profile behavior make it hard to find except in the springtime at dawn or dusk, when the males show off for females by giving loud, nasal peent calls and performing dazzling aerial displays.

Species Richness: NO SUBSPECIES

Population Dynamic: The population of the American woodcock has fallen by an average of slightly more than 1% annually since the 1960s. Most authorities attribute this decline to a loss of habitat caused by forest maturation and urban development. In 2008 wildlife biologists and conservationists released an American Woodcock Conservation Plan presenting figures for the acreage of early successional habitat that must be created and maintained in the U.S. and Canada to stabilize the woodcock population at current levels, and to return it to 1970s densities.

Evolution and Systematics:

Evolution: Nine records from late Pleistocene (0.6 million years before present) for this species from Alabama, Florida, Missouri, Tennessee, and Virginia. Carr (Carr 1981) referred fossils at Inglis, FL to the living species, which is earliest Pleistocene (1.8 mybp) in age. However, these fossils have been restudied and are not American Woodcock, but are from a new species of woodcock.

Systematics: No subspecies have been named, but note that Microptera americana Audubon, 1839, is a junior synonym of Scolopax minor. The sandpipers, family Scolopacidae, are a key component of the speciose avian order Charadriiformes. The morphologically distinct and nocturnal woodcocks, genus Scolopax, are most closely related to the snipes, genera Gallinago, Coenocorypha, and Lymnocryptes.

Number of Species: NO SUBSPECIES

Number of Genera: NO SUBSPECIES

Physical Characteristics:

Size and Length: Length: 9.8-12.2 in (25-31 cm) Weight: 4.1-9.8 oz (116-279 g)

Wingspan: 16.5-18.9 in (42-48 cm)

Coloration: They are well camouflaged in light brown, black, buff, and gray-brown tones. The face is buffy, the crown blackish. They are light gray across the neck and back, with dark-and-light patterned shoulders and brown wings. The underparts are buffy to almost orange.

General Body Features: American Woodcocks are plump, short-legged shorebirds with very long, straight bills. Their large heads, short necks, and short tails give them a bulbous look on the ground and in flight. The wings are broad and rounded compared to most other shorebirds.

Special Features of the Body: Shorebirds are designed, or adapted, to survive in open habitats. Their brown, rust, black, and white plumage makes them less conspicuous to predators. Their bi-coloration, dark on the back and lighter on the belly, further camouflages them from predators. Their light bellies blend in against the light sky when seen from below. When observed from above, by a falcon for example, their dark backs blend in with the beach or mudflat below.

Special Features of the Head and Sensory Organs: Curlews and woodcocks have extremely sensitive bills. They are tactile feeders and can “feel” their prey deep in the mud, allowing them to find food they cannot see. Their bills are highly adapted tools for finding food. Some species will probe for invertebrates in mud or water, poking their bills up and down in rapid succession like a sewing machine until they feel something to eat. Others have bills perfectly adapted to swishing through the

