CINNAMON TEAL - ANAS CYANOPTERA

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Anseriformes Family: Anatidae Genus: Spatula Species: S. cyanoptera (A molecular phylogenetic study comparing mitochondrial DNA sequences published in 2009 found that the genus Anas, as then defined, was non-monophyletic. Based on this published phylogeny, the genus Anas was split into four monophyletic genera with ten species moved into the resurrected genus Spatula.)

Habitat:

<u>Biomes</u>: In North America, Cinnamon Teal nest in freshwater wetlands of western North America. Most of their preferred habitats have plenty of emergent vegetation, and they are most abundant on large, permanent marshes. However, they use streams, reservoirs, ditches, and stock ponds, and they readily use temporary wetlands as well. Marsh plants associated with nesting, but also with habitats in the southern (and wintering) parts of range, include baltic rush, saltgrass, spikerush, tufted hairgrass, western wheatgrass, foxtail barley, as well as various bulrushes, cattails, and sedges. Some of these plants provide both cover and food. Wintering birds in Mexico use reservoirs and wet agricultural fields to tidal estuaries and mangrove swamps.

Elevation Range: CHECK DISTRIBUTION

Flight Ceiling: 400 to 2,000 feet

<u>Temperature</u>: Can survive temperatures as low as -15 degrees F with out any hassle/problem.

Distribution:

<u>In US</u>: Their breeding habitat is marshes and ponds in western United States and extreme southwestern Canada, and are rare visitors to the east coast of the United States. Cinnamon teal generally select new mates each year. They are migratory and most winter in northern South America and the Caribbean, generally not migrating as far as the blue-winged teal. Some winter in California and southwestern Arizona. Two subspecies of cinnamon teal reside within the Andes of South America. The smaller sized S. c. cyanoptera is widespread within low elevations (<1000m) such as the coast of Peru and southern Argentina, whereas the larger size subspecies S. c. orinomus occupies elevations of 3500-4600 meters in the central Andes. In Other Countries: INCLUDES INFORMATION, LOOK UP

<u>Holistic Description</u>: The male Cinnamon Teal shimmers with a rich ruddy plumage, made all the more incandescent by the summer sun slanting across reedy wetlands in interior western North America. Males molt this brilliant plumage soon after breeding, becoming much more similar to female and immature birds, and very similar to other teal species, especially Blue-winged Teal. Look for Cinnamon's longer and wider bill to help tell them apart. An entirely separate population of Cinnamon Teal lives in South America.

Species Richness: 4 LIVING, 1 POSSIBLE EXTINCT (SUBSPECIES)

<u>Population Dynamic</u>: Accurate population estimates are lacking. Counts of Cinnamon Teal and Blue-winged Teal are combined in May and during midwinter aerial surveys conducted by U.S. Fish and Wildlife Service and Canadian Wildlife Service personnel; most Cinnamon Teal breed outside standardized waterfowl survey area in North America. Bellrose estimated North American breeding population at 260,000–300,000, making Cinnamon Teal one of the least abundant dabbling ducks in North America.

Evolution and Systematics:

Evolution: Pleistocene records in Oregon and California

<u>Systematics</u>: Five subspecies (Snyder and Lumsden 1951, Am. Ornithol. Union 1957, Blake 1977). Subspecies differ chiefly in the depth of color and extent of spotting on the alternate male and the degree of size dimorphism between the sexes.

<u>Number of Species</u>: NONE LOOK AT SUBSPECIES <u>Number of Genera</u>: NONE LOOK AT SUBSPECIES

Physical Characteristics:

Size and Length: Male: Length: 15.1-16.9 in (38.4-42.8 cm) and Weight: 11.8-14.1 oz (335-401 g) Female: Length: 14.2-16.6

in (36-42.3 cm)

Wingspan: 21.3-22.4 in (54-57 cm)

<u>Coloration</u>: Breeding male has red eye, long dark bill, and mostly vivid rusty plumage, with brownish back, white underwing. Female, immature, and non breeding male are mostly rich brownish overall. All adults have sky-blue patch in open wing, similar to other teal and shovelers.

<u>General Body Features</u>: Its bill is longer and more spatulate/rounded at the end, which allows it to dabble much deeper and more efficiently, with a beak that is specifically designed to filter out mud.

