

Cairina moschata (Wild Muscovy Duck)

Family: Anatidae (Ducks and Geese)

Order: Anseriformes (Waterfowl)

Class: Aves (Birds)



Fig. 1. Muscovy duck, *Cairina moschata*.

[www.birdsoftt.com/birds.../wild%20muscovy%20duck.htm, downloaded 19 September, 2011]

TRAITS. Wild muscovies are overall black in colouration, but domesticated muscovies may be blue, brown or white. Indescent green and purple reflections on the wings and upper parts of their bodies (Wildfowl Trust, 2008). Wing; patches of white, which develops after one year of the duck's life (Dye and Stai, 2004). Plumage (arrangement of feathers) brownish, almost black. Feathers are water proof because of an oil produced by a special gland on its' tail. The wild muscovies are much sleeker, glossier and more attractive than their heavier, often "piebald" hybrid (Burton and Burton, 2002). Feather; facilitate flight, provide insulation, aids in thermoregulation, used for displaying, camouflage and signaling (Dye and Stai, 2004). Wing length; 400-500 mm (Wildfowl Trust, 2008). Males larger than female, average weight, male 6 lb (3 kg), female 3 lb (1.3 kg) (Burton and Burton, 2002). The naked skin and bill, (mouth) are bright red in domesticated ducks, but blackish in the wild muscovy ducks. Face; red warts on male not present in females, two blue-white bands. Bill; flat and broad which contain rows of fine v-shape indentation along the edge referred to as "lamellae". The lamellae function is to

provide a grip on food without it sliding off (Dye and Stai, 2004). Knoblike caruncle (fleshy outgrowths), around the face and bill, which is far more developed in males (Dye and Stai, 2004). Manelike red crest present on the males around the eyes and above the beak (Dye and Stai, 2004). Legs and feet; lead blue, grayish-black or solid black and yellow or orange in domesticated ones, webbed like paddles for swimming. Because of this characteristic of the duck, muscovies waddle, they don't walk, seen in figure 1 (Dye and Stai, 2004). No nerves or blood vessels present on feet, hence they do not feel cold and can swim in ice water. Sharp claws present on feet. Scales present on toes and metatarsus. Eyes; yellowish-brown in wild muscovies but darker in domesticated ones (Bouglouan, 2011). The muscovy duck is known by several names such as, "greater wood ducks", "musky duck", "musk duck" and the domesticated ducks in Trinidad are called the "common duck".

ECOLOGY. Original home of the wild muscovy duck is in the tropical America, from Mexico to Peru and Argentina. It has been introduced to the warmer climates of the world where it has adapted and thrives (Burton and Burton, 2002), such places are Trinidad and Tobago, and Central America (Wildfowl Trust, 2008). Found in forested areas and prefer shady, wooded habitats, surrounded or close to wetlands (Wildfowl Trust, 2008). They make use of the trees in the hollows or crowns of Moriche palms (Wildfowl Trust, 2008), for roosting and nesting. They breed close to these wetland streams areas and prefer freshwater (Bouglouan, 2011). They are omnivorous, feeding on aquatic plants and grasses, their roots, seeds, stems and leaves, and they also feed on terrestrial vegetation, including agricultural crops (Dye and Stai, 2004). They also consume vertebrates, fish, reptiles and invertebrates, crustaceans, insects, millipedes, termites, worms and tadpoles (Dye and Stai, 2004). They usually feed at night, in the evening or very early in the morning.

SOCIAL ORGANIZATION. The wild muscovy is a gregarious bird, meaning they move around in flocks (Wildfowl Trust, 2008). Sometimes muscovies can be seen by themselves but they can form groups and also flocks which are seldom seen (Dye and Stai, 2004). As mentioned before they feed during the early morning and evening hours but they also loaf a large number of their time under trees or on them, for shade. During the breeding season wild muscovies can form groups consisting of 5 or more ducks (Dye and Stai, 2004). However when not breeding, they can form huge flocks of 20 or more individuals (Dye and Stai, 2004).

