Estrilda astrild (Common Waxbill)

Family: Estrildae (Estrildid Finches) Order: Passeriformes (Perching Birds)

Class: Aves (Birds)



Fig. 1. Common waxbill, Estrilda astrild.

[http://www.finchinfo.com/birds/finches/species/common_waxbill.php, downloaded 20 February 2017]

TRAITS. The common waxbill, *Estrilda astrild*, is a relatively small grey-brown finch with a red conical bill and red coloration around the eyes (Fig. 1). The waxbill name arose due to this distinguishing red colour since the bill appears as if it has been dipped in red wax. The common waxbill is also known as the red-bellied, barred or brown waxbill, St. Helena waxbill, Saint Helena, or pheasant finch (FIC, 2017). The grey-brown plumage forms a design of dark lines on the wings and back while the tail is brown and the underside of the tail is black. The cheeks, throat and belly are white-grey and the belly has a rose-to-crimson patch (Tar, 2011). The adults have a wingspan of 12-14cm and an approximate length of 11.5cm. Their average weight is 19 grams (FIC, 2017). Their tails are generally long and tapered and the wings are rounded. Females tend to have a paler appearance than the males and the juveniles are even paler with little to no red feathers on the belly and no red bills (Marques et al., 2016) (Fig. 2).

DISTRIBUTION. *Estrilda astrild* is indigenous to sub-Saharan Africa (Fig. 3). It can also be found in the Americas, the Mediterranean Basin and Oceania where it was introduced intentionally or as a result of caged birds escaping into the wild due to the pet trade. It was also introduced in Caribbean in islands such as Puerto Rico and Trinidad (Tar, 2011).

HABITAT. Common waxbills typically inhabit damp grassy areas such as marshes, swamps, and riverside vegetation; tall grasses and reeds in the countryside; forests and woodlands as well as gardens, bushes and sugar cane plantations. They reproduce and nest in these areas. They can also be seen in farmland and parks. These birds show sensitivity to low temperatures (Stiels et al., 2012).

FOOD AND FEEDING. Common waxbills are granivorous, their diet typically consists of seeds in pasture grasses and millets. *Panicum maximum* or guinea grass is the main constituent since they produce seeds year-round. Other sources include *Digitaria horizontalis* and *Echionchloa*. To retrieve the seeds, the bird may either land on the seedhead or pull and hold it to the ground with one foot while the other foot remains on the floor to retain balance. The bill is used to remove the seeds. Feeding usually occurs in the early morning and late afternoon in flocks ranging from 2-20 individuals (Tar, 2011).

POPULATION ECOLOGY. These finches are social birds. During the day, they congregate in flocks up to 40 and forage though reeds and grasses. In the evening, an even larger congregation participates in roosting. During the breeding season, pairs come together and remain monogamous. They also engage in a process of mutual grooming referred to as allopreening. They build nests in clumps of grass, bushes and vines on or close to the ground (Tar, 2011). This results in an increased risk of predation by mammals and snakes. The adults use scat (droppings) as a means of masking the scent of the young as well as a deterrent from entering the area. Scat comes from large African cats called servals, or other carnivores (Schuetz et al., 2005).

REPRODUCTION. During courtship, the birds begin with a 'curtsy' and exchange a song. They engage in allopreening. Stem displays occur during construction of the nest in which the male sings an irregular tune and the female remains silent. Once this ritual is done, the pair moves away from the larger flock and breeds. The pairs may be adjacent to each other in a particular territory so they are not completely solitary. Males also attract other females in the flock which are not his mate. This begins with 'fluffed singing' and ends with the bird faced towards the female with his neck held high and his ventral and flank feathers ruffled. His tail is outstretched towards the females and he sings loudly (Fig. 4). Most females flee since they have not mated with this male but the male will attempt to mate with the females that have remained. The breeding season is midsummer in most areas. Nests are woven, spherical masses of grass with a small entrance, built on or close to the ground. The female builds and the male decorates the nest, and both parents distribute scat around it. A 'cock's nest' is built on top of the main nest, presumably for the parent who is not incubating at the time. Clutch size is 4-6 eggs and a pair may produce several broods a year. Both sexes work to incubate the eggs over a period of 11-12 days. Both parents also feed and care for the young while fledging occurs at 17-21 days. The juveniles can become reproductive between 6 months and 1 year. Common waxbills have a lifespan of 4 years (Tar, 2011).

BEHAVIOUR. The common waxbill utilizes song and characteristic body language to communicate, mostly involved in attracting a mate. The bird exhibits a soft, simple melody with

various notes, changing slightly in pitch and length from the contact note. A typical body movement of this finch is a 'curtsy' in which the head is turned at a slight angle and the body is crouched. This position is accompanied by singing, females sing a smooth tune and males sing multiple short notes. Males protrude their bellies to display their red colour, stick out their bills and ruffle their feathers in an attempt to lure a female. During multiple social interactions, the tails of both sexes are moved laterally. Mates also perform preening to strengthen their bond (Tar, 2011).

APPLIED ECOLOGY. Common waxbills are continuously expanding their range and increasing their populations into new areas and are not a threatened species according to the IUCN List of Threatened Species (IUCN, 2017). They can be detrimental to crops in some areas especially where they are non-native, but can also play a role in seed dispersal, and are used as pets (Tar, 2011).

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Fig. 2. Juvenile common waxbills.

[http://www.finchinfo.com/birds/finches/species/common_waxbill.php, downloaded 20 February 2017]



Fig. 3. Native distribution of the common waxbill.

[http://www.finchinfo.com/birds/finches/species/common_waxbill.php, downloaded 20 February 2017]



Fig. 4. Male common waxbill attracting a female.

[http://www.finchinfo.com/birds/finches/species/common_waxbill.php, downloaded 20 February 2017]

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