

ELEGANT TROGON - TROGON ELEGANS

As with other members of the Trogon family, the feet of the Elegant Trogon are unique with two toes facing forward and two back on each.

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Trogoniformes Family: Trogonidae Genus: Trogon Species: T. elegans

Habitat:

Biomes: In Arizona, Elegant Trogons are mostly found in forested mountain canyons, particularly among sycamores, pines, and oaks. They can also be found in juniper habitats and where cottonwood-oak, Douglas-fir, and mesquite cover is limited. Throughout its range, the Elegant Trogon lives in the widest variety of habitats of any trogon, ranging from sea level to about 6,200 feet in Guatemala. Trogons are found in four mountain ranges in Arizona, the Atascados, the Santa Ritas, the Huachucas, and the Chiricahuas. Within those mountains, trogons select canyons with sycamore trees in the riparian area, and pines and oaks in the watersheds. Nests of trogons are mainly found in sycamores, but can also occur in oaks.

Distribution:

In US: Along with the eared quetzal, it is the most poleward-occurring species of trogon in the world, ranging from Guatemala in the south as far north as the upper Gila River in Arizona and New Mexico. The Elegant Trogon is a permanent resident throughout most of its range in Mexico but is a migrant in the mountain ranges of southeastern Arizona and southwestern New Mexico, as well as along the lower Rio Grande of south Texas.

In Other Countries: NONE

Holistic Description: Many kinds of trogons live in tropical forests, but only one species regularly occurs in North America. Easily recognized by their metallic-green and rose-red colors, as well as their unusual stout-bodied, square-tailed profile, Elegant Trogons are a prized sighting for birders who visit southeastern Arizona. Early on spring mornings, their repetitive and resonating calls carry through the sycamore and oak forests that line canyon streams. Elegant Trogons are reliant upon woodpeckers to excavate holes in trees where they place their nests.

Species Richness: 5 SUBSPECIES

Population Dynamic: CHECK THREATS

Evolution and Systematics:

Evolution: NONE

Systematics: The name Elegant Trogon replaced "Coppery-tailed Trogon" to reflect the merging of earlier-named Central American populations. Apart from the distinctions between the 2 groups of subspecies, geographic variation little studied. Brown of females and red of belly in both sexes paler in populations to west and north. Relationship within genus Trogon not known. Elegant Trogon commonly placed taxonomically between 2 other Mexican and Central American species: Mountain and Collared trogons.

Number of Species: 5 SUBSPECIES

Number of Genera: 5 SUBSPECIES

Physical Characteristics:

Size and Length: Length: 28–30 cm (11–12 in) Weight: 2.1-2.8 oz (60-78.6 g)

Wingspan: NONE, IF ASKED THE typical wing chord for is 130 mm for males and 134 mm for females. Typical length is 315-320 mm.

Coloration: Male Elegant Trogons are brilliant birds with coppery green upperparts and rose-red underparts. They have a white band across the breast and a black-and-white barred underside to the tail. The face and throat are black. Females and immature are patterned similarly to males, but have grayish-brown upperparts with a white teardrop around the eye.

General Body Features: Elegant Trogons are medium-sized stocky, potbellied birds. They are larger than a robin, with a large, round head, a thick neck, large eyes, and a short, stout bill. Trogons perch upright with their long square-tipped tails pointing straight down.

Special Features of the Body: In addition to a wide gape, this species has flexible mandibles and clavicles, which enable swallowing of fruits 3 to 4 mm wider than one would predict from gape measurements. The long esophagus (up to 12 cm) is thin walled, elastic, and ringed by circular muscles presumably important in regurgitation of large seeds; no crop is present. The proventriculus is expansible and lined with glandular tissue in a pattern of closely packed hexagons. The ventriculus is large (external diameter of 2.5 cm) and muscular. The paired ceca (each 4.5 cm long) are well developed and make up 15% total intestinal length, which suggests that some fermentative digestion occurs.

Special Features of the Head and Sensory Organs: Trogon is Greek for "to gnaw or eat" and refers to the structure and function of the beak. The cutting edges of the maxilla, the mandible, or both are variably serrated in most New World species

and probably aid in securing live prey or large fruit. These serrations, along with the decurved tip of the bill (present in all species), are also useful in cutting food items into smaller pieces. Most species have short, triangular tongues, with backward-pointing projections that probably aid in holding and swallowing prey.

Dentition: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: The foot anatomy of trogonids is described as heterodactylous, a term used for the toe arrangement in which the first and second toes are oriented posteriorly, with the hallux in the lateral position (heterodactylous toe). The anterior toes of most New World trogons are partially united, presumably an adaptation for nest excavation.

