

# THE NIPOMO DUNES

by Kathleen Goddard Jones

Photography by Gaylord Jefferson Jones

Protection of the Nipomo Dunes, an eighteen square mile dune-lagoon-lake complex, has resulted in a long and painful battle, a series of battles:/to persuade gargantuan industries not to locate here; to work with the State Department of Parks and Recreation for firm control of Off-Highway Vehicle Recreation, to enlist the support of County Supervisors and the California Coastal Commission for protective measures; and full protection is not assured yet. Located at the heart of California's central coast in southern San Luis Obispo County and northern Santa Barbara County, the Nipomo Dunes' ecosystem is one of the most unique and fragile in California.

Recognizing that the area's ecological and scenic values are of national significance, the U. S. Secretary of the Interior in 1980 designated it a National Natural Landmark and placed it in the National Registry of Natural Landmarks. His brief in support of this designation states:

"The Nipomo Dunes-Point Sal Coastal Area contains the largest, relatively undisturbed coastal dune tract in California. . . Five major plant communities are well represented and the flora exhibits the highest rate of endemism of any dune area in western North America. Dune succession is exceptionally well displayed. No comparable area on the Pacific Coast possesses a similar series of freshwater lagoons and lakes so well

Maria Dunes, the Pismo Dunes, the Oceano Dunes, the Mussel Rock Dunes, the Guadalupe Dunes, and the Oso Flaco Dunes. Over the last twenty years, however, the name Nipomo Dunes took precedence over other names because it was recognized that the dunes are a part of the ancient Pre-Flandrian sand dune mass, the Nipomo Mesa, extending inland for ten miles. "Nipomo" is a Chumash Indian word meaning "at the foot of the hills," which accurately describes this dune system. The Department of Parks and Recreation now calls the complex The Pismo to Point Sal State Beach Complex.

#### VIEW FROM THE AIR

Soaring south at a low altitude in a small plane that became airborne at Oceano Airport, we look down and see a vast white and wind-sculptured wilderness, laced with green glades and graced with blue lakes. The dunes flow inland from the curving sweep of ocean like continuing waves, broken here and there by swirls of green vegetation in dune hollows, and they extend to the south for twelve miles, encompassing the Callender Dunes, the Guadalupe Dunes and the Mussel Rock Dunes complexes. Long fingers of coastal dune scrub extend from inland dunes into flat agricultural lands which disappear into the distance east.

Beneath us we can see Pismo Creek with specks of sea ducks on its quiet lagoon. . . then small Meadow Creek, flowing out of the Pismo Lake State Natural Preserve, and larger Arroyo Grande Creek (at Pismo State Beach area) coming all the way from Lopez Canyon in the far Santa Lucia Wilderness mountains. We can also see many off-road vehicle recreationists in the Pismo Dunes SVRA (State

Willow/Wax-Myrtle Communities occur in a few moist locations throughout the Nipomo Dunes and are of interest to botanists, but no studies have yet been done of this association. These ten freshwater lakes are sustained by underground seepage and by intermittent overflow from the interesting peat bogs of Black Lake Canyon, which, to the east, adjoins this privately owned area called Dune Lakes, Ltd. The Yellow Pond-lily (Nuphar polysepalum) reaches the southernmost limit of its range in Black Lake Canyon marsh and also grows abundantly in Black Lake at the Dune Lakes, Ltd. private preserve, blossoming from February into the summer.

Field notes of Alice Eastwood on April 23, 1937, report that she and John Thomas Howell found a small lupine "near the little pond with the Yellow Water-lilies." This is the rare annual Lupinus nipomensis, highly localized. Of the only two known colonies of this species, one has been reduced to six plants in the type locality by ORV recreation; the other nearby small population is severely threatened by incipient development. The San Luis Obispo County Chapter of the California Native Plant Society is making efforts to protect these presently surviving rare and endangered plants.

