GREEN-WINGED TEAL - ANAS CRECCA

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Anseriformes Family: Anatidae Genus: Anas Species: A. carolinensis

Habitat:

Biomes: Green-winged Teal breed mostly in isolated river deltas, forest wetlands, and mixed prairie regions across northern North America—they occur in the prairie pothole region, but they are not as restricted to it as many other dabbling ducks. Nesting sites include grasslands or sedge meadows that provide brush thickets of sedge or cattail for cover, and weedy or burned areas. They also favor beaver ponds in wooded areas, and nest along streams, potholes, lakes, and human-made wetlands. The race living on the Aleutian Islands nests near shallow, weedy ponds, saltwater shorelines, and beaches. Migrating birds stop over in shallow wetlands, coastal marshes, and flooded fields. Wintering birds typically flock to shallow wetlands, including coastal marshes and bayous, estuaries, the playa lakes of Texas's southern high plains, riparian sloughs, and agricultural areas such as rice fields. The nonmigratory Aleutian race of Alaska winters along the islands' beaches.

Flight Ceiling: 200 to 4,000 feet but are capable of reaching much greater heights.

Temperature: Green-winged teal are the most weather sensitive of all ducks. They are seemingly warm-weather and much less adapted to withstand cold temperatures.

Distribution:

In US: A. crecca carolinensis: common breeder to tree line throughout Alaska, e. Aleutians, and all 12 Canadian provinces except coastal British Columbia (Campbell et al. 1990a), ne. portion of the Northwest Territories, and nw. Quebec -- but breeding status not well described in latter two areas (Godfrey 1986). Breeds predominantly in wetlands in boreal forest and deciduous parklands. In U.S., regular breeder in e. Washington (M. Smith pers. comm.), Oregon (at least in Harney, Lake, Klamath, and Umatilla counties; Gilligan et al. 1994), California (Klamath Basin, Modoc Plateau, Great Basin, n.-central coast, Sacramento Valley; Small 1994), n. Nevada (N. Fake pers. comm.), Idaho (except n.-central area; Stephens and Sturts 1991), ne. Utah (Behle et al. 1985), Montana, Wyoming, central and w. Colorado (Andrews and Righter 1992), extreme n. New Mexico and locally in s. portion of state (Hubbard 1978c), locally on Mongolian Plateau of se. Arizona (Monson and Phillips 1964), North Dakota, e. South Dakota (Johnsgard 1979a, South Dakota Ornithologists' Union 1991), ne. Nebraska (Johnsgard 1979a), Minnesota (Janssen 1987), n. Iowa (Iowa Dep. Nat. Resour., unpubl.), n. Wisconsin (Robbins 1991), n. and central Michigan (Brewer et al. 1991), small area in n.-central Ohio (Peterjohn 1989b), small area in extreme nw. Pennsylvania (Brauning 1992a), n. New York and Long Island (Andrle and Carroll 1998), extreme nw. Vermont (Laughlin and Kibbe 1985), Maine, and Massachusetts (Veit and Petersen 1993). Breeds in low numbers in widely scattered locations throughout most of southern portion of regular breeding range in U.S. Irregular breeding records from New Hampshire (Foss 1994a), New Jersey (Leck 1984), n. Illinois, n. Indiana (American Ornithologists' Union 1983), Kansas (Thompson and Ely 1989), and in other portions of states listed above in which regular but regional breeding occurs (e.g., New York). Accidental breeder elsewhere.

In Other Countries: A. c. crecca breeds throughout n. Europe, Iceland, Greenland (a few breeding records for the coastal areas), and Asia with southerly limits in Europe from France and Switzerland to the northern edge of the Black Sea. In Asia, breeds across n. Russia and n. Japan. Winters in s. Europe, n. Africa (especially Nile region), and s. Asia (mainly India, se. Asia, and se. coastal China

Holistic Description: The little Green-winged Teal is the smallest dabbling duck in North America. The natty male has a cinnamon-colored head with a gleaming green crescent that extends from the eye to the back of the head. In flight, both sexes flash deep-green wing patches (specula). Look for them on shallow ponds and in flooded fields, and listen for the male's decidedly non-ducklike whistle. These common ducks breed along northern rivers; wintering flocks can number as many as 50,000.

