

## Puffin Facts

- Puffins older than the age of two can be identified by the presence of ridges on their beak. The feet also brighten with maturity.
- The Atlantic puffin is split into three subspecies; the UK subspecies (*grabae*) being smallest in size.
- The oldest puffin recorded on the Farnes was 30 years old. However this record has been beaten; the new record is 37 years old. This individual was found in NW Scotland but ringed on the Farnes.
- Black upperparts and white lower parts act as effective camouflage whilst sitting on the sea; to a predator looking up, the white colouration blends with the light sky and to a predator looking down, the black features blend with the dark water.
- Puffins typically dive for 30 seconds.
- Unlike most birds, puffins (and all other auks) have solid wing bones to assist submergence.
- Puffins can catch and swallow up to three fish during one dive.
- The beak is well adapted to grip a row of fish as the upper and lower mandibles come together in a parallel fashion to exert equal pressure along the whole length of the bill.
- The record number of sandeels found in a puffin's beak is 61.
- Having caught a fish, a puffin is able to clamp it to the roof of its beak with its strong tongue and then open its bill again to catch the next item of prey.
- In the colony, aerial predators of adult puffins include great black-backed gulls and peregrine falcons
- Puffins can overcome the problem of salt balance by their ability to excrete salt from their kidneys and *via* special nasal salt glands.
- Due to an annual moult, most puffins are flightless between January and March.
- (92% of) Puffins use the same burrow each year and thus (85% of) puffins pair for life.
- Only one egg is laid weighing 15% of an adult puffin's body weight. This small investment reflects the stability of a puffin's environment. A second egg can be laid within two weeks if the first egg falls to predation.
- Both sexes incubate. Incubation period is 39 - 43 days. If one parent dies, it is possible for the other to raise a chick alone.

- In 2008, 36,000 pairs were recorded on the Farnes, in 2013 the number was just under 40,000.
- A puffin flies into the wind on take off and with the wind on approach. Thus all puffins in a colony fly in the same direction, reducing the chance of collision.
- On landing within a colony or moving through a colony, puffins adopt a low submissive posture in order to limit any hostility between itself and its neighbours.
- Although generally peaceful, puffin fights can occur over the occupation of a burrow.
- Preening is carried out to: distribute oil from a preen gland to keep the feathers supple; to trap insulating air between their feathers; to zip feathers together so they act as one unit in flight; and to keep feathers clean (dirty feathers are not water repellent).
- Courtship involves beak tapping. Neighbours in a colony sometimes join in to develop kinship.
- Chicks can gain 10g body weight per day. However at 4 weeks old, the chick takes on 80g of fish per day (25% of its body weight).
- Puffin chicks are sometimes referred to as pufflins!
- Puffin chicks fledge after 38-44 days depending on food supply; if food is in short supply, the colony as a whole fledge their youngsters later. Puffin chicks must achieve 70-80% of adult body weight before leaving the burrow.
- Puffin chicks leave their burrows under the cover of darkness, quickly making their over cliffs and surf to swim as far out to sea as 3 miles by dawn.
- Fledging success is typically 95%, however only 20-40% of fledglings will attain full breeding status at 5 years of age.