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### SENSITIVE PLANTS IN THE CLEVELAND

NATIONAL FOREST

by Earl W. Lathrop

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In keeping with the concern for threatened and endangered plants and animals, the Cleveland National Forest in southern California maintains a Sensitive Plant Species List (USDA/FS, 1980). The plants on this list are considered sensitive for various reasons, but perhaps mostly because of their vulnerability to environmental impacts or stresses.

This paper includes the sensitive plants of the Trabuco and Descanso Districts (exclusive of the Laguna-Moreno Demonstration area) of the Cleveland National Forest, California, as well as species found during extrapolation surveys within a few kilometers of the forest borders. More detailed reports of these surveys are on file at the headquarters of the Cleveland National Forest (CNF) in San Diego. Similar surveys have been done in other districts of the forest; Fred T. Sproul, for example, surveyed the Laguna-Moreno Demonstration area and Ricardo Villasenor the Palomar District.

The Trabuco Ranger District is located in the Santa Ana Mountains, the northernmost extension of the Peninsular Ranges in southern California. Most of the range is divided between Riverside and Orange counties; a small portion in the south is in San Diego county (Lathrop and Thorne, 1978: Fig. 1).

The Descanso Ranger District (exclusive of the Laguna-Moreno Demonstration area) is approximately 54,540 hectares in area and is located in eastern San Diego county roughly west and south of Cuyamaca Rancho State Park (Fig. 1). The gabbro soils, which influence the distribution of many of the sensitive plant species of the Descanso District are described by Oberbauer (1979). The relation of soil diversity to distribution of some of the sensitive species is also elucidated by Kruckeburg (1969). The rarity of the species is not indicated in the CNF Sensitive Plant Species list. This information, for most but not all of the species, is included in Shevock (1976), Beauchamp (1978) and Powell (1980).

The critical distribution and rarity of the sensitive species are shown in Table 1. Argemone munita Dur. & Hilg. ssp. robusta G. Owneby and <u>Dudley visida</u> (Wats.) Moran were found only in the Trabuco District. The remaining 7 species are reported for the Descanso District. Three other species, which were on the 1979 CNF list when the surveys were started and subsequently removed, are also found in the area. <u>Haplopappus arborescens</u> (Gray) Hall occurs in both districts. <u>Dicentra chrysantha</u> (H & L) Walp. and <u>Cupressus quadalupensis</u> Wats. ssp. <u>forbesii</u> (Jeps.) Beauchamp ex Thorne were found only in the Trabuco District.

#### Extrapolation Surveys

The species listed here were not found within at least one of the two district boundaries but could feasibly occur in one or the other because of their reported habitat and nearby location. These are:

- Astragalus brauntonii Parish, reported near the Trabuco District in Coal Cyn. on the N. slope of Sierra Peak.
- Brodiaea orcuttii (Greene) Baker and <u>Myosurus minimus</u> L. var. <u>apus</u> Greene occur in or about the vernal pools of the Santa Rosa Plateau which borders the Trabuco District in the south.
- Satureja chandleri (Bdg.) Druce also occurs on the Santa Rosa Plateau in DeLuz Canyon and near the USFS Tenaja Guard Station.
- Calochortus dunni Purdy is found near the Descanso District at Guatay Mtn. and Desert View south of Julian.
- Grindelia hallii Steyerm is found in Cuyamaca Rancho State Park which borders the Descanso District.
- Limnanthes gracilis Howell var. parishii (Jeps.) C. Mason is found about Cuyamaca Lake but is not likely to occur in the Descanso District because the preferred habitat of wet grassy depressions is not well represented there.

The 9 sensitive plant species and 2 of the extrapolation species (Astragalus brauntonii and Satureja chandleri) are illustrated in Figures 2-12. Due to lack of space, the reader is referred to the author's full file reports of these species, alluded to previously, for more detailed information, especially habitat requirements and management recommendations. However, a few comments should be made about some of the more critical areas where most of the sensitive species occur.

1. Ortega Highway. <u>Dudleya viscida</u> is fairly well protected here by virtue of its habitat-the steep rocky cliffs of San Juan Canyon.