Any Special Internal Anatomy: Muscle distribution reflects aerial foraging. The heart is large, and the pectoral muscle complex accounts for approximately 20% of body weight, whereas the muscles of the relatively small feet and short legs represent only about 3%. The muscles of the feet and legs are underdeveloped to the degree that trogonids are unable to turn around on a perch without the assistance of the wings. Walking and hopping are rare except in the elegant trogon.

Sexual Dimorphisms: The male elegant trogon has a metallic deep green head, upper breast and back, black face and throat, and red-orange lower breast and belly. He shows grey upperwing coverts. The female has a metallic bronze head, upper breast, back, upper tail and upperwing coverts. She shows a dull white upper belly, and a small white vertical stripe behind the eye.

Differences Between Juvenile Stage and Adult: Juveniles similar to adult female but less boldly marked, with brownish white underparts (lacking red); also wing coverts appear browner than in adults (appear gray in adult male and grayish brown in adult female) and have large buffy white spots. Immature undertail more coarsely barred than in adult female. Immatures intermediate between Juvenile plumage and adult plumage of their sex.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: Elegant Trogons forage in the lower forest canopy (around 25 feet off the ground), where they sit motionless and scan neighboring branches, leaves, and trunks with almost imperceptible movements of their heads. When they spot something on a limb or in the air, they burst into flight to catch it by surprise. Males and females call to each other during foraging, courtship, incubation, and also while feeding nestlings. When advertising, males call loudly from a chosen perch, normally near the nest cavity. A displaying male approaches a female and begins flicking his tail and puffing out his crimson chest feathers. He follows the female from perch to perch while giving a low call. Males engage in threat displays where they puff out their breast and snap their bills, often during fights with other males. Little is known about the trogon mating system. They are monogamous and pairs stay together for at least a month after their young fledge. Female trogons must defend offspring from species such as Cooper's Hawks, Mexican Jays, and Sulphur-bellied Flycatchers. Trogon tend to live in areas that are also inhabited by Arizona Woodpecker, Dusky-capped Flycatcher, and Sulphur-bellied Flycatcher.

Locomotion: Adults rarely seen on ground. Fledglings occasionally seen on ground; have difficulty flying from tree to tree, probably because of short tails, underdeveloped wings, and weak foot and leg musculature, which affect perching; adults will feed immatures on ground. Generally slow and heavily undulating, or "like the slow flight of a magpie; until startled, when they flew like a dove and nearly as fast".

Communication and Perception: Song is a hoarse series of downslurred notes sometimes increasing in loudness. The notes are repeated 5–10 times with a pause before the next set. The song rate of males is generally much greater than females. Calls are generally a long drawn out note or a short series of quick harsh notes.

Home Range: After spring arrival, males compete with each other to establish territories in pine-oak mountain drainages and begin actively courting females. Adult males fight vigorously with other adult and after-hatch-year males, apparently trying to exclude them from territory. "The average length of a territory in... Arizona is about one-half mile... I once found two trogon nests only 200 yards apart... But in the... south face of the Huachucas, a single resident pair will advertise a territory a full mile in length"

Degree of Sociality: Gregarious during winter and maybe social during breeding season in Arizona.

Level of Aggression: Females were so aggressive toward each other that they grappled and fell, spinning, to the ground, then lay panting for about a minute (bleeding some from their culmens) before they flew off, chasing each other. In only a few observations, males seen puffing out scarlet breast feathers and snapping bills during territorial fights with other males; not seen in females; such aggressive behavior not reported for permanent resident Elegant Trogon of tropical America.

Migration: Resident to short-distance migrant. Elegant Trogons are permanent residents throughout a majority of their range, but in Arizona most of them are migrants.

Predators:

Predators: Cooper's Hawk, Mexican Jay, Flycatcher, Great Horned Owl, Northern Pygmy Owl, Sonoran Gopher Snake.

Anti-Predator Defenses: Mobs Great Horned Owl on sight; attracted by calls of Northern Pygmy-Owl. Large (1.5 m) Sonoran gopher snake climbing toward nest was attacked by pair of trogons, which struck the snake with wings and bill until it fell to the ground.

Diet and Nutrition:

Adult Diet: Elegant Trogons are omnivorous, eating mainly insects and fruit. They eat a wide variety of insects, in particular grasshoppers and caterpillars, particularly in the breeding season. Other foods include cherries, grapes, figs, chokecherry, and buckthorn. Compared to the diet of birds that frequent the upper canopy, the Elegant Trogon's diet contains a large proportion of animal matter. Trogons, especially males, forage in oak trees and fruit-bearing plants as well as dead or dying trees. Both parents deliver insects such as grasshoppers, caterpillars, butterflies, leafhoppers, dragonflies, bees, and wasps to their young.

