

Questions and Answers



Listing under the Endangered Species Act Not Warranted for Scripps's Murrelet and Guadalupe Murrelet

Q. What action is the U.S. Fish and Wildlife Service taking?

A. The U.S. Fish and Wildlife Service has determined through a thorough status review using the best available science that protection for Scripps's murrelet and Guadalupe murrelet under the Endangered Species Act (ESA) is not warranted and is withdrawing the two species from the ESA Candidate List. The Scripps's murrelet and Guadalupe murrelet were formerly both recognized as subspecies of Xantus's murrelet (*Synthliboramphus hypoleucus*) but were separated into two full species by the American Ornithologists' Union in 2012.

Q. What is a Scripps's murrelet? What is a Guadalupe murrelet?

A. Both Scripps's and Guadalupe murrelets are small diving seabirds, approximately 10 inches in length, and weighing only six ounces. The two species differ morphologically, have distinct vocalizations, and have separate breeding ranges. Morphologically, the Scripps's murrelet has a bill that is slightly shorter and thicker than the Guadalupe murrelet. The area in front of and behind the eye of the Scripps's murrelet is black with a dividing line between the black crown and face, and it has a white throat that extends straight back from the bill. Guadalupe murrelets have white extending up in front of the eye, white above the gape, broader white below the eye, and paler, grayish feathers that cover the ear openings.

Q. Why did the Service determine that listing the Scripps's murrelet and Guadalupe murrelet is not warranted?

A. The primary threats to the Scripps's and Guadalupe murrelets have been addressed, and they no longer face the risk of becoming endangered in the foreseeable future. Since the Service listed the species formerly recognized as Xantus's murrelet as a candidate for listing under ESA in 2004, many of the threats have been removed or reduced due to the proactive conservation and restoration efforts of land managers on the breeding islands. These on-the-ground measures have supported the restoration of important Scripps's murrelet and Guadalupe murrelet breeding habitat. Introduced predators and introduced non-predators have been removed or are not present on the four main islands that support more than 80 percent of the Scripps's murrelet breeding population. Introduced non-predator mammals like rabbits, pigs, and sheep have been entirely removed from both Guadalupe and San Benito islands, the only known islands used for breeding by Guadalupe murrelet.

Q. What threats were impacting the species?

A. Non-native predators, native predators, and destruction of habitat by introduced mammals on their nesting islands off the coast of Mexico and California appear to have caused the majority of documented past population declines.

Q. What is their current population, and how are population estimates determined?

A. Based on the best information available, the population of breeding-age Scripps's murrelets is estimated to range from about 4,000 to 6,600, and the population of breeding-age Guadalupe murrelets is estimated to range from about 1,200 to 4,900. Because these birds spend the majority of their lives at sea, overall population estimates are difficult to determine due to varied survey methodology and inaccessibility of many nesting sites. Although spotlight surveys during the breeding season have provided some data to estimate breeding population sizes, the ability to compare data between islands or inter-annually within islands has been limited.

Q. Where do Scripps's murrelets and Guadalupe murrelets live?

A. Scripps's and Guadalupe murrelets spend most of their lives at sea in the Pacific Ocean, ranging as far north as waters off British Columbia and as far south as the waters off Baja California. They come to land only during the breeding season to nest in small caves, rock crevices, cavities under boulders or roots, and under dense vegetation on offshore islands or associated rocks, often along steep slopes or cliffs. There are 10 known breeding islands used by the Scripps's murrelet from the Channel Islands off the southern California coast south to the San Benito Islands off Baja California, Mexico. These islands include San Miguel, Santa Cruz, Anacapa, Santa Barbara, Santa Catalina, Coronado, Todos Santos, San Martin, San Jeronimo, and San Benito islands. Guadalupe murrelets nest farther south, only on Guadalupe and San Benito islands off Baja California, Mexico. Murrelets begin arriving within the vicinity of nesting colonies in December and January.



Figure: At sea distribution and breeding sites of Scripps's murrelet and Guadalupe murrelet.

Q. What behavior makes their nesting activity on these islands so remarkable?

A. Scripps's and Guadalupe murrelets typically lay two eggs, each about 2 inches in size. Both parents share incubation duties. The first egg is left unattended until after the second egg is laid, for an average of eight days, then incubation of the two eggs lasts about 34 days. Eggs are periodically left unattended during incubation, presumably because one member of the pair will depart to feed before the other returns. Egg neglect increases the total length of incubation and susceptibility to predation. Each parent spends an average of three consecutive days incubating the eggs before being relieved by the mate. Scripps's and Guadalupe murrelets typically raise one brood per nesting season.

Chicks hatch between early April and early July and are born covered with down feathers and go to sea with their parents at only two days of age. The chicks are escorted out of the nest by their parents or guided to sea by calls from their parents or other murrelets. The chicks either jump from the cliff edge or are blown into the surf below. Family groups then swim rapidly offshore and away from nesting colonies, presumably to avoid predators. The chicks are then reared at sea by both parents.

Q. What do Scripps's and Guadalupe murrelets eat?

A. Both Scripps's and Guadalupe murrelets are thought to feed on schooling fish and zooplankton, foraging at ocean fronts where prey is concentrated near the surface of the water. They are wing-propelled divers, chasing down prey under the water with powerful wingbeats.

During the breeding season, murrelets feed offshore in small, dispersed groups, usually in singles and pairs, but occasionally in groups of up to eight. Diet samples from Scripps's murrelets included northern anchovies, sardines, pacific saury, rockfish and krill. The diet of the Guadalupe murrelets is not known but is likely to be similar to that of Scripps's.

Q. Why were the Scripps's murrelet and Guadalupe murrelet formerly recognized as subspecies of the Xantus's murrelet?

A. The Scripps's murrelet and Guadalupe murrelet were formerly both recognized as subspecies of Xantus's murrelet (*Synthliboramphus hypoleucus*) but were separated into two species by the American Ornithologists' Union in 2012 based on new genetic information. Scripps's murrelets and Guadalupe murrelets differ in breeding range, facial plumage, bill size, and vocalizations. The most notable morphological difference between the species is the distribution of white feathers on the face, but subtle differences also exist in bill length and depth, tarsus length, and back plumage color.

Xantus's murrelet included two subspecies *S. hypoleucus scrippsi* and *S. h. hypoleucus* first documented in 1859. However, more recent data suggest the two subspecies should be recognized as distinct species, the Scripps's murrelet (*S. scrippsi*) and Guadalupe murrelet (*S. hypoleucus*). This split resulted in five recognized species of *Synthliboramphus* murrelets that have the most southern distribution of all birds in the alcid family (web-footed diving birds with short legs and wings). Ancient murrelets breed across the north Pacific, and Japanese murrelets are limited to Japan, Korea and possibly Russia. The Scripps's murrelet and Guadalupe murrelet and the closely related Craveri's murrelet (*S. craveri*) breed only in southern California, Baja California, Mexico, and the Gulf of California.