Jack Lake glistens below us, a jewel much reduced in size within its green setting of Arroyo Willow, giant scirpus, juncus acutus and cat-tails. During the past ten years ORV recreation has steadily advanced the flanks of tall white dunes now almost surrounding the lake. At its moist fringes the rare and endangered La Graciosa Thistle or White Marsh Thistle (Cirsium loncholepis) is scattered in cushions of soft Field Sedge (Carex pansa) along marshy footpaths edged with shiny

Jack Lake Meadow's drier slopes are typical of the inland Callender Dunes: colorful in spring, summer and fall. In grassy openings among the dominant shrubs, Mock Heather (Haplopappus ericoides) or (Ericameria ericoides), yellow Lupinus arboreus and Silver Dune Lupine (Lupinus chamissonis), come yellow splashes of early Goldfields (Lasthenia chrysostoma) and lacy white spreads of Layia glandulosa daisy, with Blochman's sky-blue larkspur (Delphinium parryi var. blochmaniae), pink from the dune Chinese Houses (Collinsia bartsiaefolia var. bartsiaefolia), AND the curled fiddlenecks of orange trumpet blossoms on Amsinckia spectabilis var. microcarpa, followed later by several endemic Chorizanthes, our Comet's Plume yellow burst of composite stars (Senecio blochmaniae). These plants are all fairly common in the coastal habitat of San Luis Obispo and Santa Barbara Counties.

Over the hill from Jack Lake, inland in Long Valley, flower bouquets of endemic Dune Blue Phlox (Eriastrum densifolium var. densifolium), occurring with large circular mounds of Sand Almond (Prunus fasciculata var. punctata) 15 feet in circumference. In September these inland grasslands turn to a fragile lavender with Wreath-flower (Stephanomeria virgata).

With Jack Lake and floracious Jack Lake Meadow behind us, we skim over the green oval of a dune hollow where thick Arroyo Willow obscures even a glimpse of the shadowed water in Lettuce Lake.

To our right in the fenced legal SVRA (State Vehicle Recreation Area) dune buggies race round and round a parabola blowout bowl in the open barren dunes below us. . .all vegetation long obliterated. A very large Indian shell mound, thickly

white sand dunes. Translated, Oso Flaco means "Skinny Bear" lake. The name comes from a long way back in history: it was 1769 when the first land expedition of explorers came up the coast. Gaspar de Portola, Friar Juan Crespi and their soldier band camped at "a large lagoon in sand dunes," where expedition leader Portola sent a few of the soldiers out to hunt meat for dinner. (Doubtless, others in the party found the rare watercress of Oso Flaco Lake, Cardamine gambelii, and tossed up a salad - as the diaries of the early Spanish explorers frequently mention searches for watercresses, essential to their health, as it kept off scurvy. It is also likely that some other member of the party made a dessert compote of the succulent and spineless gooseberries (Ribes divaricatum) from a damp dune glade nearby.) However, the legend relates that the hunters returned with "a lean bear" and that when the stew was served Portola chewed and chewed patiently, but finally rested his jaws, heaved a sigh and commented, "Alas, oso flaco - skinny bear." And the name remains.

In its setting of white dunes, Oso Flaco Lake covers about 70 (seventy) acres of open water; a eutrophic lake, shallow and very productive. Rich with life, its fringe of marshes are green with stands of Bur-reed (Sparganium eurycarpum var. greenei), cat-tails (Typha latifolia), bulrushes (Scirpus californicus, and probably Scirpus cernuus), with common tules (Scirpus acutus) and sedge tussocks of Carex Cusickii. Bright yellow flowers of the Rosaceae float along the edges of much of the open shore: it is Silver Weed (Potentilla egedii var. groenlandica). The rare and endangered Swamp Cress (Cardamine gambelii) twines up bulrush stems and ornaments

Where Oso Flaco Creek flows out of Oso Flaco Lake, the Willow/Wax-Myrtle growth is so dense it forms tunnels where the sun never penetrates. This long riparian corridor follows Oso Flaco Creek through wetlands and foredunes to the ocean. It is even thick and abundant all along the opposite south side of Oso Flaco Creek and marsh. It is a sheltered habitat for over 100 (one hundred) species of birds, which nest and forage or rest in migration or visit at various seasons; among them are the Whistling Swan, Snow Goose, Snowy Egret, Snowy Plover, White Pelican and Hermit Thrush. The Golden Eagle has nested in tall Arroyo Willows here - and a pair of rare Peregrin Falcons are presently regular foragers.