Juvenile Diet: ^^^^^

Special Adaptations for Getting Prey: Capable of handling and consuming variety of food items; depending on where these occur, can exploit a variety of plant species. Will “process a large caterpillar by passing it laterally through its bill one or more times. Catches insects in air “flycatcher style”, but catches most food by sally-gleaning.

Reproduction:

Mode of Reproduction: Monogamous

Mating System: Apparently monogamous but no data from marked birds or genetic studies.

Mating Season: May to July

Courtship: Courtship in documented on 17 occasions; displays by male near female include flicking (or “pumping”) tail, inflating crimson chest while facing female, and following female from perch to perch while calling (kow or kuh) in low pitches. Nest advertisement during this phase observed on 7 occasions: Advertising males called loudly from perch 15-30 m from cavity, at 160 calls/h.

Territoriality: HOME RANGE

Mating: Male mounted female from behind; duration of act approximately 10 s.

Nesting: Elegant Trogons nest along streams in holes in either live or dead trees. They can’t excavate these cavities themselves, so they depend on holes that woodpeckers (often Northern Flickers or Acorn Woodpeckers) have made. Some nests are reused from year to year. Large sycamores can be used in consecutive years and generally more than one-fourth of nests are reused at some point. The nests contain very little material, and eggs simply lie on the floor of the cavity.

Egg-Laying: Clutch Size: 2-4 eggs Egg Length: 1.1-1.2 in (2.7-3.1 cm) Egg Width: 0.9-1.2 in (2.2-3.1 cm) Incubation Period: 17-21 days Nestling Period: 34-40 days Egg Description: Faint bluish white to dull white.

Hatching and Incubation/Gestation: Naked, pink, and with their eyes closed.

Development: Altricial, naked, skin pink, eyes closed, “heel-joint of leg with pad of projecting papillae to protect it from abrasion, 2 toes point backward from first”

Parental Care: Both sexes feed nestlings. When feeding new young, adults enter nest cavity, disappear, then come back out; feed older young by perching on cavity lip, extending head, neck, and breast down into cavity, then flying away. As young near fledging, second method could be very rapid, almost as if adults drop large insects into cavity for young to handle.

Lifespan: NOT KNOWN.

Conservation:

Official Federal Status: Least Concern

Special Statuses in Individual States: NONE

Threats: There is little information on Elegant Trogon population trends. Partners in Flight estimates a global breeding population of 200,000, with 6% spending some part of the year in the U.S. and 79% living in Mexico. The species rates a 14 out of 20 on the Continental Concern Score. Elegant Trogon is on the 2016 State of North America's Birds' Watch List, which includes bird species that are most at risk of extinction without significant conservation actions to reverse declines and reduce threats. It is probable that Elegant Trogons will always be rare in southeastern Arizona. Their tendency to nest near human activity raises the question of how humans affect nest success, but studies so far have shown them to be relatively tolerant of this. Trogons are more likely to be affected by the destruction of riparian vegetation in the Southwest, which could reduce suitable nesting locations. A related issue is the drawdown of water tables in the region, which could harm the sycamore trees and riparian forests that trogons depend on.

Conservation Efforts: ^^^^^

Extra Facts:

1. Elegant Trogons are what’s called a “secondary cavity nester”—they put their nests in holes in trees, as woodpeckers do. But they don’t have the ability to make these holes themselves, so they are largely dependent on woodpeckers to excavate nest holes for them. Once the woodpecker has moved on, trogons (among many other secondary cavity

nesting species) can move in. Elegant Trogons often use holes that were excavated by Northern Flickers or Acorn Woodpeckers.

2. Trogon is a Greek word meaning "gnawer," which refers to its insectivore diet and hooked bill.
3. Trogons tend to nest in riparian vegetation, sometimes close to human activity. Trogon nests are regularly found near service trails, campgrounds, and picnic grounds, so if you go camping in the mountains of Arizona you might find you have a trogon nesting in your campsite.
4. Elegant Trogons were first found in the Huachuca Mountains of Arizona in 1885. Half a century later, in 1939, a nest was discovered in Madera Canyon of the Santa Rita Mountains, and they have since been found in the Atascosas and Chiricahuas Mountains. Although there seems to be suitable habitat in several other mountain ranges, it's likely that this species has not yet had the chance to disperse there.

Notable Species:

1. *T. e. ambiguus* Gould, 1835
2. *T. e. canescens* Van Rossem, 1934
3. *T. e. elegans* Gould, 1834
4. *T. e. goldmani* Nelson, 1898
5. *T. e. lubricus* J. L. Peters, 1945