

Anas discors (Blue-winged Teal)

Family: Anatidae (Ducks and Geese)

Order: Anseriformes (Waterfowl)

Class: Aves (Birds)

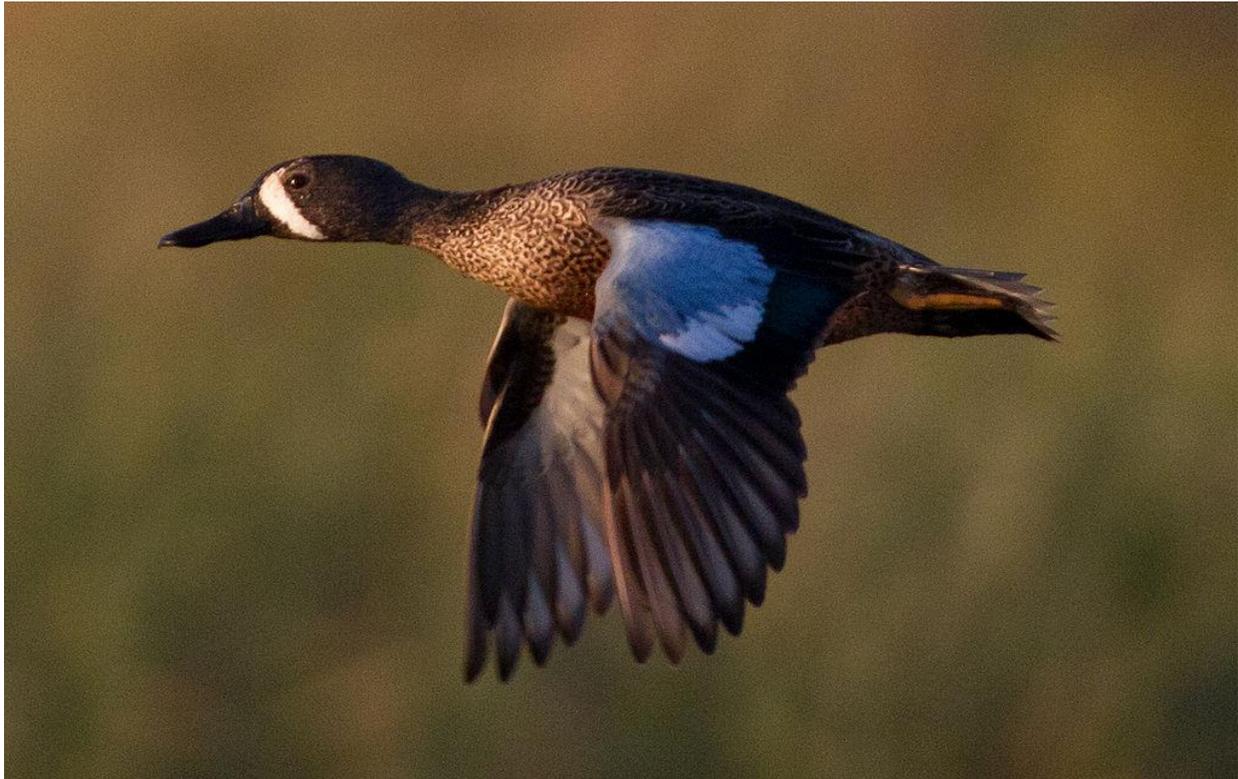


Fig. 1. Blue-winged teal, *Anas discors*.

[http://en.wikipedia.org/wiki/Blue-winged_teal#mediaviewer/File:Blue-winged_Teal.jpg,
downloaded 14 November 2014]

TRAITS. *Anas discors* has blue spots on the forewings, hence its name blue-winged teal. Large white patches on front wing. Males are smaller and more colourful than females. Wingspan range 56-62cm, mass 280-499g, body length 36-41cm. A large white crescent is present on the face of the male, between the eye and bill (Fig. 1). White patch on rear (Guillemain et al., 2007). Male's body is light brown. Its tail is black. The female's body mottled brown. White area at end of bill. Both male and female has yellow legs (Wikipedia, 2014). These birds use visual and vocal communication to signal and attract each other.