In the moist dampness of Willow/Wax-Myrtle thickets are found a variety of fungi: Amanita pantherina, satiny-white and 6-8 inches across, L.B.M.'s ("Little Brown Mushrooms"), puff-balls and, in a spot of open, sunny sand, Laccaria trullisata, alone or half-buried in clusters, showing only their caps. The open small meadows among the woodlands of wind-pruned willow/wax-myrtle are thickly soft underfoot with rush (Juncus leseurii) in which evening primroses stand tall with creamy-yellow large petals (Oenothera hookeri subsp. montereyensis); and goldenrod (Solidago confinis) blossoms deep yellow-gold intermittently all year, as do the common nightshades, white and purple, together with Corethrogyne filaginifolia in three varieties; it is variety robusta which in any month offers a small white "daisy" or two. In the dark of December when it is the only flower we can always easily find in the dunes, we call it Christmas Aster.

In spreads of Juncus leseurii on low-mounded dunes of this riparian area

value to commercial strawberry production, and are designated a rare population type. (Letter: National Council on Gene Resources, May 1982).

Before the advent of the present invasion of dune vehicles, these high white sand dunes encircling Oso Flaco Lake, which are now so bare, were carpeted with pink-lavender sand verbena (Abronia umbellata), yellow sand verbena (Abronia latifolia) and purple-tasseled colonies of the rare Crisp Dune Mint (Monardella crispa), in enclaves of the rare and endangered salmon-pink to scarlet Indian Paintbrush (Castilleja mollis). Comet's Plume (Senecio blochmaniae) was trailing its burst of yellow stars for every passing Monarch Butterfly. One pointed very high white dune rose above these displays of color, an exquisite Oso Flaco beacon as one entered the dunes from the Oso Flaco Lake Road causeway, crossing the lake. But year by year sand dune vehicle recreation increased, to the hundreds, and to the thousands. The Oso Flaco causeway became a favored major access of off-highway vehicles to the dunes. Only a year ago, in 1982, these softly contoured slopes of white sand were alive with 3-wheeled ATC's (All Terrain Cycles) operated by adults and by children as young as three years old, with roaring jeeps and powerful large-tired 4-wheel-drive pickups; the noise of all this "recreation" was bedlam. And the dune formations and dune vegetation were being utterly destroyed. Protests from many, many quarters mounted.

And at last, after Labor Day weekend 1982 the State Department of Parks and Recreation began the remedial control program: firm regulations were established and publicized; requirements of the California Coastal Commission Permit were implemented;

trails have become flower boxes! It is possible to reflect upon Thoreau's "A lake is the landscape's most beautiful and expressive feature. It is the earth's eye, looking into which the beholder measures the depth of his own nature."

Much more needs to be done; but a heartening beginning has been made.

#### COREOPSIS HILL

We are flying across Oso Flaco Creek, leaving the Callender Dunes Complex behind and entering the Guadalupe Dunes Complex, between Oso Flaco Creek and the Santa Maria River.

Just southeast of Oso Flaco Lake looms a long darkly vegetated well stabilized dune ridge. It is the glorious highlight of the overall Nipomo Dunes, a flowering dune garden of 100<sup>+</sup> acres called Coreopsis Hill.

Late in February and lasting into April the hill bursts into a golden yellow from the flowers of the bush daisy, Coreopsis gigantea, growing in these dunes from one to eight feet high. This colorful plant is also found along coastal bluffs from southern San Luis Obispo County to Baja California and on most of the Channel Islands. Its light green feathery foliage grows in dense tufts at the ends of the candelabra-like branches of the stout and leathery trunk. Large daisy heads top slender flexible stems, which move ever-so-slightly but constantly in the light breeze common to Coreopsis Hill. One becomes aware that there is movement over the whole hill ... a waving, a bending, a beckoning, a nodding - both an invitation and an acquiescence: one falls captive to the spell. While March and April are the peak blooming months, there is a year-round plant succession, sometimes of



(*Pityrogramma triangularis*) can still be found in a moist draw on the north side; the diminutive poppy, *Meconella linearis* var. *pulchella*, with three petals white and three petals yellow makes sunny stands in the grass, and *Phacelia douglasii* carpets all footpaths with frail lavender-blue, looking somewhat like a dune's Baby Blue-Eyes; *Abronia umbellata*, the Lavender-pink Sand Verbena, reaches out its long decumbent stems in open sandy spaces with *Croton californicus*; Popcorn Flower (*Plagiobothrys nothofulvus*) and Blue-dicks (*Dichelostemma pulchellum*) and Owl's Clover (*Orthocarpus purpurascens*) are everywhere; *Eschscholzia californica* var. *maritima* with its distinctive orange center in yellow petals, is abundant. It is interesting to pause in walking up Coreopsis Hill to look down upon the damp sandy flats beside Little Coreopsis Lake, observing the slip-face along the north margin of the lake being stabilized by an extensive and dense colony of Giant Scouring Rush (*Equisetum hyemale* var. *affine*)

