AMERICAN ROBIN - TURDUS MIGRATORIUS

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Passeriformes Family: Turdidae Genus: Turdus

Species: T. migratorius

Habitat:

<u>Biomes</u>: American Robins are common birds across the continent. You'll find them on lawns, fields, and city parks, as well as in more wild places like woodlands, forests, mountains up to near treeline, recently burned forests, and tundra. During winter many robins move to moist woods where berry-producing trees and shrubs are common.

Distribution:

<u>In US</u>: This bird breeds throughout most of North America, from Alaska and Canada southward to northern Florida and Mexico. While robins occasionally overwinter in the northern part of the United States and southern Canada, most migrate to winter south of Canada from Florida and the Gulf Coast to central Mexico, as well as along the Pacific Coast. Most depart south by the end of August and begin to return north in February and March (exact dates vary with latitude and climate). <u>In Other Countries</u>: VAGRANT, NONE

<u>Holistic Description</u>: The quintessential early bird, American Robins are common sights on lawns across North America, where you often see them tugging earthworms out of the ground. Robins are popular birds for their warm orange breast, cheery song, and early appearance at the end of winter. Though they're familiar town and city birds, American Robins are at home in wilder areas, too, including mountain forests and Alaskan wilderness.

Species Richness: 7 SUBSPECIES

<u>Population Dynamic</u>: The American robin has an extensive range, estimated at 16,000,000 km2 (6,200,000 sq mi), and a large population of about 320 million individuals. At one point, the bird was killed for its meat, but it is now protected throughout its range in the United States by the Migratory Bird Treaty Act.

Evolution and Systematics:

Evolution: Numerous late Pleistocene and Holocene records from Virginia, Tennessee, Florida, Texas, Missouri, Nevada, Arizona. New Mexico, California.

<u>Systematics</u>: Size variation is only moderate across the species' wide breeding distribution. Bill length covaries with general size, except that birds with the proportionally longest bills belong to the isolated population in Baja California Sur. Leg length as a proportion of general size is small in Mexico and large in birds of the cool humid forests along the northern Pacific Coast. Heart and lung masses increase with altitude.

<u>Number of Species</u>: 7 SUBSPECIES <u>Number of Genera</u>: 7 SUBSPECIES

Physical Characteristics:

Size and Length: Length: 7.9-11.0 in (20-28 cm) Weight: 2.7-3.0 oz (77-85 g)

Wingspan: 12.2-15.8 in (31-40 cm)

<u>Coloration</u>: American Robins are gray-brown birds with warm orange underparts and dark heads. In flight, a white patch on the lower belly and under the tail can be conspicuous. Compared with males, females have paler heads that contrast less with the gray back.

<u>General Body Features</u>: American Robins are fairly large songbirds with a large, round body, long legs, and fairly long tail. Robins are the largest North American thrushes, and their profile offers a good chance to learn the basic shape of most thrushes. Robins make a good reference point for comparing the size and shape of other birds, too.

<u>Special Features of the Body</u>: A robin can easily recognize another robin by the characteristic bright red color of the feathers on its breast. Robins will form groups to attack predators such as Blue Jays and snakes.

<u>Special Features of the Head and Sensory Organs</u>: Thermal insulation, soft down feathers that grow close to the skin, keep birds from getting too cold or too hot.

Dentition: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: Feet and toe arrangement is highly adapted for perching.

<u>Any Special Internal Anatomy</u>: American Robins stand on the ground and use their vision to hunt. After scanning the ground for worm movement, the robin cocks its head to better focus on the worm, then will run over and grab the worm.

<u>Sexual Dimorphisms</u>: The adult female is similar but the has a paler gray crown and mantle, as well as a paler breast and significantly more white on the ventrum. The throats of females are less striped, with fewer, thinner stripes covering a smaller area. The Definitive Alternate male has deep grayish to dark-brown upperparts with a blackish head, white crescents above and below eye, and white tips on outer rectrices (most eastern populations); rich rufous underparts with white undertail coverts; and a white throat, streaked with black.

