

Tufted Puffin



Fratercula cirrhata



Photo by
<https://www.usgs.gov/media/images/a-tufted-puffin-sea-lower-cook-inlet-alaska>

Physical Description:

Tufted puffins are medium-sized stocky seabirds with rounded heads. They are the largest puffin. They reach lengths between 14.2 and 15.8 inches (or 36 to 40 centimeters) and weigh between 18.3 to 35.3 ounces (or 520 to 1000 grams). While they are solid brown-black overall, they do have distinctive facial coloration as well as bright orange feet and bills. In breeding plumage, a tufted puffin has a white mask across its face, ending in a tuft of blonde feathers sweeping back from above the ear. The bill is accented with a yellow plate at the base. Nonbreeding adults have dark gray faces with no head plumes or bill plates. Like other puffins, this species has a large, laterally compressed bill. The outer wings are wider than the inner wings, giving the outstretched wing a hand-like appearance. The tufted puffin can be distinguished from other puffins by its dark belly.

Natural History:

Tufted puffins can be found in many coastal habitats adjacent to the Washington coast and elsewhere in the northern Pacific, with the exception of estuaries. They are one of the most abundant and conspicuous seabirds nesting in the north Pacific. They breed in colonies on islands. Winter habitat is well offshore, in mid-ocean. Puffins are highly social animals. Besides living in colonies, they will fish together in flocks of 10 to 25 birds. They dive and swim underwater, using their wings to paddle and their feet to steer their way through schools of small fish, which they catch in their bills. They disperse widely while at sea but will return to the colony where they were born during breeding season. Tufted puffins are active in their colonies during the day and can often be seen sitting on rocks in an upright posture. Tufted puffin colonies fluctuate in size annually. The North American Waterbird Conservation Plan estimates a continental breeding population of 2,750,000 to 3,000,000 birds, rates the species a 9 out of 20 on the Continental Concern Score, and lists it as a Species of Low Concern. Many California populations, however, have disappeared or significantly declined. In recent years, potentially serious declines have occurred in Washington as well. In Washington, most breeding colonies are protected as wildlife refuges or are inaccessible to humans. In May 2015, the Fish and

Wildlife Commission voted unanimously to approve listing the tufted puffin as endangered in Washington State.

Reproduction:

Tufted puffins breed in colonies on islands with steep, grassy slopes or on cliff tops. The steep drop offs may help the birds take flight. Throughout their range, they prefer treeless islands. They nest mostly in ground burrows and occasionally under boulders and piles of rocks or dense vegetation. Tufted puffins form attachments and pair long-term with partners for breeding. Breeding usually begins in April although mating activity has been seen as early as March and as late as May. During the period prior to egg laying, large groups will congregate off-shore from their nesting colony and engage in intense courtships and frequent copulations. Similar behaviors occur on land at the same time, with puffins courting mates through skypointing (flying straight upwards), strutting, and billing (two birds rubbing their bills together). The duo spends a significant amount of time preparing their burrow, using their feet and bills to dig. Burrows will have an end chamber, which they fill with grass, seaweed, or feathers. In highly populated colonies, the burrows of two or three of the animals sometimes run together. Often, they will build the nest site in one year, but wait until the following breeding season to occupy.

Life Cycle:

During breeding season, the female lays one off-white egg, sometimes with faint blue and brown markings, usually between late April and early June. Eggs produced later than June are unlikely to produce fledglings. The peak egg-laying period usually lasts about two weeks in each colony. Both parents will tend to it during the six to seven week incubation period, and also care for the young for another six to seven weeks. After that period, the young tufted puffins leave the nest and head to sea at night. Most young birds are not yet capable of flight at this time, so they walk, or flutter to sea, without parental aid. Young puffins usually do not return to the colony for almost two years, spending all their time at sea. Puffins become sexually mature at the age of three, but most do not mate until they're four. They can live up to 20 years.

Range:

Tufted puffins spend a majority of the year over the Pacific Ocean, but nest along coastlines from lower California to Alaska, and across the ocean from Japan to the shores of northeastern Asia. Their migratory patterns are not well known, but tufted puffins are less likely to be seen near shore in winter than in the breeding season. They are probably the most pelagic of the alcids during their non-breeding season, with many birds wintering 60 to 120 miles offshore. Most of the 29 known nesting colonies in Washington are on the outer coast. Jagged Island and Alexander Island hold the largest colonies, with 7,800 and 4,000 breeding birds, respectively. The five known inland colonies are located on Protection Island, Seal and Sail Rocks, Smith Island, Colville Island, and Bare Island.

Diet:

In addition to small fish, they also feast on mollusks, cephalopods, and crustaceans, including squids, octopus, crabs, and jellyfish. They also hunt capelin, sand eels, herring, and hake.

Threats:

Tufted puffin colonies are vulnerable to food supply and climatic events, such as El Niño, and fluctuate in size accordingly. By-catch in fishing nets killed tens of thousands of tufted puffins each year into the 1980s. The elimination of drift-nets on the high seas has reduced mortality, although by-catch in coastal fishing nets still kills large numbers of puffins. In addition, nesting tufted puffins are highly vulnerable to red and arctic foxes, river otters, brown bears, and other mammals. Such predators were once absent from most islands in the northeast Pacific, but were introduced in the 1800s and early 1900s. Where present, mammalian predators have devastated or eliminated tufted puffins from many islands. Interestingly, populations of large gulls, which prey on young puffins, have been increasing in Washington, which may account for some of the recent decline in numbers. Oil spills and human disturbance are also threats to this species.

Fun Facts:

- Tufted puffins will routinely carry multiple fish crosswise in their bills (and can carry more than 20 fish at a time), which they take back to their young.
- Burrows of tufted puffins can be more than 1.5 meters (5 feet) long and four to six inches in diameter!
- Unlike other birds, tufted puffins need a running start to take to the air.
- Nicknames of the tufted puffin are “Sea Parrot” and “Clown of the Sea” because of their colorful bills and tufts of feathers.
- They can dive to depths up to 200 feet and stay underwater for a minute or more.
- They can reach speeds of 55 mph.

Sources:

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