Species Richness: Three recognized subspecies: Anas crecca carolinensis in North America, A. c. crecca in Eurasia, and A. c. nimia on the Aleutian Is. Anas c. carolinensis males in breeding plumage characterized by a white vertical stripe below the breast. A. c. crecca and A. c. nimia males lack the vertical stripe but possess a white horizontal stripe along the scapular feathers; green stripe on head is also typically outlined in white in males of both of these subspecies. A. c. nimia is also larger than A. c. crecca and A. c. carolinensis .

Population Dynamic: Numbers increased in North America from 1959 to 1974. Trend appears to have continued through 1990, although no change reported from 1970 to 1985. These upward trends may result from lack of destruction of breeding habitat, because most individuals breed north of major agricultural areas. Increases most dramatic in Mississippi and Central flyways

Evolution and Systematics:

Evolution: Fossils of Green-winged Teal from Pleistocene and prehistoric sites are numerous in North America and Europe. The earliest record from the late Hemphillian from Coffee Ranch, Texas, is dubious and most likely is a record of one of the known extinct species. Anas pullulans, A. ogallala, A. bunkeri, and A. greeni are all small ducks from the late Tertiary North America.

Systematics: Three recognized subspecies: Anas crecca carolinensis in North America, A. c. crecca in Eurasia, and A. c. nimia on the Aleutian Is. Anas c. carolinensis males in breeding plumage characterized by a white vertical stripe below the breast. A. c. crecca and A. c. nimia males lack the vertical stripe but possess a white horizontal stripe along the scapular feathers; green stripe on head is also typically outlined in white in males of both of these subspecies. A. c. nimia is also larger

than A. c. crecca and A. c. carolinensis . Previously considered separate species but united as a single species by Peters because of hybridization. Some authors have again suggested elevating A. c. crecca and A. c. carolinensis to species status. Highly divergent mitochondrial DNA haplotypes between U.S. and Russia, but 1 haplotype found in both regions suggesting some historical gene flow

Number of Species: NONE, 3 SUBSPECIES

Number of Genera: NONE, 3 SUBSPECIES

Physical Characteristics:

Size and Length: Length: 12.2-15.3 in (31-39 cm) Weight: 4.9-17.6 oz (140-500 g)

Wingspan: 20.5-23.2 in (52-59 cm)

Coloration: Adult males have grayish bodies with a narrow white vertical stripe extending from the waterline to the shoulder. In good light, their dark heads are cinnamon with a wide green swoop from the eye to the back of the neck. Females are brown with a yellowish streak along the tail. Both sexes have green wing patches in the secondaries (speculum), but these may be hidden when not in flight.

General Body Features: Lamellae are small, fine comb like structures found in rows along the inside of the bill. When waterfowl are feeding, sediment and water enter the bill. Lamellae filter out inedible material, while trapping invertebrates, seeds, and other food items. Most dabbling ducks have 50 to 70 lamellae on their upper and lower mandibles.

Special Features of the Body: NONE, USE GENERAL

Special Features of the Head and Sensory Organs: Bill of male blackish. Bill of female in Alternate plumage greenish gray with dark spotting on sides, usually toward base; edges and tip of bill black. Bill of female in Basic plumage dusky olive without spots; becomes gray in color along edges. Some yellowish color along edges. Iris: Dark brown

Dentition: Lamellae and Gizzard

Special Features of the Limbs and Digits: Blackish in hatchlings. In Alternate plumage male, grayish with webs blackish. In Basic plumage male, legs gray or olive with dark webs. In Alternate female, legs and feet grayish with dusky webs. In Basic female, legs and feet gray to olive with dark webs.

