GOLDEN-FRONTED WOODPECKER - MELANERPES AURIFRONS

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Piciformes Family: Picidae Genus: Melanerpes

Species: M. aurifrons

Habitat:

<u>Biomes</u>: A versatile species, occupying open to semi-open woodlands, second-growth forests, and brushlands from sea level to about 2,500 m. Found in both xeric and mesic conditions, with greater tendency toward arid communities. In xeric regions, closely associated with mesquite; also riparian corridors containing cottonwoods, oaks. Its preferred habitat is mesquite, riparian woodlands, and tropical rainforest. Also found in urban parks and suburban areas.

Distribution:

<u>In US</u>: It is distributed from Texas and Oklahoma in the United States through Mexico to Honduras and northern Nicaragua.

In Other Countries: NONE

<u>Holistic Description</u>: A stripe-backed woodpecker of Mexico and Central America, the Golden-fronted Woodpecker reaches the United States only in the brushlands and open woodlands of Texas and Oklahoma.

<u>Species Richness</u>: 12 SUBSPECIES <u>Population Dynamic</u>: CHECK THREATS

Evolution and Systematics:

Evolution: NONE

<u>Systematics</u>: Pronounced geographic variation, with strong clinal variation in the following characteristics: color of nape, frontal region (nasal tufts), and belly, ranging from yellow to red; width of black and white barring on dorsum, from narrow to broad; pattern of white on central rectrices, from black to barred with white; and size. Trends in coloration of frontal region parallel those of nape, although greatest average expression of yellow is found in e. Chiapas. Belly color varies from yellow in Texas and Mexican Plateau, red in Yucatán Peninsula, and orange in Central America, to purest yellow in e. Chiapas.

Number of Species: 12 SUBSPECIES
Number of Genera: 12 SUBSPECIES

Physical Characteristics:

Size and Length: Length: 8.7-10.2 in (22-26 cm) Weight: 2.6-3.5 oz (73-99 g)

Wingspan: 16.5-17.3 in (42-44 cm)

<u>Coloration</u>: Horizontal black and white barring across upperparts; white rump; black tail, with variable amount of white barring on outer rectrices. Yellow nasal tufts; golden orange to yellow nape; red crown-patch, usually discontinuous with nape and nasal tufts. Sides of head, breast, and flanks grayish; central abdomen yellow. Large white patch across base of primaries noticeable dorsally in flight.

General Body Features:

<u>Special Features of the Body</u>: The woodpecker's beak is strong and sturdy, with a chisel-like tip for drilling holes in wood. Woodpeckers use their stiff tail as a prop while climbing in order to balance themselves.

<u>Special Features of the Head and Sensory Organs</u>: Woodpecker tongues, however, vary based on their diet. Some species have a tongue that is longer than their bill in order to extract insects from a hole. Woodpeckers also have a lengthened hyoid apparatus (bones, muscle, cartilage connected to the tongue), allowing their tongue to extend incredible lengths.

Woodpeckers have bristly feathers over their nostrils to prevent inhalation of wood particles as they chisel.

Dentition: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: Their strong "zygodactyl" feet are specifically adapted to cling and grasp onto trees. Two toes face forward, and two face backward. Most songbirds have three forward-facing toes, and one backward-facing. They may peck a total of 8,000-12,000 pecks per day! Luckily, a woodpecker's skull is built to absorb this shock. Sinewy attachments at the base of a woodpecker's bill and around the brain help to minimize damage to the brain.

Any Special Internal Anatomy: Woodpeckers are often characterized as "chisel-billed" because they peck into living or dead wood to find grubs or build a nest. Cells in the tips of their beaks are constantly replaced, preventing them from wearing down over time. The woodpecker's long tongue has a barbed tip and is covered in sticky saliva. These features help the bird capture and extract insects from the holes the bird drills.

Sexual Dimorphisms: Female crown grayish (lacks red patch of male).

<u>Differences Between Juvenile Stage and Adult</u>: Juvenile similar to adult, but duller, with fine streaking on crown and breast, and only faint color on nape and nasal tufts. Eyes brown.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

<u>Activity</u>: Roosts solitarily in trees, usually in cavity. Males roost in nest cavity with eggs and nestlings at night until 1 wk before fledging of young. Perches and preens for extended periods of time throughout year. Scratches head directly. Occasionally rubs sides of head on branches. Nesting behavior of the golden-fronted is similar to that of the red-bellied woodpecker. Tall trees of pecan, oak, and mesquite are the major species used for nesting in the United States and northern Mexico. Occasionally fence posts, telephone poles, and bird boxes are used.

<u>Locomotion</u>: Hops on ground and on horizontal limbs. On vertical surfaces, hitches upward (body lunges forward as feet release grip; uses tail as brake to prevent downward regression). While hitching downward, individual hops backward, typically tail first, again using tail as brake. Regular flight is that of typical woodpecker—undulating, swift, and seldom sustained. Flaps wings several times, producing upward segment of undulation, followed by pulling in and holding of wings against body, producing downward segment of undulation. Takes flight by springing away from vertical substrate with feet and tail and dropping momentarily before spreading wings. When startled or engaged in chases, flight is more rapid and direct. Long-distance flights are typically above canopy.

Communication and Perception: Call a loud, raspy "churr." Also short "check" notes and drums.

<u>Home Range</u>: Aggressive, especially while breeding. In w.-central Texas, breeding territories are large, ranging from 14.4 to 23.2 ha. Territories are predominantly pair exclusive, although a case of overlapping foraging ranges by 2 breeding pairs has been observed. Territories are established and maintained by both sexes; intersexual conflicts common. Churr Calls appear to play important role in territorial advertisement. Drumming likely functions as means of territory proclamation and maintenance

<u>Degree of Sociality</u>: Typically seen solitarily or in pairs, but family groups of up to 5 may remain together into late summer and early fall. Reports of gathering in "small loose companies" during fall and winter are probably result of localized foraging and not associated with regular flocking behavior.

