

INVESTING in the future

Like all seabirds, Cape Gannets are monogamous. Their long commutes between breeding and feeding sites mean that both parents have to share incubation and chick-rearing duties. Gannet pairs generally remain together in successive seasons, often breeding in the same nest each year. The nest is a mound of guano, feathers and other material that both partners scrape together to refurbish the nest at the start of the breeding season. When guano was harvested from colonies every year, nests were only a few centimetres high and weighed less than two kilograms; these days in the gannets' protected breeding colonies the nests are much higher and weigh on average more than 13 kilograms.

Breeding usually occurs in spring, although egg laying is staggered and may continue to December or even later, especially at Bird Island in Algoa Bay. About half of all pairs that lose an egg or a small chick lay a replacement egg, usually two to four weeks after their first breeding attempt fails. However, there is no evidence of double brooding.

All gannets usually lay one egg, even though twinning experiments in which researchers deliberately add a second egg to a nest show that pairs can often raise two chicks. Barely one per cent of Cape Gannets lay two-egg clutches and some of these probably result from eggs moved from other nests. Adult gannets occasionally kick an egg out of their nest and, given the close proximity of nests, these are sometimes 'rescued' by neighbouring birds.



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First-year survival of young gannets is linked to their weight at fledging, so it pays parents to invest all their effort in one chick. Interestingly, the Peruvian Booby, which fills the niche of the Cape Gannet in the Humboldt Current upwelling region, typically lays three eggs and several other boobies lay two eggs. However, adult boobies continue to feed their chicks for several months after they fledge, whereas young gannets have to fend for themselves once they leave the colony.

Gannets and boobies lack a brood patch and instead incubate their eggs with their webbed feet. In Cape Gannets, the egg takes just over six weeks to hatch into a nearly naked, blackish chick that has to be brooded for the first few weeks. Chicks are fed regurgitated fish and grow rapidly. After 11–12 weeks the youngsters weigh more than their parents, but then lose weight as parental feeds dry up and they typically leave the nest when they are 13–15 weeks old. Breeding success is generally quite good, with about 60 per cent of eggs resulting in fledglings.

An adult Cape Gannet tends to its newly hatched chick, which is safely ensconced in a large guano nest.

However, success varies considerably among colonies and is much lower in La Niña years when upwelling is greatly reduced, limiting the availability of their preferred pelagic fish prey.

Juvenile Cape Gannets have grey-brown plumage, spotted white, which is gradually replaced with white adult plumage from about eight months old. Most Cape Gannets attain adult plumage by the time they are three years old. A few might breed at age three, but most only start when they are older than four years. Adult survival is in general high and a few ringed birds over the age of 30 years have been recorded. This long adult lifespan is necessary to raise sufficient chicks to maintain the population.

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