Sterna hirundo (Common Tern)

Family: Laridae (Gulls and Terns)
Order: Charadriiformes (Shorebirds and Waders)
Class: Aves (Birds)

Fig. 1. Common tern, *Sterna hirundo*.

[https://www.birdid.no/bird/eBook.php?specieID=1479&compareSpecieID=1790, downloaded 17 October 2016]

TRAITS. Medium-sized and slender terns ranging from 31-37cm in length, adults weigh 110-145g with wingspan of 75-80cm (INHS, 2016). Elongated outer tail feathers. Tails are long and deeply forked, tips of the tail-streamers are level with the folded wing-tips. The outer tail feathers are dark grey, with white upper tail coverts. Upperparts, silver-grey, outer primaries on the wingtips are black. On its head, a black cap covers the eyes and down to the back of the neck. The common tern has white cheeks and pale whitish-grey underparts (Fig. 1). Underwing primaries have dark edges and are seen when the bird is in flight. Bill colour is orange-red with black tip. Its legs are red. The juvenile common tern has a whitish forehead with dark brown crown and dark ear-coverts, grey wings, with brown bars and dark edges; the tail is short, and lacks the elongated streamers that are seen in the adult. The short tail has dark tips, the legs are pink or orange-brown, and the bill pink or yellow. They acquire full adult plumage after four years.

ECOLOGY. The common tern is found breeding throughout the temperate areas of the Northern Hemisphere, in habitats such as beaches, and on grassy and rocky inland shores. They migrate south in the non-breeding season, to warm sub-tropical or tropical waters; the Caribbean region has both winter visitors and year-round residents (Fig. 2). It feeds mainly on small fish but also consumes crustaceans, insects, squid and other invertebrates (Erwin, 1977).

FORAGING BEHAVIOUR. The common tern diet consists mainly of fish, baitfish; crustaceans, insects, squid and other invertebrates (Erwin, 1977). Its catches its prey by plunge-diving. This is characterized by location its prey by hovering over the surface of the water, then, once spotted, swoops down and picks the food from the surface or dives below the surface. Additionally, the common tern is known for stealing food or attempting to steal food from other terns. Shoals of fish may attract large feeding flocks, but these birds often feed alone or in small groups (Erwin, 1977). In some cases, the common tern can be territorial. These territories are defended by both males and females. Territoriality at feeding sites varies between colonies and is directly related to food availability. Foraging is carried out over fresh water and marine habitats, where they typically follow predatory fish, awaiting panicked baitfish at the surface. Foraging can take place in mixed-species flocks together with other terns (INHS, 2016). In terms of distance travelled for food, most common terns forage 5-10 km from breeding colonies, and at maximum 15 km offshore.

COMMUNICATION. There are three different calls. The most distinctive is the alarm call. This call doubles as a warning to intruders, while serious threats are responded to with a loud distinctive call as a tern takes flight. This quiets the colony while they assess the threat. Another call is used when an adult is approaching the nest while carrying food. Its purpose is for recognition as parents and chicks can identify and locate each other by call. This is the same amongst siblings, who possess the ability recognize each other's calls at a minimum of twelve days after hatching, which is important for keeping the brood together. The last known call is used during social contact.

SEXUAL BEHAVIOUR. Common terns are monogamous (Gonzales-Solis et al., 2001). Females play an active role in the choice of mates. Males spend much time fishing and preparing for what is known as courtship feeding, while females spend most of their time at the colony (Gonzales-Solis et al., 2001; Ludwig and Becker, 2006). The breeding period is between April and June. Male common terns will establish their territories at the colony before commencing courtship feeding. Courtship feedings entails the male tern bringing fish to the female. Males consistently offer fish to the female prior to mating (Ludwig and Becker, 2006). Premating displays consist of the male posturing followed by the pair circling each other. The male mounts the female at 1-2 minute intervals before copulation commences. When copulation begins, this is accompanied by wild flapping of wings during and after. Chicks are able to fly after a month but sexual maturity is achieved after 3 years. Reproduction may continue until death with peak productivity at approximately 4 years and a maximum reproductive life-span of 20 years (INHS, 2016).

NESTING. The nests are typically shallow depressions located on open substrates, and consist of little or no vegetation placed near to a vertical object which serves to provide shelter and as a means of identification of the nest (del Hoyo et al., 1996). Construction and site selection consists of the male bending forward and scraping into the ground with its feet to make a small hollow. This method is repeated around the nest before the female selects the one she sees as fit to lay her eggs in. Common terns nest in large colonies with numbers as high as several thousand pairs. Some pairs are known to nest alone. Before breeding occurs the common tern arrives at established

breeding sites and occupies its nesting area for 15- 25 days before laying. A clutch of 1-4 eggs is typically laid and incubated by both the male and female for 22-28 days (INHS, 2016).

JUVENILE BEHAVIOUR. Young common terns are capable of leaving the nest within a few days after they hatch (Smith et al., 2005). They are fed by parents for a minimum of six weeks post-hatch. Chicks will remain close to the nest when they are newly hatched, until their mobility increases as they age. As they begin to venture further away from the nest they become separated. Those chicks which hatched first are typically larger and receive more food. As a result of this they are more likely to survive than chicks that hatch later. Like other species of birds, tern chicks have the ability to beg. The begging intensity of chicks has been observed as an influencing factor in parental feeding decisions (Smith et al., 2005). The age at which they take their first flight is about 22-28 days, but they remain with parents a minimum of 2 months.

ANTIPREDATOR BEHAVIOUR. One of the parents attends the nest constantly directly after eggs hatch. They are known to become very aggressive after their chicks are laid and have learnt to move. When a colony is threatened by a predator, the bird gives a loud warning call to the rest of the colony. The adults form a defence against the predator, and chicks hide away in the high grass or in their nests. A common tactic among members of colonies is called panic. This entails an entire colony flying up using loud calls that generate a lot of noise then, falling silent suddenly, followed by a downward swoop to the ground. This is very effective and often assures the colony's safety. Nesting in colonies is advantageous to these birds as the probability of a tern being harmed by a predator is low.

REFERENCES

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Fig. 2. Geographic range of the common tern: breeding (yellow, summer), non-breeding (blue, winter) or resident (dark green, year-round).

[http://datazone.birdlife.org/species/factsheet/common-tern-sterna-hirundo/distribution, downloaded 17 October 2016]