Any Special Internal Anatomy: NONE, USE GENERAL

Sexual Dimorphisms: Male and female Alternate plumage dimorphic. Male head cinnamon with an iridescent green crescent running through the eye to a small crest at the back. Breast pinkish with small black spots. North American subspecies (Anas crecca carolinensis) has a short, vertical, white stripe along the side of the body just below the front of the folded wing. Sides vermiculated, appear gray. Back grayish. A yellowish triangular patch along each side of black undertail-coverts. Speculum green toward inner wing, blackish toward outer wing; bordered by a tan stripe on leading edge and a white stripe on trailing edge. Male in eclipse plumage similar to female. Female mottled brown with a dark bill, dark forewing, and white chin and belly. Males in Alternate plumage easily distinguished from other species.

Differences Between Juvenile Stage and Adult: Female-like plumage acquired after full flight is attained and then molted in Aug or Sep. Dorsal feathers brownish tan with buffy margins, whereas breast is streaked brown on buffy coloration. Feathers on sides similar to breast but with broad streaks. Belly pale buff with some dark markings. Rectrices sepia with buffy margins and notched tips. Tertials small and narrow with worn tips. Much of wing-lining is white. Wing speculum dull, and tips of secondary coverts form a white bar. Greater primary coverts have white edges. Female Juvenile plumage as male except spotting and streaking on belly more pronounced.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: Diurnal activity patterns examined for fall and wintering individuals (Tamisier 1976). Individuals wintering (Nov–Feb) in Louisiana in agricultural wetlands spend 11–12.5 h on nocturnal feeding grounds; flocks depart for feeding grounds about 20 min after sunset and return 20 min before sunrise. During the day, individuals spend 8–9 h sleeping, remainder of time preening and swimming (2.9 h), with little feeding. Swimming activities include courtship, which peaks in Jan and Feb; preening activity highest in Nov and Dec.

AND

Green-winged Teal are fast, agile, buoyant flyers. They can take off straight from the water without running across the surface. Though they are dabbling ducks that usually tip up to feed, they occasionally dive for food and to avoid predators. In winter Green-winged Teal gather in roosting flocks of up to 50,000 birds. Courtship starts in the fall and peaks in January and February; they choose new partners each year. Males try to secure a mate using an elaborate set of movements and vocal displays, with groups of up to 25 males courting females both on the water and in courtship flights. Although most pairs form on the wintering grounds, pair formation continues during spring migration and on the breeding grounds. The male defends its mate from copulation attempts by other males, then deserts the female once incubation is underway. A few hours after they

hatch the chicks can swim, dive, walk, and forage for themselves, although the female continues to brood them at night and to protect them when the weather turns cold.

Locomotion: May walk or hop from water to shore. Leaves water to loaf on sites such as rocks and overhanging branches close to water surface, but not regularly observed to perch at a height. Typically rapid, agile, and buoyant. The only species of duck known to scratch in flight. Very maneuverable in flight and may attain flight directly from surface of water. Rarely dives for food, although will dive to escape predators.

Communication and Perception: Males give a clear whistling call as part of several courtship displays, sometimes adding a rapid chitter. Green-winged Teal females give a repeated, shrill quack on the wintering grounds, during courtship, and to distract potential predators when brooding. They also give 5–15 fast, persistent quacks, about 2 per second, when searching for nest sites, perhaps to lure potential predators out and assess a site's safety. A series of 4–7 quacks of decreasing volume is given during courtship, as well as a harsh, rattling call made when inciting a male during pair formation.

Home Range: Spatially defined defended territories not observed in this species; large areas of overlap in home ranges. A male's aggression and defense (including 3-bird aerial pursuits) typically involve defense of his mate from forced-copulation attempts by other males

Degree of Sociality: Gregarious during migration and on wintering grounds, with flocks numbering to the hundreds. Individuals roosting on wintering grounds during the day may occur in aggregations of up to 50,000 individuals (Tamisier 1976). Breeding pairs dispersed on the breeding grounds.

