Naval Command,
Control and Ocean
Surveillance Center,
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NATIVE PLANTS OF POINT LOMA NAVAL COMPLEX

A Critical ecosystem and home for Sensitive and Native Plant Habitat:

Diegan Costal Scrub
Southern Coastal Bluff Scrub
Southern Maritime Chaparral
Maritime Succulent Scrub
Grasslands
Coastal Strand
Endangered Plant Species

POINT LOMA - A THREATENED SPECIES
by Donald Lydy, A.I.A

A threatened species is defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range".

Our story begins with that point in mind.

The Point Loma land mass is rapidly becoming a critical ecosystem *that is diminishing along the southern California coast due to continuing development. That concern and the need to be proactive in protecting what remains has become a primary concern of several environmentally oriented agencies and societies.*

Past Secretary of Defense Dick Cheney has stated on several occasions that the military establishment will make protection and stewardship of the environment a high priority. Past Under-secretary of the Navy Jacqueline Shaeffer has stated that Naval activities will actively pursue protection of wildlife habitats and will cooperate with the U.S. Fish and Wildlife Service (USFWS) in the protection of undeveloped areas and the restoration of disturbed areas.

It is well to remember that since we do not own the land we occupy, but hold it in public trust, our roles as caretakers and stewards of the land become more visible.

San Diego Sand Aster

The natural vegetation of Point Loma constitutes a diverse assemblage of over 117 native and 53 introduced plant species, covering an area of approximately 600 acres. Six natural plant communities are present on Point Loma, including ***Diegan Coastal Sage Scrub, Southern Coastal Bluff Scrub, Southern Maritime Chaparral,***

Sand Verbena

Maritime Succulent Scrub, Grasslands, and the Coastal Strand. *Urbanization has surrounded Point Loma on all sides, leaving relict populations of these native habitat types; therefore, all remaining native habitat on Point Loma is regarded as sensitive to USFWS.*

Within southern California, over 70% of the Diegan Coastal Sage Scrub habitat has been lost. *Less than 1,500 acres of Southern Coastal Bluff Scrub remains. Only 2,500 acres of Southern Maritime Chaparral remains. All but about 500 acres of Coastal Strand have disappeared. Maritime Succulent Scrub, which does not appear north of Newport Bay in Orange County, has been reduced to 500 acres; thus, Point Loma possesses critical remnants of all these habitat types.*

The number of sensitive resident species supported by these habitats is an additional expression of their increased rarity. Additionally, as Point Loma is a significant component of the Pacific flyway, one also needs to consider the contribution that native and non-native habitat make to the welfare of migratory species. Well over 250 species of birds use Point Loma during migration. This area is a major wildlife resource of regional significance.

The diverse vegetation, topography, soils, and the maritime location provide habitat for several terrestrial and sea-related vertebrate wildlife species. Eight species of reptiles and amphibians, 15 species of small and large mammals, and over 300 species of birds are known to inhabit Point Loma or to use portions of the peninsula seasonally.

During the recent Terrestrial/Biological survey done in 1992, sightings of both the Northern red diamond rattlesnake and Coyotes occurred.

Sensitive plant and animal species are a primary concern. *16 plant, 2 reptile, 18 bird, and 2 small mammal species inhabiting Navy property are considered rare, threatened, or endangered. Additional sensitive wildlife species, including 6 reptiles, 1 bird, 3 mammals, and 10 plant species are located on Point Loma.*

Sensitive plant populations and wildlife habitat are presently the focus of an action by the USFWS to designate a significant part of Point Loma as "protected lands". *This action is being coordinated and managed by the Naval Facilities Engineering Command, with assistance from representatives from each command on Point Loma. As a specific plan for the "protected area" develops, it will be coordinated with Center management to insure that it does not present an operational conflict.*

Chocolate Lily

Second only to direct habitat destruction as a threat to the survival of sensitive species is habitat fragmentation and isolation. *Such fragmentation leaves populations too small to survive the fluctuations that normally occur in natural populations. It also prevents the genetic exchange necessary to the health and vigor of native species. A corollary of the above is that habitat which is bisected or interrupted does not have the biological value that an intact area of the same size would have. Attempts should be made to maintain a low surface-to-perimeter ratio when designating habitat, such that there is a large undisturbed internal area relative to a disturbed perimeter. Regional planning will reduce fragmentation.*

Due to the absence of fire in this area, some of the vegetation is 80 years old, or more, so that once it is destroyed its biological value will not be replaced for decades, *even if mitigatory revegetation is attempted. In every case, the USFWS prefers preservation over mitigation. Every attempt should be made to first avoid, then minimize impacts to natural resources, and only as a last resort, restore biological values.*

A related issue to the protection of these diminishing habitats is that of "Exotic species". Exotic species means all species of plants and animals not naturally occurring in an ecosystem. Executive Order 11987 dated 24 May 1977 specifically prohibits introduction of an exotic species into an existing ecosystem.

Over the years, as more exotic landscape species have been introduced, much of it has become acclimated and escaped into the surrounding lands. Some of the acclimated exotics are very competitive and they have taken over former areas of native plant species. Not only is it essential to avoid introducing more exotic plants, it has become essential that an exotic removal program be initiated to protect native species. Efforts are starting for an extensive removal program of two specific exotic species: Acacia trees and Carpobrutus ground cover (ice plant or pickleweed). The Naval Supply Center and The Submarine Base have already begun a removal program.