ACTIVE AND RESTING BEHAVIOUR PATTERNS. Wild muscovy ducks display a variety of behaviour including hissing at each other during mating, tail wagging, bill clapping, crest raising during mating or to show awareness and head bobbing shown also during mating. The wild and domesticated muscovies have a need for permanent access to water for carrying out its every day routines, during the day and night. A number of feeding, bathing, sleeping and preening patterns are repeated each day (Burton and Burton, 2002). When resting or sleeping they rarely keep their eyes closed, for more than a few minutes, but when sleeping they can keep the eyes closed for up to 30 to 60 minutes or longer (Burton and Burton, 2002). Their resting posture is by sitting and placing their head into their shoulders or turned back so their bill rests in the shoulder blade feathers (Burton and Burton, 2002). This posture can be kept for long periods of time, with frequent blinking of the eyes.

COMMUNICATION. Wild muscovy are mostly silent, they do not use vocalization, apart from hissing at each other during mating, tail wagging, bill clapping, crest raising during mating or to show awareness and head bobbing shown also during mating and signs of aggression. Wild muscovies have a harsh quack (Wildfowl Trust, 2008). Soft quacks and chirrs or cackles can be heard by the females. The most important sense of a duck is its vision; since good eyesight is essential for safe flight (Dye and Stai, 2004). The vision in wild Muscovy ducks is well developed which gives keen insight superior to that of other vertebrates (Dye and Stai, 2004). The eyes are like reptile eyes but has better-position lens (Dye and Stai, 2004).

SEXUAL BEHAVIOUR. Wild muscovies first breed at the age of 1-2 years, breeding season is during the wet season and the breeding interval is 1 year (Burton and Burton, 2002). The male muscovies are promiscuous, mating with any female that is ready to mate and keeping other males away by fighting fiercely using the bills, and claws also they strike each other violently with the armed bony knobs on their wings (Burton and Burton, 2002). They fight to defend territory and mate. During the courtship period a series of displays are seen, such as the males nodding their heads back and forth in abrupt jerks with their necks outstretched and crests raised (Burton and Burton, 2002). A similar display is seen by the females. There is also over excessive preening and feeding behaviours. There are also specific calls and postures such as holding both tail and head up (Dye and Stai, 2004). Once paired they stand side by side, nodding their heads and hissing at each other. At first the male runs after the female and tries to grab her, the female first try to escape and they both may run around for some time until finally she ceases resistance (Burton and Burton, 2002). The nest is built by the female in a hole in a tree and she lays a clutch of about 15 eggs. A fierce watch is given to other male mates by the mating partner but the female may mate with others. The mating pair doesn't stay together for life; they find new partners each year (Dye and Stai, 2004). The males don't raise the young and the young don't stay with the female for long a time (Dye and Stai, 2004).

JUVENILE BEHAVIOUR. Before the ducklings are hatched a process whereby the mother and duckling exchange low frequency call is carried out, which imprints on the ducklings (Dye and Stai, 2004). After hatching their colour is duller, with little or no white on the wing (Bouglouan, 2011), most of the ducklings would follow their mother into the water, the newly hatched ducks are covered with a dense, insulating cover which traps air, making them able to float. The ducklings are able to forage by themselves but still require protection by the mother from predators (Dye and Stai, 2004). She uses the "contact" call which was imprinted on them. The male muscovies leave the mother before the eggs are hatch, so the female raise the ducklings by herself. During the summer the female molt leaving her flightless, but the juveniles first feathers appear and they begin to fly, leaving their nest and going on their own (Dye and Stai, 2004). "In wild Muscovy ducks, the mother will watch over her young for several months" (Dye and Sati, 2004).

ANTIPREDATOR BEHAVIOUR. When there is an intruder in the flock, responses, such as freezing, alarm calling and crest raising are seen (Burton and Burton, 2002). Wild muscovies are strong and heavy, despite this they can fly pretty good and when disturbed or threatened they can fly until no longer seen (Dye and Stai, 2004). If caught they fight vigorously and use their wing, claws and beaks to chase intruders away (Burton and Burton, 2002). The blinking of the eye is

use as an antipredator mechanism, vigilance, so they can become fully awake and alert if a predator is close.

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