Level of Aggression: Aggressive and dominance interactions include supplants, threats, chases, and fights. Fights may include beating with wings or jabbing and pulling with bill. On wintering grounds, males observed to win 38 of 56 encounters with females when their pairing status was the same. When paired and interacting with an unpaired male, however, females won more encounters. Supplants, threats, chases, and fights between females were higher than expected, and females initiated fewer interactions than expected by chance (Hepp and Hair 1984). Dominance status may influence access to food and survival rates.

Migration: Nearly all populations perform major spring and fall migrations. After breeding, males have a molt migration with some populations moving in the general direction of the wintering grounds; the general pattern of molt migration is not known however

Predators:

Predators: Observations of predation on adults by aerial predators are rare, but Northern Harrier (Circus cyaneus) and Peregrine Falcon (Falco peregrinus) are known to capture adults in migrating or wintering flocks from the surface of the water or in flight (Tamisier 1976). Predation by Harris' Hawk (Parabuteo unicinctus) also documented (Rosenberg et al. 1991). Red fox (Vulpes vulpes) frequently take breeding adults; of 48 recovered carcasses at fox dens from 1968 to 1973, 74% were females, suggesting that nesting females are more vulnerable to predation because of incubation behavior (Sargeant et al. 1984). Keith (Keith 1961) documented the fate of 21 Green-winged Teal nests in se. Alberta: 11 predated by striped skunks (Mephitis mephitis), 4 deserted, 5 hatched, and 1 predated by unknown mammal. American Crows (Corvus brachyrhynchos) and Black-billed Magpies (Pica pica) take eggs (Munro 1949b) and may be important predators as much nesting occurs in woodlands and shrubs. Clutches laid early in the season (late May and early Jun) are more susceptible to crow predation because nesting cover is less developed than it is later

Anti-Predator Defenses: Disturbance by Northern Harrier averaged 4.2 times/d; individual Green-winged Teal spent on average 24 s flying after each disturbance. Often preen after flight. Apparent tradeoff between vigilance and foraging; individuals show escape behavior in response to a potential predator less frequently early in the morning when foraging needs are expected to be highest.

Diet and Nutrition:

Adult Diet: Green-winged Teal eat mainly aquatic invertebrates and seeds. They feed in shallow water, near shorelines, on mudflats, and in agricultural fields, taking advantage of whatever foods are most abundant. Migrating and wintering birds may feed at night or during the day. On the water they dabble along the surface where they pluck or strain seeds and invertebrates, and dip their head and neck or tip up to reach submerged food. They also probe mudflats for invertebrates and eat worms, seed shrimp, and copepods living just above the sediment. Depending on where they're feeding, plant foods may include sedge fruit, seeds of pondweeds, grasses, smartweeds, sea purslane, bulrush, dwarf spikerush, swamp timothy, and agricultural crops including corn and rice. Animal prey includes midges, tadpoles, molluscs, and crustaceans.

AND

Broad diet. Seeds of sedges, grasses, and aquatic vegetation; aquatic insects and larvae, molluscs, crustaceans. Considered an opportunistic forager feeding on foods (animal or plant) in high abundance