Environmental organizations have recognized and commented that were it not for the presence of the Navy on Point Loma, these sensitive habitats would have vanished due to urbanization. *We need to consider the environmental consequences of discretionary actions and provide balance to protect areas of biological sensitivity, otherwise, our descendants may not have benefit of such a truly unique and beautiful resource as Point Loma. What we possess has the effect of a National Park. We need to do all we can to protect it.*

(Editor's Note: In addition to Don Lydy being the Base Architect and Head of the Engineering Branch of the Facilities Office, he also is the Command's Natural Resources and Cultural Resources Manager)

Sensitive plant species known to occur or to have occurred recently on Point Loma Navy land:

Shaw's agave
Golden-spined cereus
Sea kisses
Wart-stemmed ceanothus
Orcutt's spineflower
San Diego sand aster
Sea dahlia
Western ponyfoot
Coast wallflower
Cliff spurge
San Diego barrel cactus
Chocolate lily
Snake cholla
Short-lobed broomrape
Ashy spike-moss
San Diego sunflower

Sea Dahlia

PLANT SPECIES OCCURRING ON THE POINT LOMA NAVY COMPLEX*

PLANT SPECIES

SOUTHERN MARITIME CHAPARRAL

California maidenhair fern
Ranchers fiddleneck
Nuttal‘ s snapdragon
Coyote-brush
Red maids
Sea kisses
Morning glory
Milk maids
Wart-stemmed ceanothus
Canchalagua
Bladderpod
Dark-tipped bird’s beak
San Diego sand aster
Virgate sand aster
Pigmy stone crop
Cryptantha
Nievitas
Witch’s hair
Fine-leaf tansey-mustard
Wild hyacinth
Coast monkey flower
Doveweed
Yerba santa
Long-stemmed golden yarrow
Fennel
Nuttal”s bedstraw
Saw toothed golden bush
Rushrose
Toyon
Coast jepsonia
Shiny lomatium
Coastal deer weed
Laurel sumac
Cucamonga manroot
Coastal wishbone
Common rip-gut grass
Soft chess
Foxtail chess
Bottle brush
Sea-fig
Hottentot-fig
Ramona lilac
Star thistle
Lamb’s quarters
Goosefoot
Garland chrysanthemum
Mediterranean rock rose
Common horseweed
Conza couteri
Atacama pampus grass
African brass buttons
Bermudagrass
Cape-marigold
Russian olive
Desert encelia
Filaree
Storksbill
St. Catherine’s lace
Murray red gum
Flaming eucalyptus
Petty spurge
Fennel
Treasure flower
Cranesbill
Hare barley
Canary Island hypericum
Golden top
Notchleaf marsh rosemary
Grass poly
Cheeseweed
Horehound
Burr clover
White sweet clover
Crystal ice-plant
Little ice-plant
Myoporum
Paper-white
Tree tobacco
Yellow sorrel
Annual bluegrass
Kikuyu grass
Canary Island date palm
Torrey pine
California sycamore
Rabbit foot beardgrass
Catalina Island cherry
Wild radish
Caster bean
Russian thistle
Brazilian pepper tree
Peruvian pepper tree
Sow-thistle
Common sow thistle
Chickweed
Red palm
Cocklebur

PLANT SPECIES

MARITIME SAGE SCRUB

Red-skin wild onion
Pineapple weed
Wild-celery
Coastal sagebrush
Ocean locoweed
Broom baccharis
Golden-spined cereus
Brewer’s calandrinia
Sea kisses
Weed’s mariposa lily
Felt paint-brush
Small-seed sand mat
Wavy-leaf soap-plant
California spine flower
Fringed spine flower
Small-leaf virgin’s bower
Spice bush
Croton
Western ponyfoot
Ladyfingers
Coastal dudleya
Chalk lettuce
Giant wildrye
California encelia
Flat-topped buckwheat
Coast wall flower
Cliff spurge
Spurge
San Diego barrel cactus
California filago
Cudweed
California everlasting
White everlasting
Smooth cat’s-ears
Mesa bushmallow
Fishhook cactus
Littleseed muhly
Cleveland’s tobacco
Narrow leaf oligomeris
Snake cholla
Coastal cholla
Short-lobed broomrape
Fire poppy
Western pellitory
Rein orchid
Silverback fern
Plantain
Lemonadeberry
Chia
Black sage
Jojoba
Giant stipa
Everlasting nest-straw
San Diego sunflower
Mohave yucca
Fremont’s camas

SOUTHERN COASTAL BLUFF SCRUB

Shaw’s agave
Sea rock
Sand mat
Alkalai weed
Coastal salt grass
Alkali-heath
Coastal isocoma
California desert-thorn
Emory rock-daisy
Villous sand-spurry
Sea blite

SOUTHERN FORE-DUNE VEGETATION

Red sand verbena
Beach burr weed
Southern sun-cup
Beach evening primrose
Virgate sand-aster

CALIFORNIA GRASSLAND

Leafy bent
San Diego sea dahlia
Annual California poppy
Chocolate lily
Common goldfields
Ground pink
Lupine
California polypody
Foothill stipa

San Diego
Sunflower

San Diego
Barrel
cactus

San Diego
Sage scrub

POINT LOMA NAVAL COMPLEX

Reviewed and approved by

**Executive Officer/Base
Operations Manager**

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