Vivid red Indian Pink (*Silene laciniata*) pierces upward through the dominant shrubs: Mock Heather (*Ericameria ericoides*), Duhe Buckwheat (*Eriogonum parvifolium*) and even through the pale-blue plumes of Silver Dune Lupine (*Lupinus chamissonis*). Two varieties of *Corethrogyne filaginifolia* are very abundant, as are two species of Everlasting (*Gnaphalium* spp). California Rock Fern (*Polypodium californicum*) can be discovered in a sheltered north-facing patch of moss.

A large Black Cottonwood Grove (*Populus trichocarpa*) stretches all along the lower north slope of Coreopsis Hill, combining with Arroyo Willow thickets in marshlands at the bottom. The shade of this Black Cottonwood grove makes a welcome

**INCANA VAR. SUCCULENTA**

"Dunedelion" (Malacothrix ~~californica~~) and small yellow field daisy Senecio californica.

Summer brings the flowering of opulent yellow native cactus on the lower part of the hill's south-facing slope (Opuntia phaeacantha) and near it in this dry habitat the swelling half-balls of Purple Pincushion (Pholisma paniculatum). In summer, also, Eriastrum densifolium var. densifolium makes its small mounds of rich sky-blue phlox.

In late summer the Live Forever stalks of Dudleya lanceolata blossoms orange-yellow above the browning grasses and all the Chorizanthes are turning from flower to fruit. And in autumn the Mock Heather shrubs blossom in tiers of heather-gold, attracting flocks of arriving Monarch Butterflies. In late Fall the eastern grassland meadows of Coreopsis Hill are a frail lavender mist of Stephanomeria virgata, the delicate and pervasive Wreath-flower. The only flower rewards during winter days are the white and sometimes rosy-tinged daisy-blooms of Corethrogyne filaginifolia var. robusta. And in the depth of our bright southern winter the cycle of Coreopsis Hill comes round full circle with the formation in cold January of the first feathery tufts of filiform Coreopsis gigantea foliage.

GUADALUPE DUNES

South of Coreopsis Hill are spread out the rest of the Guadalupe Dunes.

A 6,000± acre network of inactive parabolic dunes, has, like its northernmost section Coreopsis Hill, most of its richly diverse vegetation still intact.

As we move southward we observe that this is the widest of the three dune complexes:

three miles wide in places, from the seashore on the west to the eastern toes of

This is our favorite camping site, Hidden Willow Valley, to which we backpack four miles from Oso Flaco Lake Road on occasional weekends.

As the foredunes flatten out into wide open sand-plains, both common and rare plants occur: six out of the twelve rare plants of the Nipomo Dunes area are well represented here, and something between one and two hundred common species. There occur a few small natural undrained ponds, surrounded by willows and a limited habitat of moisture-loving plants. This very rich area of the Guadalupe Dunes is the 2,500 acre Mobil Oil Corporation property. It is land which is the last of its kind: it is the last substantial tract of pure coastal dune scrub which is relatively un-destroyed, along the entire California coast! But it is being impacted by illegal off-highway vehicle trespass, is remote from enforcement and difficult to protect. It should be fenced and posted without delay.

South, the balance of the Guadalupe Dunes Complex is the Leroy Lease, where Union Oil Company patrols their 3,000 acre busy oil field located along the wide and meandering Santa Maria River. This river is the major source of sand for the Nipomo Dunes, bearing sand through the centuries from the San Rafael Wilderness, the Sierra Madre Range and the long Cuyama River Valley.