Juvenile Diet: Chicks up to 2 weeks old eat mainly insect larvae. Juveniles found to feed mainly at or above surface rather than below surface of the water.
Special Adaptations for Getting Prey:
Reproduction:
Mode of Reproduction: Monogamous
Mating System: Males and females pair monogamously during winter, but paired males also attempt forced extra-pair copulations during the laying season. Males desert their mates after incubation begins. Paired males known to attempt forced extra-pair copulations with other females (McKinney and Stolen 1982), a phenomenon not documented in unpaired males. Injury and mortality to females during forced copulation attempts observed in captivity, but injury in the wild is probably rare because females seek heavy cover when pursued.
Mating Season: March to Late April/Early May
Courtship: Males use many movement and vocal displays (many including both components) when courting females. Most displays described below are given on the water, and nearly all social courtship occurs on the water or in courtship flights. Many of these displays are also found in other dabbling ducks (e.g., Mallard).
Territoriality: Spatially defined defended territories not observed in this species; large areas of overlap in home ranges (F. McKinney pers. comm.). A male's aggression and defense (including 3-bird aerial pursuits) typically involve defense of his mate from forced-copulation attempts by other males
Mating: Copulate on the water. Prior to copulation, male and female perform mutual Head-pumping. This display consists of repeated up and down motions of the head; display is not always followed by copulation and is not always mutual. After performing this display, female adopts a prone posture in the water with her head low and stretched out over the water; male then mounts female from the back and grasps her nape in his bill. Copulation involves a single pronounced thrust as the male's tail is pressed around the left side of the female's tail; followed by male postcopulatory Bridling. Both sexes then bathe and preen
Nesting: With the male following behind, the female chooses a well-concealed site on the ground, usually within about 200 yards of water. Nests are typically built in sedge meadows, grasslands, brush thickets, or in woods near a pond. The female chooses a spot that offers dense cover that may form a complete canopy over the nest. The female uses her feet to scrape a nest bowl where she lays the first egg, then adds plant material such as grasses, sedges, and leaves from around the nest site, using a sideways motion of her bill to build up a nest measuring 6–7 inches across and 2–6 inches deep. After laying her last egg, the female adds her down feathers to the nest bowl before beginning to incubate.
Egg-Laying: Clutch Size: 6-9 eggs Egg Length: 1.7-2.0 in (4.3-5 cm) Egg Width: 1.3-1.4 in (3.2-3.5 cm) Incubation Period: 20-23 days Egg Description: Creamy white to pale olive-buff
Hatching and Incubation/Gestation: Precocial chicks hatch with eyes open, covered in yellow and dark olive-brown down.
Development: NONE
Parental Care: Females provide care in the form of brooding, leading, and protecting young. No male parental care.
Lifespan: MAX 27.1 years (wild), USE GENERAL
Conservation:
Official Federal Status: Least Concern
Special Statuses in Individual States: NONE
Threats: Green-winged Teal are numerous and their population has increased over recent decades, according to waterfowl surveys by the U.S. Fish and Wildlife Service. They estimated the North American breeding population in 2015 was at least 4 million, almost double the long-term average. Green-winged Teal are not on the 2014 State of the Birds Watch List. Most of the population breeds in Canada and Alaska, where relatively remote and inaccessible nesting areas buffer this species from habitat losses farther south caused by agricultural and urban development. Green-winged Teal are second only to Mallards in the number of ducks taken by hunters each year, with about 1.7 million shot per year in the U.S. Bag limits for ducks are changed annually based on population size estimates and harvest objectives, helping to safeguard these species against declines.
Conservation Efforts: ^^^^
Extra Facts: The American and Eurasian forms of the Green-winged Teal were formerly considered different species. The Eurasian teal differ from the American by lacking the vertical white shoulder stripe and having a horizontal white stripe along the back instead. Eurasian teal show up casually each year along both the Pacific and Atlantic coasts.
The Aleutian Islands of Alaska support their own race of Green-winged Teal, Anas crecca nimia. Unlike other Green-winged Teal populations, this race doesn't migrate. In winter the birds move from summering sites on ponds and lakes to the islands' beaches, where they forage in tide pools and on shallow-water reefs.

Green-winged Teals have closely spaced, comblike projections called lamellae around the inner edge of the bill. They use them to filter tiny invertebrates from the water, allowing the birds to capture smaller food items than other dabbling ducks. Green-winged Teal sometimes switch wintering sites from year to year. One banding study found that individuals wintering in Texas one year went as far away as California in subsequent years. This lack of philopatry, or "faithfulness" to a particular site, may reflect the tendency of males that did not breed the year before to try to find mates among a different set of wintering females.

The oldest known Green-winged Teal was at least 20 years and 3 months, based on banding data. It was a female banded in 1941 in Oklahoma, and recovered by a hunter 1960 in Missouri.

Pet Information: NONE

Notable Species:

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