ECOLOGY. Found in terrestrial, marine and freshwater habitats. These include shoreline; calm sluggish water, mangroves, shallow ponds and wetlands that consist of thick emerging vegetation (Bennett, 1938). Resting flats consist of protruding rocks in water, mud flats, shoreline. Foraging for food is either on land or water. Nesting occurs in open waters with surrounding grassland.

Vegetation is used as nesting covers. They feed on vegetation and aquatic invertebrates (Rohwer, 1986). These invertebrates may include insects, aquatic crustaceans, molluscs, and other marine invertebrates. Vegetation includes seeds, grains, leaves, nuts, phytoplankton and algae. They have many predators which may include snakes, foxes, skunks and humans (Bennett, 1938). These birds live mutually among other dabbling ducks. The blue-winged teal mortality rate is the highest (up to 65%) of the dabbling ducks. This may have occurred because of over-ocean flying for long periods and hunting. Nests are destroyed by predators (Gammonley and Fredrickson 1995). These birds make significant seasonal migrations. In summer they migrate to North America. In winter, they migrate to South America, Central America and Southern parts of the United States (Lemaster, 1985), and are common winter visitors to both Trinidad and Tobago. Most active and easy to see in the early morning and late afternoon.

SOCIAL ORGANIZATION. The blue-winged teal exists in small flocks and is usually found among other dabbling ducks. When the breeding season is over, the male blue-winged teal vacates the breeding grounds first, leaving female teals behind. They proceed to satisfactory moulting cover, where there is thick vegetation. The male teals are flightless for approximately 3-4 weeks (Tesky, 1993). They migrate to wintering habitats, leaving somewhere in the middle of August. The males leave first, and by the middle of September the young follow (Rohwer et al., 2002).

FORAGING BEHAVIOUR. They use the dabbling method to feed, immersing their bill into the water. They are not divers hence they do not dive to feed. They submerge their necks and head forward when feeding on the surface (Stanford, 1988). What influences the quantity and quality of food consumed by these birds depends on its morphological adaptations and biological demands. When the availability of food changes within the aquatic ecosystem, foraging behaviour changes. Upon arrival to breeding grounds, they usually feed on seeds and grains. Aquatic vegetation grows as the season continues and there is an increase in surface associated invertebrates. Their large wings relative to body weight (Fig. 2) allows them to glide down with precision. In summer when wetlands dry, they move to wetlands to feed. In winter, they spend half of daylight hours feeding (Gammonley and Fredrickson, 1995). Females need a protein rich diet for egg production during breeding and most of this protein is consumed from aquatic invertebrates (Rohwer, 1986).

COMMUNICATION. To attract females, the male blue-winged teal make sounds. These sounds include a low pitched nasal “paay” and a high pitched whistle “pew.” These calls occur during fall and early winter. It starts with a solitary call, followed with a brief series of low pitched “pews.” Females also make sounds during the mating season. A brief series of powerful, solitary quacks, uniformly spaced, is made. These quacks may differ in volume and span. A female that is already mated and is experiencing chasing by a male that is not her mate gives a quack sound then a “gaek” sound respectively, in order to chase them off. Females as well make a quack sound to communicate with their young (Rohwer et al., 2002). To attract females, the male may also swim in front of her. He positions his body before her with the head facing away. If the female accepts the male, she does so by extending her head outward followed by lowering it and pointing it towards him. They both toss their head up and down when this is finished. This head bobbing is known as precopulation (Bailey et al., 1973).

SEXUAL BEHAVIOUR. These birds are sexually mature at the conclusion of their first winter (Bennett, 1938). During the breeding season, the female only has one mate for the whole of that season. Mates are however replaced between breeding seasons. Courtship begins with flight. Precopulatory displays occur when a female accepts a male as her mate. This display is a head pumping in both sexes with bill pointing downwards. The male seizes its mate by the nape, mounts her and attempts at copulation. If a female is under attack by another male who is not her mate, the male defends his female by hostile pumping the other male and also by calling. This often leads to a fight between the males. Fights usually involve feather pulling and wing beating. The female also defends herself from an intruding male by diving and/or flying away (Bailey et al., 1973).