<u>Differences Between Juvenile Stage and Adult</u>: Juveniles are somewhat similar to adults, but are distinguished by black spotting on the underparts, pale spotting on the upperparts including the wing coverts, an entirely white throat, and paler head with less well defined white markings, although often with a buffy whitish supercilium.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

<u>Activity</u>: When foraging on the ground, the American Robin runs a few steps, then stops abruptly. In long grass, robins may hop or fly just above the ground powered by slow, powerful wingbeats. American Robins often find worms by staring, motionless, at the ground with the head cocked to one side. Robins sometimes fight over worms that others have caught. During fall and winter robins often roost in large flocks and spend much more time in trees. In spring, males attract females by singing, raising and spreading their tails, shaking their wings and inflating their white-striped throats. When pairs are forming in spring, you may see a display in which a male and female approach each other holding their bills wide open and touching them. American Robins are strong, straight, and fast fliers.

<u>Locomotion</u>: Running is well developed; on the ground, usually makes a short, straight run with rapid steps, pausing frequently to scan for prey and/or predators. Will hop if vegetation is too long to permit running. Does not climb. Short, low flights are common. Need more information.

<u>Communication and Perception</u>: The musical song of the American Robin is a familiar sound of spring. It's a string of 10 or so clear whistles assembled from a few often-repeated syllables, and often described as cheerily, cheer up, cheer up, cheer up, cheer up. The syllables rise and fall in pitch but are delivered at a steady rhythm, with a pause before the bird begins singing again. At dawn, the song is more rapid.

<u>Home Range</u>: Breeding territory size varies inversely with population density: 0.11–0.21 ha. Degree of territoriality may also vary with population density; as density increases territoriality may decrease. Territories established and maintained by males using a combination of song and aggressive displays. During male territorial establishment, testicular weight increases rapidly though no developing sperm occur; females experience little increase in gonadal weight and maintain winter sociality of flocking behavior. Males intimidate each other through actions such as running toward one another in a crouched posture or chasing; subtle dominance may be established by "pushing" a retreating rival with short run-and-pause movements. <u>Degree of Sociality</u>: Loosely gregarious during the breeding season; more tightly gregarious in the nonbreeding season. Flocking during winter months increases foraging success in competitive encounters over fruit supplies with other species. Under extremely cold winter conditions, known to improve foraging efficiency by defending fruit supplies against conspecifics as well as other species.

<u>Level of Aggression</u>: Males are more aggressive than females and initiate more and spend more time on aggressive interactions when they have fertilizable mates. Males are aggressive to keep other males away from their mates rather than to gain control of resources needed by females in order to attract them. Documented interactions are rare. Aggressive posturing includes crouching and lifting the tail often followed by charges.

<u>Migration</u>: Resident or short-distance migrant. Robins can be found year round almost anywhere south of Canada. Birds that breed from Canada to the north slope of Alaska leave in fall for the U.S. Some robins winter as far south as the Southwest, Mexico, and the Gulf Coast.

Predators:

<u>Predators</u>: Cooper's Hawk, Northern Goshawk, Various Snakes, Domestic Cat, Steller's Jay, American Kestrel, Clark's Nutcracker, Common Raven, Common Grackle, House Cats, Squirrel, Raccoon, Chipmunk, Blue Jay.

<u>Anti-Predator Defenses</u>: Threat displays directed at predators, such as Blue Jays and snakes, consist primarily of visual mobbing behavior and chirp and chuck vocalizations. Chirps are more likely to be included in the repertoire of birds that ultimately attack a model predator; chucks are more likely to be included in the repertoire of individuals that do not.

Diet and Nutrition:

<u>Adult Diet</u>: American Robins eat large numbers of both invertebrates and fruit. Particularly in spring and summer they eat large numbers of earthworms as well as insects and some snails. (They have rarely been recorded eating shrews, small snakes, and aquatic insects.) Robins also eat an enormous variety of fruits, including chokecherries, hawthorn, dogwood, and sumac fruits, and juniper berries. One study suggested that robins may try to round out their diet by selectively eating fruits that have bugs in them.