- King Creek. The good stands of <u>Cupressus</u> <u>stephensonii</u> on this canyon slope are well protected by the personnel of both the Descanso Ranger District and Cuyamaca Rancho State Park.
- 3. Lyons Peak. Access to this important area, an adjunct to the Descanso District, is controlled by a locked gate. Thus the three sensitive plant species here (Table 1) are afforded some protection.
- 4. Lawson Peak. This area, while not as scenic as Lyons Peak, is truly a valuable botanical area. Four sensitive species occur here (Table 1) and the spring flora is relatively rich in chaparral and ground cover species. Unfortunately there are no locked gates on the access roads leading to this area. It has been recommended to the Forest Service that access to this area should be controlled, at least during the flowering season of the sensitive species.
- 5. <u>Moreno Dam.</u> <u>Ribes canthariforme</u> is well protected here by controlled access. Drought periods may be its only threat. <u>Ribes canthariforme</u>, unlike R. <u>indecorum</u> Eastw. which grows in the same areas, is found mostly in rocky ravines or among large boulders where water harvesting is possible, perhaps indicating the need for extra moisture by this species.
- 6. <u>Viejas Grade</u>, <u>Viejas Mtn</u>. This area is mentioned more for what hasn't been found here recently, namely <u>Acanthomintha ilicifolia</u>. While this annual has been reported from this area in the past, the author was unable to find it in 1980, despite frequent trips there throughout the spring and summer. Since it is an annual, it may have failed to appear simply because of inadequate rainfall. In any case, it is rare.
- 7. <u>Hagador Canyon</u>, <u>Sanitago Peak</u>. Aside from subspecies of the prickly poppy (<u>Argemone</u>), considered to be endemic to the Trabuco District, these two areas are floristically very rich.

### Literature Cited

Beauchamp, R.M., 1978. Recommendations for San Diego and Imperial counties rare plants proposed for the revision of the inventory of rare and endangered vascular plants of California, California Native Plant Society. Unpublished report, San Diego State University, California.

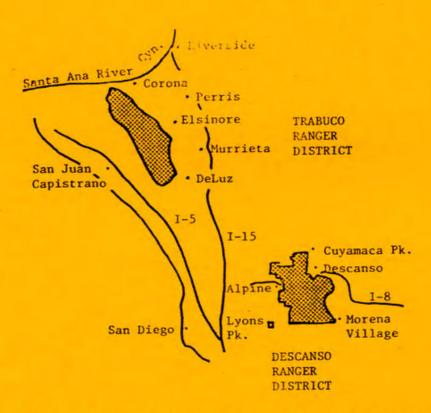
Kruckeburg, A.R., 1969. Soil diversity and the distribution of plants, with examples from Western North America. Madrono 20:129-154.

Lathrop, E.W. and R.F. Thorne, 1978. A flora of the Santa Ana Mountains, California. Aliso 9:197-278. Oberbauer, T.A., 1979. Influence of gabbroic substrate on plant distribution. Lecture at Southern California Botanists symposium on rare plants in southern California. February 3, 1979. Los Angeles County Natural History Museum.

Powell, W.R., 1980. Inventory of rare and endangered vascular plants of California. California Native Plant Society special publication no. 1, second edition.

Shevock, J.R., 1976. Floristic regions of the Santa Ana Mountains with emphasis on the rare, endangered and geographically interesting species. Unpublished report for a seminar in physical geography, California State University, Long Beach, 15 pp.

