blochmaniae ssp. *insularis* (Santa Rosa Island dudleya), *Dudleya* sp. nov. ''East Point'' (munchkin dudleya), *Dudleya nesiotica* (Santa Cruz Island dudleya), *Galium buxifolium* (island bedstraw), *Gilia tenuiflora* ssp. *hoffmannii* (Hoffmann's slender-flowered gilia), *Helianthemum greenei* (island rush-rose), *Heuchera maxima* (island alumroot), *Malacothamnus fasciculatus* ssp. *nesioticus* (Santa Cruz Island bushmallow), *Malacothrix indecora* (Santa Cruz Island malacothrix), *Malacothrix squalida* (island malacothrix), *Phacelia insularis* ssp. *insularis* (island phacelia), and *Thysanocarpus conchuliferus* (Santa Cruz Island fringepod). The 16 plant taxa and their habitats have been variously affected or are currently threatened by one or more of the following: soil loss; habitat alteration by mammals alien to the Channel Islands (pigs, goats, sheep, donkeys, cattle, deer, elk, bison); direct predation by these same alien mammals; habitat alteration by native seabirds; habitat alteration due to vehicular traffic; overcollection for scientific or recreational purposes; competition with alien plant taxa; reduced genetic viability; depressed reproductive vigor; and the chance of stochastic extinction resulting from small numbers of individuals and populations.

DATES: Comments from all interested parties must be received by October 9, 1995. Public hearing requests must be received by September 25, 1995.

ADDRESSES: Comments and materials should be sent to the Field Supervisor, Ventura Field Office, U.S. Fish and Wildlife Service, 2493 Portola Road, Suite B, Ventura, California 93003. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Carl Benz, Assistant Field Supervisor, Ventura Field Office (see **ADDRESSES** section) (telephone number 805/644–1766; facsimile 805/644–3958).

SUPPLEMENTARY INFORMATION:

Background

Arabis hoffmanii (Hoffmann's rock-cress), *Arctostaphylos confertiflora* (Santa Rosa Island manzanita), *Berberis pinnata* ssp. *insularis* (island barberry), *Castilleja mollis* (soft-leaved paintbrush), *Dudleya blochmaniae* ssp. *insularis* (Santa Rosa Island dudleya), *Dudleya* sp. nov. ''East Point'' (munchkin dudleya), *Dudleya nesiotica* (Santa Cruz Island dudleya), *Galium buxifolium* (island bedstraw), *Gilia tenuiflora* ssp. *hoffmannii* (Hoffmann's slender-flowered gilia), *Helianthemum greenei* (island rush-rose), *Heuchera maxima* (island alumroot), *Malacothamnus fasciculatus* ssp. *nesioticus* (Santa Cruz Island bushmallow), *Malacothrix indecora* (island malacothrix), *Malacothrix squalida* (Santa Cruz Island malacothrix), *Phacelia insularis* ssp. *insularis* (island phacelia), and *Thysanocarpus conchuliferus* (Santa Cruz Island fringepod) are California Channel Island endemics. The only species in this group that is not exclusive to the northern island group is the island rush-rose, with one population known from Santa Catalina Island.

Located offshore and south of Santa Barbara County, the four northern islands (from west to east: San Miguel, Santa Rosa, Santa Cruz, and Anacapa) are the highest points on a 130 kilometer (km) (80 mile (mi)) long seamount (Dibblee 1982). They are included within the boundaries of the Channel Islands National Park (CINP). Anacapa Island is the smallest of the four northern islands and is divided into east, middle, and west islands totalling 2.9 square km (1.1 square mi); it is the closest island to the mainland at a distance of 20 km (13 mi). East and Middle Anacapa islands are flat-topped, wave-cut terraces largely surrounded by steep cliffs. West Anacapa is the highest of the three, reaching 283 meters (m) (930 feet (ft)) above sea level. Santa Cruz Island is the largest of the California Channel Islands at 249 square km (96 square mi) with the highest point being 753 m (2,470 ft) above sea level and has a fault-controlled central valley that creates a dry interior condition. Santa Rosa Island is 217 square km (84 square mi) in area and 475 m (1,560 ft) at its highest point. San Miguel Island, the westernmost of the northern group, is 37 square km (14 square mi) in area and 253 m (830 ft) in height. Santa Catalina Island (south Los Angeles County) is 194 square km (75 square mi) in area and its highest elevation is 648 m (2,125 ft) above sea level (Power 1980).

Much of the northern Channel Islands are managed by Federal agencies. San Miguel Island is under the jurisdiction of the U.S. Department of the Navy (Navy), but the National Park Service (NPS) has operational jurisdiction through a Memorandum of Agreement. Anacapa Island is managed by the NPS with an inholding for the U.S. Coast Guard lighthouse. The western 90 percent of Santa Cruz Island is owned and managed by The Nature Conservancy (TNC). Almost all of the remaining 10 percent of the island is under the jurisdiction of the NPS. Except for the City of Avalon, Santa Catalina Island is privately owned and managed by the Catalina Island Conservancy.

Anacapa and Santa Barbara islands were set aside as a National Monument in 1938. In 1980 the U.S. Congress abolished the National Monument and incorporated those lands, waters and interests into National Park status, adding Santa Cruz Island and Santa Rosa Island (at that time privately owned) within the boundaries. The NPS acquisition of Santa Rosa Island in 1986 was accomplished by outright fee purchase from the Vail and Vickers Ranching Company. This acquisition included the potential option for a 25-year continuation of cattle ranching and a subleased commercial deer and elk hunting operation, of which 18 years remain, as long as the Secretary of the Interior determines that the property is being used for purposes compatible with the administration of the park or with the preservation of its resources.

In 1769 in San Diego, the establishment of the mission system began. Attempts to remove the native Chumash Indian populations from Santa Cruz Island to the mainland were completed by 1814 (Hobbs 1983). Subsequent land use practices on the islands focused on the introduction of a variety of livestock (sheep (*Ovis domesticus*), goats (*Capra hircus*), cattle (*Bos taurus*), burros (*Equus asinus*), and horses (*E. caballus*)) and game species (pigs (*Sus scrofa*), deer (*Odocoilius hemionus*), elk (*Cervus canadensis roosevelti*), rabbits (*Oryctolagus cuniculus*), wild turkey (*Melegris gallopavo*), California quail (*Callipepla californica*), and chukar (*Alectoris chuckar*)) for ranching and hunting purposes (Hochberg *et al.* 1980a, Minnich 1980, Jones *et al.* 1989).

The introduction of domestic animals to island ecosystems has had catastrophic effects on the vegetation. Because of the absence of natural population controls such as disease and predation, livestock overpopulated the islands. The ultimate control on population sizes for livestock on islands has been starvation (Sauer 1988). Records for Santa Cruz Island indicate that sheep had been introduced in the early 1830's; by 1875, sheep stocking was around 50,000 head (Hobbs 1983). In 1890, perhaps as many as 100,000 sheep grazed on Santa Cruz Island (Hochberg *et al.* 1980a). Pigs had been released on Santa Cruz Island by 1854 (Hobbs 1983). Conditions of overgrazing combined with drought occurred in 1864, 1870–72, 1877, 1893–1904, 1923–24, 1935, 1946–48, 1964, (Dunkle 1950, Johnson 1980) and most recently 1986–