Juvenile Diet: CHECK PARENTAL CARE.

<u>Special Adaptations for Getting Prey</u>: When foraging for earthworms, uses a combination "Head-Cock" and "Bill-Pounce" behavior. In Head-Cocking, one eye points toward a spot on the ground, 3–5 cm directly in front of the bird, along the longitudinal axis of the body. After holding this position for a few seconds, the robin rotates and flexes its head to bring the other eye into a similar relationship with the ground. Bill-Pouncing then occurs, whereby the bill is thrust quickly into the

ground, presumably at visually detected prey, at the spot where the eyes had been directed. Individuals also use their bills to probe the ground and soil, as well as to move leaves, twigs and other objects while foraging. Robins make uncomplicated maneuvers to catch small, slow ground invertebrates and run in brief spurts to chase faster invertebrates, especially those flushed.

Reproduction:

Mode of Reproduction: Monogamous

Mating System: Socially monogamous. Information on sex ratios unavailable. More data needed.

Mating Season: April to July

<u>Courtship</u>: Generally socially monogamous throughout the season; rematings in successive years most likely due to chance. Mate choice based on plumage; both male and female robins tend to choose mates that are similar to themselves in regards to breast color.

Territoriality: HOME RANGE

<u>Mating</u>: Copulation follows dawn singing and a strutting courtship display by the male around the female on the ground, during which he spreads and elevates his tail, shakes his wings, and inflates his throat. Also associated with pair formation is Ceremonial Gaping, whereby male and female approach one another and touch (or nearly touch) widely opened bills. Courtship feeding may also occur.

<u>Nest Placement</u>: Female robins choose the nest sites, which are typically on one or several horizontal branches hidden in or just below a layer of dense leaves. Nests are typically in the lower half of a tree, although they can be built as high as the treetop. American Robins also nest in gutters, eaves, on outdoor light fixtures, and other structures. In western prairies, American Robins may build their nests on the ground or in thickets, while in Alaska they sometimes nest on buildings or cliffs.

<u>Nest Description</u>: Females build the nest from the inside out, pressing dead grass and twigs into a cup shape using the wrist of one wing. Other materials include paper, feathers, rootlets, or moss in addition to grass and twigs. Once the cup is formed, she reinforces the nest using soft mud gathered from worm castings to make a heavy, sturdy nest. She then lines the nest with fine dry grass. The finished nest is 6-8 inches across and 3-6 inches high.

<u>Egg-Laying</u>: Clutch Size: 3-5 eggs Number of Broods: 1-3 broods Egg Length: 1.1-1.2 in (2.8-3 cm) Egg Width: 0.8 in (2.1 cm) Incubation Period: 12-14 days Nestling Period: 13 days Egg Description: Sky blue or blue-green and unmarked. <u>Hatching and Incubation/Gestation</u>: Helpless at birth, mostly naked with spare whitish down.

<u>Development</u>: Hatchlings are colorful, with translucent Baryta yellow skin, through which can be seen a greenish gall bladder, purplish-red liver, and orange yolk; bill orange-pink, mouth lining light cadmium. ALTRICIAL.

<u>Parental Care</u>: Female broods young for the first few days until they develop homeothermy and protects them from inclement weather, but does not usually remain on the nest at night after the first week. Young are fed regurgitated food for the first 4 d after hatching. Food consists of soft invertebrates such as beetle grubs and parts of earthworms, but may be 30% plant material.

Lifespan: Bird banders have found that only 25% of young robins survive the first year. The longest known lifespan in the wild of an American robin is 14 years; the average lifespan is about 2 years.

Conservation:

<u>Official Federal Status</u>: Least Concern <u>Special Statuses in Individual States</u>: NONE

<u>Threats</u>: American Robins are numerous and widespread, and their populations are stable or increasing throughout their range over the last few decades, according to the North American Breeding Bird Survey. Partners in Flight estimates the global breeding population at 310 million, with 79% spending some part of the year in the U.S., 45% in Canada, and 13% in Mexico. They rate a 5 out of 20 on the Continental Concern Score and are not on the 2014 State of the Birds Watch List. Because the robin forages largely on lawns, it is vulnerable to pesticide poisoning and can be an indicator of chemical pollution.