Special Features of the Body: NONE, IF ASKED USE GENERAL DUCK

<u>Special Features of the Head and Sensory Organs</u>: Cinnamon Teal has a slightly larger bill, better developed for straining food items out of the water. In some ways this species seems intermediate between Blue-winged Teal and Northern Shoveler. <u>Dentition</u>: Lamella and rock-intake gizzard that allows it to "chew" food

Special Features of the Limbs and Digits: NONE, IF ASKED USE GENERAL DUCK

Any Special Internal Anatomy: NONE, IF ASKED USE GENERAL DUCK

<u>Sexual Dimorphisms</u>: Female Cinnamon Teal is largely brownish with blue upper wing coverts, essentially very similar to female Blue-winged Teal. Cinnamon has a plainer face and a bigger more spatulate bill, somewhat recalling Northern Shoveler. CHECK COLOR.

<u>Differences Between Juvenile Stage and Adult</u>: Juveniles are generally pale brownish overall with small and somewhat pointed contour feathers. Note the plain face and large dark bill.

Behavior:

<u>Diurnal, Nocturnal, or Crepuscular</u>: Spends more time diurnal than nocturnal.

<u>Activity</u>: From spring arrival to incubation, pairs spend most of day foraging (48 and 56% for males and females, respectively) or sleeping and loafing (14 and 12%). Other activities include preening (11 and 10%), swimming (11 and 9%), and walking or flying. Females spend more time feeding (Gammonley 1996b), whereas their mates spend more time alert (2.1 vs. 0.6%) and involved in intra- and interspecific aggression (3.1 vs. 1.3%)

AND

Like many duck species in North America, Cinnamon Teal perform courtship displays and form pairs from late winter into early spring. Pairs may be monogamous for the breeding season, but at least some males copulate with multiple females in a season. Their courtship displays are most intense when multiple males are gathered around a single female. Displaying males perform ritualized preenings of their wings, back, and breast, move their heads through various positions, dip and upend as though feeding, and perform synchronous "jump flights" together as the female watches. The female signals interest in a male by swimming in front of him, and she rejects a male by head-pumping or opening the bill, both general threat displays in this species. Males guard females from the moment they begin building the nest through most of the incubation period, and they also defend a small fixed territory that includes the nest and the male's favorite resting spot. Cinnamon Teal chase not just intruders of their own species but often Blue-winged Teal as well, though Cinnamon appears to be less intensely territorial than Blue-winged. After breeding, Cinnamon Teal gather in flocks to molt and migrate. The male's rusty plumage is lost during molt from late summer through autumn, and flock behavior is generally more peaceable at that time, though males are still somewhat dominant over females.

<u>Locomotion</u>: Primarily aquatic, but quite agile on land; often walks or runs while feeding in shallow water or traveling to loafing areas on land. Like other dabbling ducks, takes flight by leaping directly off water at sharp angle. Often performs Lateral Head-shakes before taking flight, especially when alarmed (Johnsgard 1965); other preflight movements include Head-flicks (uncommon) and Both-wings Stretch (McKinney 1965b). Rapid, ceaseless wingbeats in flight; glides only when landing. Extremely agile in flight, often making sharp turns and flying low over land or water. Lands with wings spread and feet extended forward. Like other dabbling ducks, presents a high profile while swimming. Capable of diving for food, but rarely does so.

<u>Communication and Perception</u>: Vocalizes infrequently; quiet compared with other dabbling ducks. Male Head-Pumping Display (see Behavior: agonistic behavior, below) accompanied by a rattling, low-pitched karr karr karr, similar to chuk-chuk of male Northern Shoveler; also used during courtship activities. Female performs a soft, rattling rrrr as bill moves upward during Inciting (see Behavior: sexual behavior, below). Decrescendo Call of female is infrequent and similar to that of female Northern Shoveler, a weak gack-gack-ga-ga

<u>Home Range</u>: Territories were not established until after nest-site selection; defended area usually included the nest site (although nests were found <1 m apart) and was never >100 m away. Defended areas were small (<30 m2) and always included a favored loafing site used by the male while his mate was on the nest.

<u>Degree of Sociality</u>: Most commonly observed in pairs or small groups of <30 individuals during breeding and migration. Large flocks occasionally form during winter and migration (e.g., >30,000 in Valley of Mexico; Saunders and Saunders 1981). Social feeding common throughout the year (see Food Habits: feeding, above).

<u>Level of Aggression</u>: Most common aggressive display is Head-Pumping (McKinney 1970, Connelly 1977); accounted for >90% of all agonistic interactions between paired males and other paired or unpaired males (Gammonley 1996b). Circular Fighting (McKinney 1970) is relatively uncommon. Females often participate in interactions between pairs, though usually at a lower intensity.

