

***Nosopsyllus fasciatus* Parasitizing House Mice on  
Southeast Farallon Island, California  
(Siphonaptera: Ceratophyllidae)**

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Southeast Farallon Island is a small granitic island located near the edge of the continental shelf approximately 48 km WSW from the Golden Gate Bridge, San Francisco, California. Presently the island is under the jurisdiction of the San Francisco Bay National Wildlife Refuge and the 12th U.S. Coast Guard District. The Point Reyes Bird Observatory (PRBO) maintains a research station at the island with logistic support provided by the Coast Guard and the Oceanic Society. The island serves as an important sanctuary and breeding ground for 12 species of marine birds and 5 species of pinnipeds (Ainley and Lewis, 1974). Besides humans the only other land mammals presently residing on the island are house mice, *Mus musculus* Linnaeus (DeSante and Ainley, 1980). European rabbits, *Oryctolagus cuniculus* Lilljebord, exterminated from the island in 1974, had been resident beginning sometime between 1855-1876 (Pinney, 1965). Various domestic mammals including dogs, cats and mules have resided there during the past but are no longer present (DeSante and Ainley, 1980) and hoary bats, *Lasiurus cinereus* (Palisot de Beauvois), and red bats, *L. borealis* (Müller), occur in small numbers for brief periods during their fall migration (Tenaza, 1966; PRBO, unpubl.). The absence of rats, *Rattus norvegicus* (Berkenhout) and *R. rattus* (Linnaeus), (DeSante and Ainley, 1980) is an interesting aspect of the island's ecology considering the rather intense and continuous human activity since 1849 (Dougherty, 1971; Shanks and Shanks, 1978).

During 23 August to 6 September 1980 I visited the island to continue studies on the marine bird flea, *Ceratophyllus pelecani* Auguston, parasitizing western gulls, *Larus occidentalis* Audubon. During this period the house mouse population was at its annual peak (R. Boekelheide, pers. comm.) and the PRBO staff biologists were snap-trapping mice inside their house in an attempt to control the rather high indoor mouse infestation. House mice were present on both the main island and West End, a smaller island to the west separated by the narrow Jordan Channel, and mice were quite active on the southern marine terrace where large numbers of western gulls had recently nested. Because of the high mouse population, the dispersed gull population (gulls were no longer territorial about their nests and most hatching year gulls were capable of flight), and mouse activity in the gull nesting area, it appeared possible that the mice were serving as fall alternative hosts for the bird fleas. There is one record of *C. pelecani* collected from *Peromyscus maniculatus elusus* Nelson and Goldman, Santa Barbara Island, Channel Islands, California (Hubbard, 1947) and this flea will readily engorge on white mice in the laboratory (Schwan, unpubl.). Therefore, during my stay on the