Conservation Efforts: ^^^^^

Extra Facts:

- 1. An American Robin can produce three successful broods in one year. On average, though, only 40 percent of nests successfully produce young. Only 25 percent of those fledged young survive to November. From that point on, about half of the robins alive in any year will make it to the next. Despite the fact that a lucky robin can live to be 14 years old, the entire population turns over on average every six years.
- 2. Although robins are considered harbingers of spring, many American Robins spend the whole winter in their breeding range. But because they spend more time roosting in trees and less time in your yard, you're much less

- likely to see them. The number of robins present in the northern parts of the range varies each year with the local conditions
- 3. Robins eat a lot of fruit in fall and winter. When they eat honeysuckle berries exclusively, they sometimes become intoxicated.
- 4. Robin roosts can be huge, sometimes including a quarter-million birds during winter. In summer, females sleep at their nests and males gather at roosts. As young robins become independent, they join the males. Female adults go to the roosts only after they have finished nesting.
- 5. Robins eat different types of food depending on the time of day: more earthworms in the morning and more fruit later in the day. Because the robin forages largely on lawns, it is vulnerable to pesticide poisoning and can be an important indicator of chemical pollution.
- 6. The oldest recorded American Robin was 13 years and 11 months old.

Notable Species:

- 1. T. m. migratorius, the nominate subspecies, breeds in the US and Canada, other than down the west coast, to the edge of the tundra from Alaska and northern Canada east to New England and then south to Maryland, northwest Virginia, and North Carolina. It winters in southern coastal Alaska, southern Canada, most of the US, Bermuda, the Bahamas and eastern Mexico.
- 2. T. m. nigrideus breeds from coastal northern Quebec to Labrador and Newfoundland and winters from southern Newfoundland south through most of the eastern US states to southern Louisiana, southern Mississippi and northern Georgia. It is uniformly darker or blackish on the head, with a dark gray back. The underparts are slightly more red than those of the nominate subspecies.
- 3. T. m. achrusterus breeds from southern Oklahoma east to Maryland and western Virginia and south to northern Florida and the Gulf states. It winters through much of the southern part of the breeding range. It is smaller than the nominate subspecies. The black feathers of the forehead and crown have pale gray tips. The underparts are paler than those of the nominate subspecies.
- 4. T. m. caurinus breeds in southeast Alaska through coastal British Columbia to Washington and northwest Oregon. It winters from southwest British Columbia south to central and southern California and east to northern Idaho. It is very slightly smaller than the nominate subspecies and very dark-headed. The white on the tips of the outer two tail feathers is restricted.
- 5. T. m. propinquus breeds from southeast British Columbia, southern Alberta, southwest Saskatchewan south to southern California and northern Baja California. It winters throughout much of the southern breeding range and south to Baja California. It is the same size as or slightly larger than nominate T. m. migratorius, but paler and tinged more heavily brownish-gray. It has very little white on the tip of the outermost tail feather. Some birds, probably females, lack almost any red below. Males are usually darker and may show pale or whitish sides to the head.
- 6. T. m. confinis breeds above 1,000 m (3,300 ft) in the highlands of southern Baja California. This form is particularly distinctive, with pale gray-brown underparts. It is relatively small, and the palest subspecies, with uniform pale gray-brown on the head, face and upperparts. It usually lacks any white spots to the tips of the outer tail feathers, which have white edges. It is sometimes classed as a separate species, the San Lucas robin, but the American Ornithologists' Union regards it as only a subspecies, albeit in a different group from the other races.
- 7. T. m. phillipsi is resident in Mexico south to central Oaxaca. It is slightly smaller than propinquus but has a larger bill; the male's underparts are less brick-red than the nominate subspecies, and have a rustier tone.