<u>Migration</u>: Most populations are short- to intermediate-distance migrants, depending on breeding and wintering locations; some populations may be resident in southern parts of breeding range (e.g., highlands of Mexico and San Joaquin Valley, CA). Many South American populations (e.g., A. c. orinomus) likely are also short-distance migrants or resident.

Predators:

<u>Predators</u>: Eggs. Losses to avian predators, including Common Ravens, American Crows, California Gulls, Bald Eagles, and Black-billed Magpies. In Utah, California Gulls destroyed 33.9% of eggs in monitored nests during one breeding season. Mammalian predators include coyote, striped skunk, raccoon, mink, weasels, opossum, and Norway rat; probably also red fox and badger. Adults and Young. Losses of nesting hens common; higher proportions of female Cinnamon Teal found dead on or near nest than of other nesting ducks in San Luis Valley, CO. Probable or confirmed predators of nesting hens include coyote, red fox, mink, Great Horned Owl, Peregrine Falcon, and Northern Harrier. Northern Harriers observed taking adults during breeding and late winter.

Anti-Predator Defenses: NONE DEFINED, LOOK AT OTHER INFO AND GENERAL DUCK (MALLARD)

Diet and Nutrition:

<u>Adult Diet</u>: Cinnamon Teal feed much like other dabbling ducks, taking most of their food at or near the surface by rapidly opening and closing the bill to take seeds, aquatic vegetation, zooplankton, and insects. Cinnamon Teal sometimes feed like Northern Shovelers, following each other in tight groups as they forage slowly across an area, almost in unison. Commonly recorded plants in the diet include seeds and shoots of marsh grasses such as alkali bulrush, hardstem bulrush, smartweed, widgeon grass, spikerush, horned pondweed, and millet. A smaller portion of the diet is made up by snails, beetles, dragonflies, midges, water fleas, water boatmen, and many types of flies.

<u>Juvenile Diet</u>: Omnivorous diet consisting of seeds and aquatic vegetation, aquatic and semi terrestrial insects, snails, and zooplankton. [SAME AS ADULT]

<u>Special Adaptations for Getting Prey</u>: Long bill that is able to dabble and filter out other things, while taking in the most food as possible.

Reproduction:

Mode of Reproduction: Monogamous

<u>Mating System</u>: Only seasonal monogamy reported, but may employ a mixed reproductive strategy in which males pursue extra-pair copulations. Spencer reported a male: female ratio of 1.19:1 during the breeding season at Ogden Bay, UT. Surplus of males (sex ratio 1.27:1) in Arizona breeding population; mean number of unpaired males positively related to wetland size <u>Mating Season</u>: Feb-Mar

<u>Courtship</u>: Courtship occurs in small groups comprising at least 1 female and several males. McKinney noted that Cinnamon Teal perform a number of displays used by other blue-winged ducks, and that several displays appear to be derived from the surface-feeding habits of this group. Male courtship displays directed at mates or unpaired females include Preen-behind-wing, Preen-dorsally, Belly-preen, Preen-back-behind-wing, Repeated Calls, Turn Back of Head, Lateral Dabbling, Head-dip, and Up-end. Males perform short display flights (Jump Flights), usually when larger groups of unmated males are competing for positions near a female. Females Incite by swimming in front of mate or favored male and Head-Pumping or opening bill toward intruding male.

<u>Territoriality</u>: Paired males aggressively defend females and favored waiting sites from nest initiation through third week of incubation. Spencer described Cinnamon Teal territories in Utah. Territories were not established until after nest-site selection; defended area usually included the nest site (although nests were found <1 m apart) and was never >100 m away. Defended areas were small (<30 m2) and always included a favored loafing site used by the male while his mate was on the nest. Territory defense was conducted by the male only, and usually involved Head-Pumping Display (see Agonistic Behavior, above) or short pursuits directed at intruding pairs on the water; aerial Pursuit Flights were not observed. Pursuit Flights also uncommon in Arizona and in San Luis Valley, CO, compared with other dabbling ducks (JHG). Territory defense generally does not extend to intrusions by other species, except for Blue-winged Teal.

Mating: Copulation occurs on water. Primary display is Precopulatory Head-pumping (bill pointed downward), performed by both sexes (Johnsgard 1965, McKinney 1970). Female solicits copulation by assuming a prone position. Male swims behind female and mounts, grasping female's neck with his bill. Both sexes bathe and preen following copulation. Pairs observed copulating during prelaying, laying, and incubation. RAPE OCCURS IN EXTRA PAIR COPULATION.