PARENTAL BEHAVIOUR. The female takes care of its nest and the rearing of its young. They dig a curved hole in the ground as a nest. This nest is dug with her feet. Surrounding the nest dried grass are gathered. One egg is laid per day. She incubates her eggs by sitting on them and they are incubated for 21-27 days. A total of 6-14 eggs are laid and they take 21-40 days to hatch. She preens the hatchlings until they are all dried and clean. When all the eggs are hatched, she leads them away from the nest and doesn't return to it (Fig. 3). She cares for them until they can fly. At 24 days they reach their fledging and at 40 days they are independent (Glover, 1986; Kear, 2005; Livezey, 1980).

JUVENILE BEHAVIOUR. Ducklings spend a short period of time in the nest. This period of time is usually fewer than 24 hours, before they proceed to their primary expedition to water. The mother broods the young. Sometimes the male may chaperone juvenile broods for brief periods. The juveniles are capable of feeding, with aid from adults. The female stays with her young for approximately 2 weeks, directing them to suitable feeding sites. The young fledge at around 24 days. After approximately 40 days they are independent (Rohwer et al., 2002; Tesky, 1993).

ANTIPREDATOR BEHAVIOUR. To escape into cover, the blue-winged teal uses large abundances of bulrushes and cattails. Nesting cover is supplied by sedges, hayfields and grasses. A test was carried out by Fritzell (1975) which showed that the nest of the blue-winged teal with a light cover was better suited than a nest heavily covered. A nesting success of 47% was reported on an area that was grazed and 14% ungrazed (Bennett, 1938; Fritzell, 1975). The long-tailed weasel *Mustela frenata* is a predator of the blue-winged teal, that consumes the eggs of the birds. When the females are present in their nest, they are preyed on by birds of prey. The fox *Vulpes vulpes* is another predator of these birds which captures them in prairies. The cryptic colour of females and ducklings serves to prevent recognition by predators (Rohwer et al., 2002).

REFERENCES

- Bailey, R., Seymour, N. and Stewart, G. 1973. Rape behavior in blue-winged teal. *Auk*, **95**: 188-190.
- Bennett, L. 1938. The blue-winged teal: its ecology and management. Boston: Collegiate Press.
- Fritzell, E. K. 1975. Effects of agricultural burning on nesting waterfowl. *Canadian Field-Naturalist*. **89**: 21-27.
- Gammonley, J. H., and Fredrickson, L. H. 1995. Life history and management of the blue-winged teal. USDI National Biological Service, Waterfowl Management Handbook 13.1.8. 7 pp.
- Glover, F. 1986. Nesting and Production of the Blue-Winged Teal (*Anas discors* Linnaeus) in Northwest Iowa. *The Journal of Wildlife Management*, **20**: 28-46.
- Kear, J. 2005. Ducks, Goose and Swans. United Kingdom: Oxford University Press.

- Lemaster, R. 1985. *The Great Gallery of Ducks and Other Waterfowl*. Mechanicsburg, PA: Stackpole Books.
- Livezey, B. 1980. Effects of selected observer-related factors on fates of ducks nests. *Journal of Wildlife Management*, **8**: 123-128.
- Rohwer, F. 1986. Composition of Blue Winged Teal Eggs in Relation to eggs size, Clutch Timing of Laying. *The Condor*, **88**: 513-519.
- Rohwer, F.C., Johnson, W.P. and Loos, E.R. 2002. Blue-winged teal (*Anas discors*). In: Poole, A. (Ed.) *The Birds of North America Online*. Cornell Lab of Ornithology, Ithaca. Available at: <http://bna.birds.cornell.edu/bna/species/625>
- Stanford. 1988. https://web.stanford.edu/group/stanfordbirds/text/essays/Dabblers_vs._Divers.html , download 15 November 2014.
- Tesky, J.L. 1993. *Anas discors*. In: *Fire Effects Information System*. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Available at: <http://www.fs.fed.us/database/feis/animals/bird/andi/all.html>
- Wikipedia. 2014. Blue-winged teal. http://en.wikipedia.org/wiki/Blue-winged_teal , download 14 November 2014.

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Fig. 2. Blue-winged teal flying.

[<http://gunnhook.com/outdoor-journal/10-tips-for-a-better-early-season-blue-winged-teal-shoot/>, downloaded 16 November 2014]



Fig. 3. A female blue-winged teal with her young.

[<http://greglasley.com/bwteal.html>], downloaded 16 November 2014]



Fig. 4. A Blue-winged teal drinking water.

[<http://greglasley.com/bwteal.html>], downloaded 16 November 2014]