<u>Level of Aggression</u>: Males and females defend territories against conspecifics, both intra- and intersexually—a behavior rare among sexually dichromatic melanerpine woodpeckers. Encounters with intruders may end with supplanting and fleeing of intruder, but frequently defender pursues opponent to boundary of defended area. Aerial chases typically look like erratic flight patterns and may be prolonged. During close physical encounters, Golden-fronted Woodpeckers will jab bills at each other's head. In aerial encounters, feet are locked and individuals topple downward, exchanging bill jabs.

Migration: NONE

Predators:

Predators: Aplomado Falcon, Cooper's Hawk, Rat Snakes.

Anti-Predator Defenses: NONE

Diet and Nutrition:

<u>Adult Diet</u>: Adult and larval arthropods on tree surface, subsurface, and ground; aerial insects to lesser extent. Large quantities of fruits, nuts, acorns, and corn. Consumes various adult and larval insects, including beetles (Coleoptera), ants (Hymenoptera), moths (Lepidoptera), cicadas (Homoptera), praying mantises (Mantodea), walking-sticks (Phasmida), and grasshoppers (Orthoptera); also takes spiders (Arachnida).

Juvenile Diet: ^^^^

<u>Special Adaptations for Getting Prey</u>: As with many of its congeners, the timber-drilling and extensive excavation that are typically associated with woodpecker foraging are rare. Instead, this species relies on variety of other opportunistic foraging modes. In these studies, most common methods of foraging in descending order of frequency were gleaning (picking of surface food items); pecking (tapping with bill to obtain items below bark); probing (reaching with bill or tongue into cracks, crevices, or holes); and fly-catching (aerial pursuit of insects). Probes crevices, holes, and branch stubs.

Reproduction:

Mode of Reproduction: Monogamous

<u>Mating System</u>: Observational studies suggest monogamy.

Mating Season: May to August

<u>Courtship</u>: Displays associated with agonistic behavior—Head-Swinging and Bill-Pointing displays—also appear to play important role in courtship. Sexual Posturing, in which individual lowers head and bill below plane of breast, exposing crown and producing hunched posture, is common early in breeding season. Sexual Posturing is observed from both sexes during mate greetings, from females when males give Churr Calls from nearby perch, and from either sex before reverse mounting. *Territoriality*: HOME RANGE

<u>Mating</u>: Before copulation, may exhibit reverse mounting (female flutters briefly on male's back); copulation does not always follow. Sexual Posturing may also precede mounting or reverse mounting. During copulation, female maintains low horizontal posture, either perpendicular or parallel to a limb. Male flutters onto female's back and slides backward, directing

his vent underneath female as she raises caudal portion of her body. Final position, held for several seconds, is such that their bodies are nearly perpendicular to each other. Male may use wing as brace.

<u>Nesting</u>: Nesting behavior of the golden-fronted is similar to that of the red-bellied woodpecker. Tall trees of pecan, oak, and mesquite are the major species used for nesting in the United States and northern Mexico. Occasionally fence posts, telephone poles, and bird boxes are used. Both sexes assist about equally in excavating cavities in live or dead wood. Time required for excavation is usually 6–12 d. Lines bottom of cavity with wood chips.

Egg-Laying: Clutch Size: 4-7 eggs Number of Broods: 1-2 broods Egg Length: 0.9-1.1 in (2.39-2.88 cm) Egg Width: 0.7-0.8 in (1.87-2.06 cm) Incubation Period: 12-14 days Nestling Period: 30-32 days Egg Description: White.

Hatching and Incubation/Gestation: Naked and helpless with eves closed.

<u>Development</u>: Altricial; nidicolous. Naked; skin pink and translucent; eyes closed. Upper mandible shorter and narrower than lower mandible, anteriorly covered with white egg tooth. Protuberance on upper and lower mandible, "heels" with prominent callous projections for resting on wood. Vocally capable of clear peep and low buzzing sounds.

<u>Parental Care</u>: Both parents brood; male broods at night until young are well covered with pin-feathers, after which he roosts, clinging to cavity walls near entrance. By 21 d, male no longer tends nest cavity at night. Both parents carry animal and plant matter to young in their bill.

Lifespan: Up to 5.93 years.

Conservation:

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

<u>Threats</u>: Golden-fronted Woodpecker populations declined between 1966 and 2014 by about 46%, according to the North American Breeding Bird Survey. Partners in Flight estimates a global breeding population of 3 million, with 23% living in the U.S., and 64% in Mexico. The species rates a 9 out of 20 on the Continental Concern Score and is not on the 2014 State of the Birds Watch List. Golden-fronted Woodpecker populations may benefit from the proliferation of mesquite on rangeland.

Conservation Efforts: ^^^^

Extra Facts:

- 1. The Golden-fronted Woodpecker is composed of four subspecies that differ in size, amount of barring on the tail, and the color of the nape, nasal tufts, and belly. Whereas the nape of the form found in Texas and most of Mexico is yellow to orange, it is red on the Yucatan Peninsula and orange farther south. The four forms were formerly considered different species.
- 2. The Golden-fronted Woodpecker consumes about as much fruit and nuts as it does insects. In summer in Texas, the faces of some woodpeckers become stained purple from eating fruit of the prickly pear cactus.
- 3. The oldest recorded Golden-fronted Woodpecker was a male, and at least 5 years, 11 months old when he was recaptured and rereleased during banding operations in Texas.

Notable Species: USE NOMINATE, SO MUCH DEBATE OVER THIS LIKELY EXCLUDES THE LIKELIHOOD OF THIS QUESTION BEING ASKED.