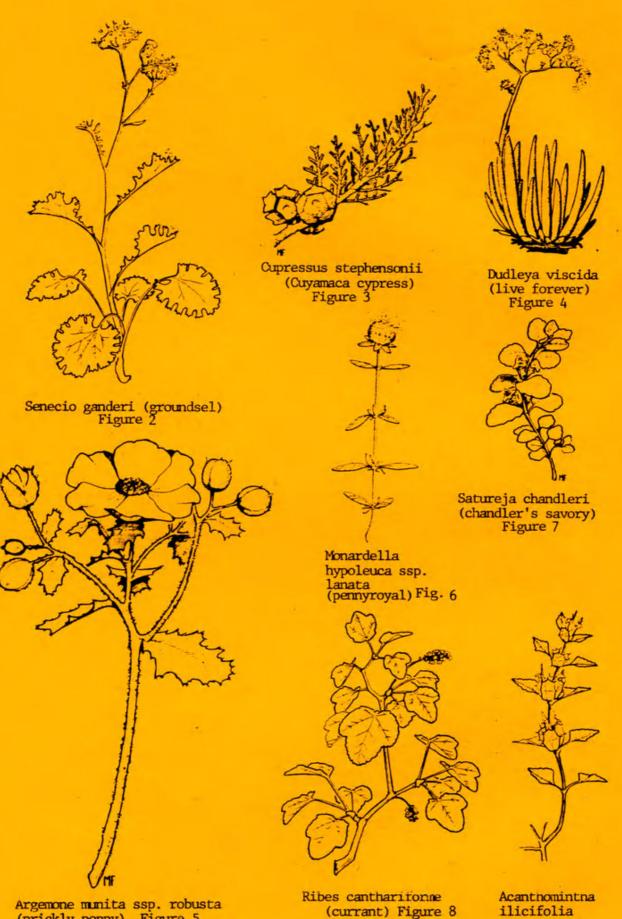
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\* Figure 1. Map of the Trabuco and Descanso Ranger Districts, Cleveland National Forest.

Species	Location(s)		Rarity Status
Acanthomintha ilicifolia (Gray) Gray	) Gray Viejas Grade		seldom reported, endangered in part
Argemone munita Dur. & Hilg. s robusta G. Owenby*	ssp. Hagador Canyon Santiago Peak		ssp. endemic to the Trabuco District, reported as rare by Shevock
Brodiaea orcuttii (Greene) Baker	er King Creek		rare, of limited distribution, endanger- ed in part
Calamograostis densa Vasey	Lawson and Lyons peaks King Creek, Los Pinos mountain	peaks inos	confined to several populations, not endangered
Cupressus stephonsonii C. B. Wolf	olf King Creek		confined to several populations, not endangered
Dudleya viscida (Wats.) Moran*	ortega Highway .3 km E of USFS San Juan Station	km E of tion	occurrence within the district confined to one population, not endangered, report- ed as rare by Shevock
Monardella <u>hypoleuca</u> Gray ssp. <u>lanata</u> (Abrams) Munz	Lawson and Lyons peaks (Cuyamaca Park by extrapolation)	peaks	confined to several populations, not endangered
Ribes canthariforme Wiggins	Lawson and Lyons peaks Moreno Dam	peaks	confined to several populations, not endangered
<u>Senecio ganderi</u> Barkley & Beauchamp	uchamp Lawson Peak (Cuyamaca Park by extrapolation)	maca Park	confined to several populations, not endangered

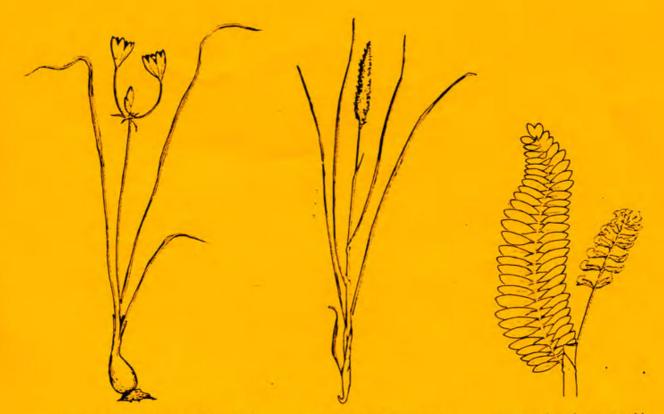
Table 1. Critical areas and rarity status of sensitive plant species. Species marked (\*) occur only in



Argemone munita ssp. robusta (prickly poppy) Figure 5

Ribes cantharitonne (currant) Figure 8

(thornmint) Figure 9



Brodiaea orcuttii (blue dick relative) Figure 10 Calamagrostis densa (reedgrass) Figure 11 Astragalus brauntonii (loco weed) Figure 12

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