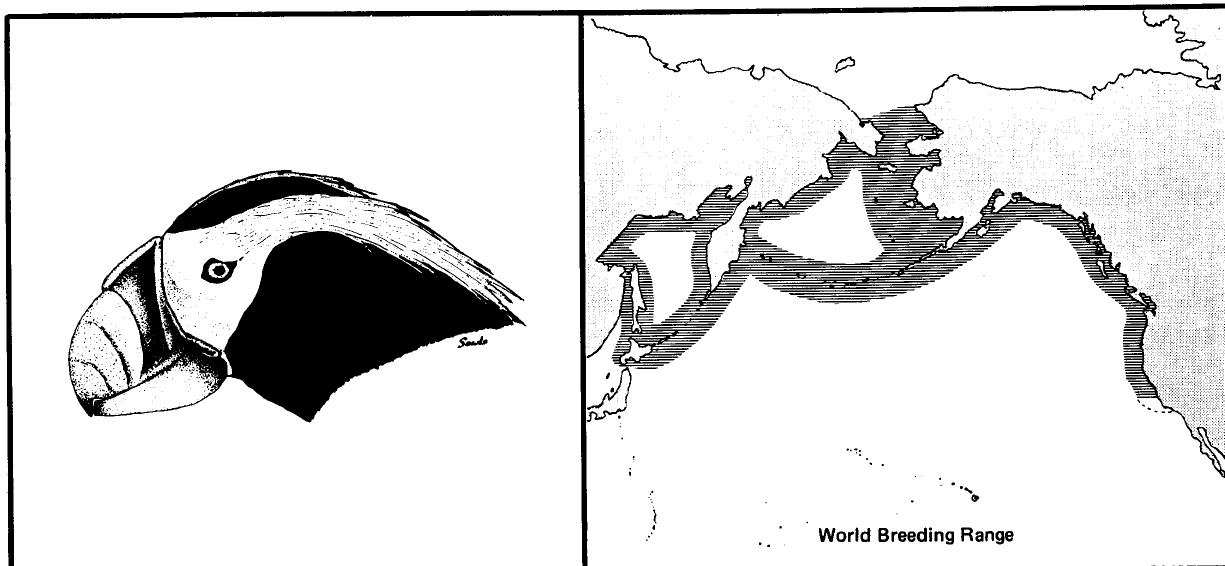


Tufted Puffin (*Lunda cirrhata*)



Tufted Puffins are among the most abundant and conspicuous seabirds nesting around the North Pacific rim, with the center of abundance apparently in the western Gulf of Alaska and the Aleutian Islands (Sowls et al. 1980). Their spectacular appearance and their as yet unexplained habit of circling and investigating vessels at sea helps make the "sea parrots" among the most well known of seabirds. At colonies they can often be seen standing in front of their nesting burrows.

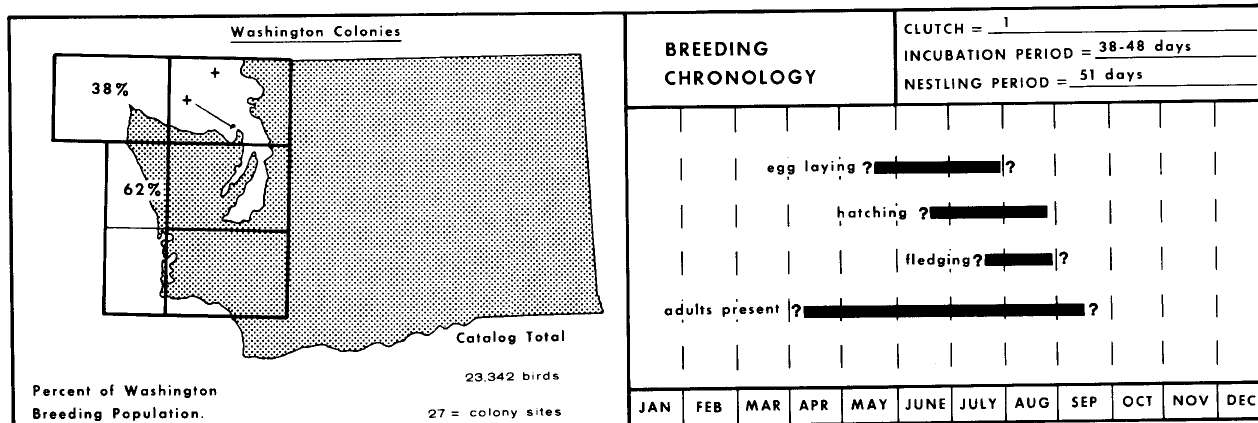
Tufted Puffins usually nest in earth burrows at the edges of cliffs or on the grassy slopes of islands. In Washington they nest on open, grassy slopes and near the top of vertical cliffs where edges erode. Habitat is limited or unavailable on many islands suitable for other species; consequently, in inland waters in

particular, puffins have probably always been restricted in nesting distribution in Washington.

Tufted Puffins can sometimes be observed carrying fish (up to 12 or more) crosswise in their bills to their chicks at colonies. Preferred foods include small fish, cephalopods, and crustaceans (Hatch et al. 1979). Although Tufted Puffins are diurnal, fledglings apparently leave their burrows and go to sea under cover of darkness. In fall, adult puffins lose their brightly colored bill sheathes. Both fledglings and adults head far offshore to winter in mid-ocean and during winters are only occasionally seen near land.

WASHINGTON COLONIES

Although Tufted Puffins are among the least-frequently noted



seabirds breeding in Washington, this attractive species is actually one of the most abundant. Few nest in the inland marine areas where most boating takes place, but on the outer coast there are large colonies. All told, the species breeds at 29 known locations with all but five of these along the outer coast from Tatoosh Island to the Point Grenville area. The largest colonies are on Jagged Island where 7,800 breeding birds are estimated and Alexander Island where 4,000 nest. In the inland waters the species nests only at Seal and Sail Rocks, Protection Island, Smith Island, and at Colville and Bare Islands. Because of inaccessibility of many sites where puffins nest along the outer coast and the fact that, though birds may be seen from a boat circling colony sites, standing outside burrows numbers seen compared with numbers actually present or foraging away from the islands may be at considerable variance. We feel actual numbers of nesting puffins in Washington may be 50% or more larger than the total estimated populations given here.

HISTORICAL STATUS AND VULNERABILITY

Tufted Puffins, like many other diving seabirds with specialized diets, are vulnerable to oiling and to contamination of food webs. Human disturbance on nesting colonies is another potential threat. Most of the colonies occupied by puffins in Washington are protected as wildlife refuges, and those on the outer coast are relatively inaccessible. The colony sites in the inland waters are much more vulnerable to disturbance by boaters, sightseers, and birdwatchers approaching too closely.

Tufted Puffins, like puffins elsewhere (Nettleship 1972; Nisbet 1973), may have decreased in numbers in Washington as populations of large gulls have increased over recorded time. Gulls prey on chicks at burrow entrances, steal fish from adults approaching the burrows, and can severely reduce the reproductive success of puffins. As late as the 1940's, puffins apparently nested at several locations (e.g., Viti Rocks) where they no longer

do. However, there have been a few more sightings in recent years near some old sites and, particularly since refuge status

protects islands in the San Juan Islands, small numbers of Tufted Puffins may reestablish themselves as nesting birds there.



Sand Island (174024) 1977 Caspian Tern chick and egg. S.G. Herman