water to filter food from the water column. **Its large eyes are positioned high and near the back of the skull, an adaptation that enables the bird to watch for danger while probing for food.**
Dentition: BEAK/LAMELLAE/GIZZARD
Special Features of the Limbs and Digits: Shorebirds have long legs for wading. Their long toes give them the stability they need for their seemingly endless walking and running along the water's edge and in soft mud.
Any Special Internal Anatomy: Not only used for finding food, bills are used for preening as well. A special oil gland located at the base of their tails helps to keep their feathers dry. The birds spread the oil from this gland with their bills or the backs of their heads when preening themselves. The oil repels water from the feathers, keeping them warm and dry.
Sexual Dimorphisms: Females are considerably larger than males. The bill is 2.5 to 2.75 inches (6.4 to 7.0 cm) long.
Differences Between Juvenile Stage and Adult: At hatch, juvenile body mass = 12-14g; bill length = 14 mm. Indistinguishable from adults at 30 days. Juveniles in their first summer have a gray neck band and gray bills and feet. Adults lack the neck band and have feet that are pink or indistinctly colored.
Behavior:
Diurnal, Nocturnal, or Crepuscular: Mostly Nocturnal, FEEDS DURING THE DAY MOSTLY (SPRING and SUMMER)
Activity: The American Woodcock breeds early in spring, with males beginning their courtship displays—sky dancing at dawn and dusk—as early as December in the southern part of the range and as early as March in the north. Males mate with multiple females and give no parental care. The nesting female is quick to abandon a nest if it is disturbed in the early stages of incubation. Later on, she may respond to an intruder by first lying low and motionless, then flushing from the nest and feigning injury to distract the intruder. The female broods the nestlings only until they dry off; they all leave the nest together a few hours after hatching. She feeds the young for a week but they begin to probe for food on their own at 3-4 days. About a month later they become independent, moving around as individuals rather than with their siblings. Outside of the nesting season, woodcocks are generally solitary, though they may group into small clusters of 2–4 individuals. Physical contact between individuals is rare, but they may sometimes tug bills.
Locomotion: On ground, walk rather than hop; bill points down, tip close to ground surface, may help open path through dense vegetation. Occasionally, walking changes to a rocking motion, observed while birds feed when female returns to nest after having been flushed from it and when birds are "caught"/observed walking in the open. In wooded cover, bird flushes vertically, zig-zagging adeptly through branches until above obstructions, then moves forward. Upon flushing, may produce a light, quavering, whistle-like sound, likely not vocal. Legs may dangle while flushing through or dropping into dense shrubby areas. Generally terrestrial but not averse to water; may deliberately swim into deep water to bathe.
Communication and Perception: Displaying males give a repeated, buzzy, nasal peent while on the ground between flights. In the air, a displaying male chirps melodically for as long as 15 seconds as he zigzags downward from the apex of his display flight.
Home Range: No known dominance hierarchy nor minimum individual distances. Females not known to be territorial at any time, males only at localized singing ground. Singing grounds/displaying males generally loosely clustered.Not random choices of sparsely vegetated openings; same sites used by different males over years. Selection may be by choice of sites near preferred female resources.
Degree of Sociality: Usually solitary. Small and temporary aggregations may occur while roosting on night fields. No known interspecific interactions. Nests often found near passerine nests.
Level of Aggression: Physical contact rare; may occasionally tug bills. Physical aggression infrequent at occupied singing grounds: non-resident males Peent principally when resident is in Song Flight, terminating before end of Chirping. Cackling by males probably threat display. Males resort to aerial chases above singing grounds, sometimes with elaborate, steep ascents with the two birds 1–2 m apart, perhaps one or both Cackling.
Migration: Resident to short-distance migrant. Most populations migrate southward for winter, staying in North America. Some southern populations may stay in the same place year-round. Northern populations travel to and from the Gulf states following broad eastern and central flyways. They migrate during the night at a leisurely pace, singly or in small flocks.
Predators:
Predators: Snakes, Domestic Cats, Raptors, Northern Goshawk, Sharp-shinned hawk, Barred Owl, Great Horned Owl, Broad-Winged Hawk, Red-Shouldered Hawk, Short-eared Owl, Barn Owl, Mink, Weasels, Raccoons, Bobcat, and Gray Fox.
Anti-Predator Defenses: FEATURES. Long, pointed wings enable some shorebirds to fly up to 50 miles per hour. Behavioral responses to predator attacks unknown except female feigns injury, leads predator from nest or flightless young. Posterior position of eyes on head may help male detect predators while recurrently Peenting at same localized site.
Diet and Nutrition:

Adult Diet: American Woodcocks eat earthworms and other invertebrates they find in the soil, including snails, millipedes, spiders, flies, beetles, and ants. They forage by probing the soil with their long bills, which have flexible upper mandibles specialized for capturing and extracting earthworms. They sometimes rock their bodies backward and forward as they forage, shifting their weight heavily from foot to foot. The vibrations from this motion may prompt earthworms to move underground, making slight sounds that the woodcock may be able to hear or feel. They also eat small amounts of plant material, such as sedges, pigweed, and members of the rose family.
Juvenile Diet: EARTHWORMS IS THE MAIN.
Special Adaptations for Getting Prey: Long bill with flexible upper mandible is specialized for capturing and extracting earthworms. Individual likely locates surface food visually; mechanisms to locate subsurface earthworms may be tactile and auditory.
Reproduction:
Mode of Reproduction: Polygynous
Mating System: Polygynous: no pair bond; males give no parental care. Males in north continue display long after most females commence laying eggs; males may display at widely separate singing grounds. Some females visit at least 4 singing grounds before nesting and continue visits while incubating and with broods. CHECK COURTSHIP FOR SINGING GROUNDS.
Mating Season: January to April
Courtship: In Spring, males occupy individual singing grounds, openings near brushy cover from which they call and perform display flights at dawn and dusk, and if the light levels are high enough on moonlit nights. The male's ground call is a short, buzzy peent. After sounding a series of ground calls, the male takes off and flies from 50 to 100 yards into the air. He descends, zigzagging and banking while singing a liquid, chirping song. This high spiralling flight produces a melodious twittering sound as air rushes through the male's outer primary wing feathers. Males may continue with their courtship flights for as many as four months running – sometimes continuing even after females have already hatched their broods and left the nest. Females, known as hens, are attracted to the males' displays. A hen will fly in and land on the ground near a singing male. The male courts the female by walking stiff-legged and with his wings stretched vertically, and by bobbing and bowing. A male may mate with several females. The male woodcock plays no role in selecting a nest site, incubating eggs, or rearing young. In the primary northern breeding range, the woodcock may be the earliest ground-nesting species to breed.
Territoriality: HOME RANGE
Mating: NONE
Nesting: Woodcocks nest in exposed sites on the ground, usually in young upland woods. The female makes a shallow depression in the leaf and twig litter, about 5 inches across and 1.5 inches deep. In some cases she lays eggs without hollowing out a nest bowl.
Egg-Laying: Clutch Size: 1-5 eggs Egg Length: 1.4-1.7 in (3.6-4.3 cm) Egg Width: 1.1-1.2 in (2.7-3.1 cm) Incubation Period: 20-22 days Egg Description: Grayish orange with splotches of brown, violet-gray or blue-gray.
Hatching and Incubation/Gestation: Active, well developed, and covered with thick gray and brown down.
Development: Young brooded until dry; all leave the nest together within a few hours of hatch. Movements wobbly but active. Young freeze in response to disturbance. With exceptions young do not eat the first day; rely on egg yolk, which may last up to 80 h. PRECOCIAL
Parental Care: Female exclusively. Commences as young hatch and continues for a few hours until departure from the nest. Brooding rhythm is indexed by periods of inactivity of females. Young require help; take food item procured by hen from her bill. Dependent on hen during their 1st wk of life, but begin to probe for food at 3–4 d of age, evidenced by mud on bills. In captivity, chicks needed to be hand fed up to 15 d of age. Adult will feed young that are near adult size.
Lifespan: Up to 8 year of age.
Conservation:
Official Federal Status: Least Concern
Special Statuses in Individual States: NONE
Threats: The American Woodcock is fairly numerous, although it is hard to detect with standardized surveys like the North American Breeding Bird Survey or Christmas Bird Count. Best estimates from the Breeding Bird Survey suggest their populations have slowly been declining between 1966 and 2014; declines are most evident in New England, parts of the Mid-Atlantic, and Minnesota. This species is on the 2014 State of the Birds Watch List, which lists species most in danger of extinction without significant conservation action. Woodcocks are one of the few shorebirds that are still hunted. Hunting tolls have declined from about 1.5 million per year in the 1970s to about 300,000 per year in the 2010s. Hunting has not been shown to influence large-scale population trends; recent declines may be related to natural forest succession combined with

habitat loss due to development. Because they forage on the forest floor, woodcocks can accumulate pesticides in their bodies from aerial spraying against forest-insect pests. Their heavy diet of earthworms makes them vulnerable to poisoning by lead, cadmium, and other heavy metals. To prevent further population declines, people may need to focus on preserving even-aged habitats suitable for breeding, including large areas of shrubland and young forest. Woodcocks may be extending their range northward and westward, using northern coniferous forests that are being opened up by large-scale harvesting.

Conservation Efforts: ^^^^^^^^

Extra Facts:

1. The male woodcock's evening display flights are one of the magical natural sights of springtime in the East. He gives buzzy peent calls from a display area on the ground, then flies upward in a wide spiral. As he gets higher, his wings start to twitter. At a height of 200–350 feet the twittering becomes intermittent, and the bird starts to descend. He zigzags down, chirping as he goes, then lands silently (near a female, if she is present). Once on the ground, he resumes peenting and the display starts over again.
2. Wouldn't it be useful to have eyes in the back of your head? American Woodcocks come close—their large eyes are positioned high and near the back of their skull. This arrangement lets them keep watch for danger in the sky while they have their heads down probing in the soil for food.
3. The conservationist Aldo Leopold wrote that the woodcock's mesmerizing sky dances were "a refutation of the theory that the utility of a game bird is to serve as a target, or to pose gracefully on a slice of toast." His writing helped spur the mid-twentieth century conservation movement.
4. Some males display at several singing grounds and mate with multiple females. The female often visits four or more singing grounds before nesting, and she may keep up these visits even while she cares for her young. The male gives no parental care, and continues to display long after most females have laid eggs.
5. Young woodcocks leave the nest a few hours after hatching, but for their first week they depend on their mother for food. They start to probe in dirt at three or four days after hatching.
6. The woodcock is also known as the timberdoodle, Labrador twister, night partridge, and bog sucker.
7. The oldest American Woodcock on record was 11 years, 4 months old.
8. The American Woodcock probes the soil with its bill to search for earthworms, using its flexible bill tip to capture prey. The bird walks slowly and sometimes rocks its body back and forth, stepping heavily with its front foot. This action may make worms move around in the soil, increasing their detectability.

Notable Species: NO SUBSPECIES