

Leach's Storm-Petrels are abundant species with an extensive breeding range around the perimeter of the North Pacific They range widely at sea Ocean. during the nonbreeding season, with birds to ranging south tropical waters both in the Pacific and Atlantic Oceans (Palmer 1962). Although they are numerous nesting bird Washington's outer coastal offshore islands, this species is infrequently seen away from the colonies during daylight hours.

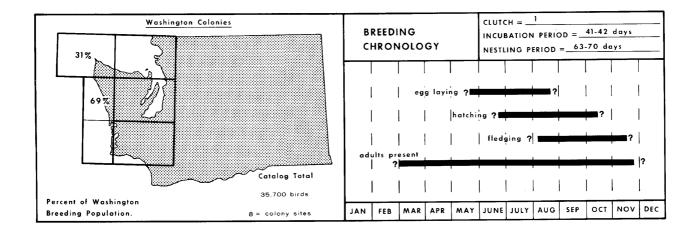
Like all storm-petrels, Leach's Storm-Petrels are nocturnal on the breeding colonies, an adaptation which reduces their susceptibility diurnal predators such qulls. Nests are usually located in burrows or, less frequently, in rock crevices (Palmer 1962). Like species of Prothe cellariiformes, this one has a well-developed olfactory system (Bang 1966; Stager 1967), and

Grubb (1973, 1974) has suggested that these birds, which sometimes nest in forests, may locate their burrows by odor.

most seabirds, Leach's Storm-Petrels exhibit relatively long lifespans and low mortality rates for their size. Individuals that survive the hazardous first year of life can live up to 24 years and possibly longer (Graham 1980). Additional references on this well-studied species include Gross (1935), Ainslie and Atkinson (1937), Huntington (1963), Wilbur (1969), Harris (1974), Threlfall (1974), Ainley et al. (1974, 1976) and Morse and Buchheister (1979).

WASHINGTON COLONIES

While Leach's Storm-Petrels are known to nest in 11 colonies in Washington, there may be as many as 20 or 25 locations where nesting takes place. They burrow



under tussocks on grassy slopes, and this habitat exists where surveys have not yet been adequate or even attempted off Washington. The largest known colonies are 20,000 birds on Jagged Island and 10,000 on Carroll Island. Dhuoyautzachtahl (Petrel Rock) is estimated to have 2,600 birds nesting, Alexander Island 2,000, and while Kohchaa(uh) is listed as "hundreds," olfactory having observers impressions to approaching but unable to land on island suggested possibly thousands may nest there. Likewise, Cake and Rounded Islands may have thousands of nests. is possible there may be 50,000 or more Leach's Storm-Petrels nesting in Washington.

HISTORICAL STATUS AND VULNERABILITY

As in the case of the Forktailed Storm-Petrel and other burrowing species, infrequent and incomplete surveys and inconsistent censusing methods make assessment of historical trends of this species difficult if not impossible. Furthermore, while they are obviously more abundant as nesting birds, Leach's Stormmuch less Petrels are seen frequently than Fork-tailed Storm-Petrels on boat trips off the coast during the nesting season, presumably because their preferred foraging habitat is far offshore and possibly because the species is more nocturnal in habits. This virtual lack of nearshore at-sea data offers no help in locating colonies or in making historical comparisons.

Leach's Storm-Petrels appear to forage farther offshore and over warmer waters than Fork-tailed Storm-Petrels (Wahl 1975). Their later nesting season in Washington is apparently a response to seasonal oceanographic conditions: the warm waters of the West Wind Drift come closest to the continent during July and August when young birds are hatching and being fed by adults.

Predators such as river otters can impact storm-petrel colonies along the Washington coast (Speich and Pitman 1984). Like other seabirds, Leach's Storm-Petrels are vulnerable to contamination by oil. While they may forage far

offshore during the nesting season, their use of the coastal waters is only partially known (waters near nesting colonies have not been adequately sampled), and nocturnal foraging habits would

make present sampling methods inadequate in any case. They appear to be absent from Washington waters in winter, the season of greatest storms and hazards to shipping.

FIELD NOTES

The authors would appreciate copies of your field notes for updates