Nesting: Females select the nest site, usually beneath dead marsh grasses that are less than 2 feet tall, not far from water. In the northern part of the species' range, nest sites are selected so that they are warmed by the sun in the early morning and shaded in the afternoon. Females scrape a depression and line it with rushes, saltgrass, bulrushes, and grasses, material from the immediate vicinity of the scrape. They add down from their breast as egg-laying commences. If water levels rise during

incubation, females will augment the nest with more material to keep it from flooding. Measurements from 5 nests averaged 7.3 inches across, with the interior cavity 5 inches across by 2 inches deep.

Egg-Laying: Clutch Size: 4-16 eggs Number of Broods: 1-2 broods Egg Length: 1.7-2.0 in (4.4-5 cm) Egg Width: 1.3-1.4 in (3.33-3.5 cm) Incubation Period: 21-25 days Egg Description: Creamy white.

<u>Hatching and Incubation/Gestation</u>: Covered in yellow down with a gray-brown eyestripe. Able to leave nest soon after hatching.

<u>Parental Care</u>: Males typically abandon their mates by the third week of incubation. Only females provide care for young; early reports of males caring for or accompanying broods are probably erroneous and based on the fact that males often remain on rearing wetlands prior to wing molt, feeding and loafing in areas also used by broods. Female remains near brood; becomes aggressive toward conspecifics and otherwise dominant species such as American Coots that threaten or venture close to her young. Females with young spend more time alert than presenting and nesting females do.

Lifespan: Averages 20-30 years.

Conservation:

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

<u>Threats</u>: Cinnamon Teal are numerous, but their populations have declined since 1968, according to the North American Breeding Bird Survey. Partners in Flight estimates the global breeding population at 380,000, rates the species a 13 out of 20 on the Continental Concern Score, and includes the species on the Yellow Watch List for declining populations. The U.S. Fish and Wildlife Service carefully monitors duck populations and hunting levels; in recent years, about 800,000 Cinnamon and Blue-winged Teal have been taken by hunters in the U.S. each year. As a wetland species, Cinnamon Teal is susceptible to contaminants from agriculture and industry through most of its range. In western North America, loss of wetlands to agriculture, grazing, and especially development of human settlements has meant massive loss of habitat for Cinnamon Teal. The wetlands that remain may be polluted or converted to deepwater reservoirs for recreational fishing, making them less useful to Cinnamon Teal.

Conservation Efforts: UP

Extra Facts:

The female Cinnamon Teal often places her nest below matted, dead stems of vegetation so it is completely concealed on all sides and from above. She approaches the nest through tunnels in the vegetation.

Waterfowl fanciers (aviculturists) often keep this gorgeous duck in their collections, and sometimes these birds escape captivity. Most collectors put a non-aluminum band on the legs of their birds, but if this is missing it can cause problems for ornithologists, because it can be hard to know whether an out-of-range sighting is of a wild bird or an escapee.

The Cinnamon Teal is unusual among ducks: it has separate breeding populations in North America and South America. Unlike most North American dabbling ducks, the Cinnamon Teal rarely breeds in the midcontinent prairie-parkland region. The oldest recorded Cinnamon Teal was a female and at least 10 years, 6 months old when she was found in California in 2010. She had been banded in the same state in 2001.

Pet Information: NONE

Notable Species:

Spatula cyanoptera septentrionalium (Oberholser, 1906) northern cinnamon teal breeds from British Columbia to northwestern New Mexico, and they winter in northwestern South America.

Spatula cyanoptera tropica (Snyder & Lumsden, 1951) tropical cinnamon teal occurs in the Cauca Valley and Magdalena Valley in Colombia.

Spatula cyanoptera borreroi (Snyder & Lumsden, 1951) Borrero's cinnamon teal (possibly extinct) occurs in the eastern Andes of Colombia with records of apparently resident birds from northern Ecuador. It is named for Colombian ornithologist José Ignacio Borrero.

Spatula cyanoptera orinoma (Snyder & Lumsden, 1951) Andean cinnamon teal occurs in the Altiplano of Peru, northern Chile and Bolivia.

Spatula cyanoptera cyanoptera (Vieillot, 1816) Argentine cinnamon teal occurs in southern Peru, southern Brazil, Argentina, Chile, and the Falkland Islands.