#### MUSSEL ROCK AND POINT SAL

Suddenly a dune mass nearly five hundred feet high looms up under our plane. This is the highest dune along the California coast, formed of sand transported by the northwest ocean winds and protected by the rugged volcanic barrier of the Mussel Point headland. This dune mass is called "The Devil's Slide" by the dune buggy people.

rock and scattered gardens of Seaside Daisy (Eriqeron glaucus), Live-forever (Dudleya lanceolata), cliff-clinging Lizard-tail (Eriophyllum staechadifolium var. artemisiaefolium), sea-bluff Goldenbush (Happlopappus venetus var. sedoides), rose-lavender Wishbone Bush (Mirabilis laevis), seaside California Poppy (Eschscholzia californica var. maritima), And here, too, the rare and endangered Indian Paintbrush (Castilleja mollis). The trail leads along precipitous cliffs and through the steep Mussel Rock Ravine, which drops its little creek as a 15-foot waterfall; dramatically splashing down to the beach, it is festooned with a coastal plantain (Plantago hirtella var. galeottiana). Occasional along the sides of the bluffs are clulps of white calla lilies, evidence perhaps of some past recluse beachcomber or hermit fisherman. This long white sandy beach is empty except for the heiroglyphs of gulls in the wet sand.

We now fly over Point Sal's deep secluded cove of white sand. Shrubby blue lupine (Lupinus arboreus) and the golden bush-daisy Coreopsis gigantea are massed on the gentle cliff slopes of the cove. A cliff seep makes a small basin of fresh, clear water in the sand; around it are the delicate hoof-prints of small deer. At the sandy saddle of Point Sal, braving the wind white mini-poppy, so much like Cream-cups; it is Meconella linearis, its beauty enhanced by hints of yellow and reddish markings.

We finally circle remote Point Sal State Beach, of only 49 acres with no development of any kind, and turn back northward to make the eighteen mile return flight to Oceano Airport. We are at the northern boundary of Vandenberg Military

of the Nipomo Dunes in State Park ownership. The State Department of Parks and Recreation, the California Coastal Commission and the San Luis Obispo County Supervisors have agreed upon protective management policies for state-owned areas. The Union Oil Company now prohibits vehicle recreation in their Guadalupe oil field beside the Santa Maria River. After an acrimonious battle, steps to control the ORV's were taken late in 1982. Since that time the dunes at Oso Flaco have been closed to Off-highway vehicles. No longer do thousands of campers, motor homes, station wagons, travel-trailers and trailers (278,000 visitors clocked on one holiday weekend) crowd five rows deep along the beach. ORV destruction of parts of this great dune system is being brought partially under control by better enforcement and restrictive fencing. At the same time, a plan for restoration of damaged dunes is being implemented, including the proposal for an ambitious program to eliminate maram grass (Ammophila arenaria). Seedlings and cuttings of native dune plants are being nurtured in nurseries. They will be planted with care in the same areas from which the seeds and cuttings were collected, so as to protect gene pools.

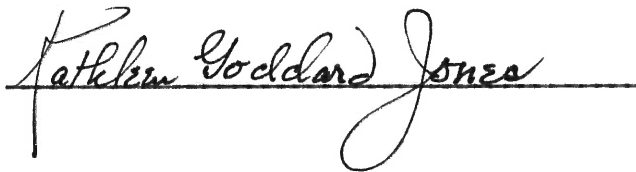
Thirteen federal and state studies, surveys and official actions, dating from 1920 to the present, document the uniqueness of the Nipomo Dunes from Pismo to Point Sal and their significance for preservation.

#### QUESTIONS FOR THE FUTURE

While much progress has been made to acquire and protect the Nipomo Dunes, vast acres remain unprotected and open to abuse. The struggle continues, and

installation of a strong pilings barrier across Oso Flaco Beach to prevent ORV's from driving south of Oso Flaco creek and into the as yet undestroyed Mobil Oil Corporation property of the unique and fragile Guadalupe Dunes - and onward to the Santa Maria River? Will Santa Barbara County with Husky Oil Company soon eliminate ORV's from the Mussel Rock Dunes, as is being presently discussed? Will the newly created State Off-highway Motor Vehicle Recreation Commission, operating within the State Department of Parks and Recreation, provide funding to install the barrier pilings, as required by the Coastal Commission? Will money be forthcoming, furthermore, from the California substantial ORV Funds to install more fencing of sensitive areas and protect places like Coreopsis Hill? Most importantly, will onshore oil development facilities for Outer Continental Shelf oil be prohibited in these unique and fragile coastal dunes?

The largest question of all is: Can protection be rallied for protection of the pageantry of Coreopsis Hill and for all of this "small" eighteen-mile section of the coast in southern San Luis Obispo and northern Santa Barbara counties. . . . considered by many to be the largest and most beautiful coastal dune-lagoon complex in California?

A handwritten signature in cursive script, reading "Kathleen Goddard Jones", is written over a horizontal line.