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ISLAND SPECIALISTS: SHARED FLORA OF THE ALTA AND BAJA CALIFORNIA PACIFIC ISLANDS

Sarah E. Ratay¹, Sula E. Vanderplank², and Benjamin T. Wilder³

ABSTRACT.—The floristic connection between the mediterranean region of Baja California and the Pacific islands of Alta and Baja California provides insight into the history and origin of the California Floristic Province. We present updated species lists for all California Floristic Province islands and demonstrate the disjunct distributions of 26 taxa between the Baja California and the California Channel Islands. These 26 plant taxa are found among the 16 Pacific islands without occurring on the intervening mainland of Alta California. Separate species lists for each island group (8 California Channel Islands and 8 Baja California Islands) were compiled. These lists were compared to the mainland California flora to identify species that occur on the California Islands and either the Baja California Pacific Islands or the mediterranean region of the Baja California Peninsula, but not the mainland of Alta California. This first compilation of the flora of the Baja California Islands and nomenclatural updates for the Channel Islands provide a platform for future research and conservation planning.

RESUMEN.—El grado de conexión florística entre la región mediterránea de Baja California y las Islas del Pacífico de Alta y Baja California proporciona un entendimiento de la historia y el origen de la Provincia Florística de California. Presentamos listados actualizados de especies de todas las islas de la Provincia Florística de California y mostramos la distribución aislada de veintiséis taxones entre la Baja California y las Islas del Canal de California. Identificamos aquellas especies de plantas que se pueden encontrar dentro de las dieciséis islas del Pacífico, pero no se encuentran en la península de Alta California. Con este objetivo, recopilamos listados separados de las especies que habitan en cada grupo de islas (las ocho Islas del Canal de California y las ocho islas de Baja California). Estos listados se compararon con la flora existente en la península de California con el fin de identificar aquellas especies que se encuentran en las islas de California, y tanto en las Islas del Pacífico de Baja California como en la región mediterránea de la Península de Baja California, pero *no* en la península de Alta California. La primera recopilación de flora de las Islas de Baja California y actualizaciones nomenclaturales en las Islas del Canal, proporcionan una plataforma para futuras investigaciones y planes de conservación.

The islands of the California Floristic Province (CFP) are an important component of one of the world's great biodiversity hotspots (Myers et al. 2000). The CFP has commonly been referred to as an environmental island due to its regionally unique mediterranean-type climate, isolation (via oceanic and orographic boundaries), and corresponding globally significant levels of endemism. The plant community has had ample time to evolve since the emergence of wet winters and dry summers at least 5–10 Mya (Axelrod 1973) and perhaps earlier (Ackerly 2009, Keeley et al. 2011). The remarkable diversity and endemism of the CFP has been attributed to relative climatic stability during glacial-interglacial transitions of the Pleistocene (Lancaster and Kay 2012, Sniderman et al. 2013). The antiquity and distinctiveness of the California flora are

well-recognized attributes that are accentuated on the islands of the Californias.

The degree of floristic similarity of 16 offshore islands, and their apparent role as refugia for species once present on the mainland, has been a persistent biogeographical puzzle. The CFP includes 16 islands from the adjacent coast of Alta and Baja California and extends south to the 28th parallel, including the CFP vegetation found on Cedros and Guadalupe Islands (Raven and Axelrod 1978, Moran 1996, Oberbauer 2002a). The CFP has an increasing gradient of aridity from north to south, but vegetation distributions are heavily influenced by fog presence; this fog provides additional moisture and reduces radiant loadings, significantly changing conditions for plants (Dawson 1998, Fischer et al. 2008, Vanderplank 2013). Physical data suggest that ocean currents have

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Fig. 1. California Channel and Baja California Pacific Islands with Diegan Scrub as defined by Axelrod (1978). Map by B.T. Wilder, adapted from Google Earth™ imagery.

been stable for millions of years (Jacobs et al. 2004), which indicates the presence of fog during the development of the CFP.

Within the large number of plant species on the CFP islands and the mainland of Alta and Baja California is the occurrence of disjunct Baja California taxa on the California Channel Islands. These species are seen today only on the CFP islands and a distinct portion of the California mainland termed the Diegan Scrub, the San Diego region southward into coastal northwestern Baja California (Fig. 1; Axelrod 1978). However, the number and identity of this group of disjunct species has remained unknown.

To identify the species that define this pattern, we present (1) the first compiled checklist of the 8 CFP Baja California Islands, (2)

nomenclatural updates to the flora of the 8 California Channel Islands, and (3) the plants that occur on the California Channel Islands and in the Diegan Scrub but *not* the rest of mainland California, hereafter referred to as “exemplar taxa.”

METHODS

Development of Checklists

We assembled all existing species checklists for the 2 island groups (Alta California and Baja California) into 2 lists, then compared those lists with the flora of the California Floristic Province for both mainland Alta and Baja California to generate the list of exemplar taxa. The nomenclatural updates presented here are based on our best understanding of the

island floras at the date of publication and follow the models of the sources indicated below for the 2 lists. Species now thought to be extirpated from the islands are denoted by an ampersand (&). Unvouchered taxa (including reports, photo vouchers, and personal communications) are indicated by a question mark (?). Nonnative species are indicated by an asterisk (*). When a subspecies was not recorded for all the islands and some ambiguity remains, the taxon is recorded at the species level only. Exotic species that were planted or are not naturalized (e.g., *Nerium oleander*) were deleted from checklists.

Baja California Islands Checklist

The most recent species lists for each of the 8 Baja California Islands (Appendix 1; Coronados, Todos Santos, San Martín, Jeronimo, Guadalupe, San Benito, Cedros, and Natividad) were compiled from the following data sources:

Coronados—Oberbauer 2002b
 Todos Santos—Junak and Philbrick 1994a
 San Martín—Junak and Philbrick 1994b
 Guadalupe—Moran 1996, Rebman 2006, Rebman et al. 2007
 San Benito—Junak and Philbrick 2002b, Rebman 2007a
 Cedros—Oberbauer 1987, Rebman 2007b
 Natividad—Junak and Philbrick 2002a

The list of Jeronimo island flora, consisting of 8 taxa, was provided via personal communication from Steve Junak. We verified mainland Baja California flora distributions with the unpublished data of Jon Rebman and Bart O'Brien (personal communication 2013). Several taxa were added to the checklists based on recent collections, herbarium specimens recently encountered, and recent reports by Sula Vanderplank, Jon Rebman, and Steve Junak; these taxa are indicated by footnotes. The taxonomy for this checklist follows the Checklist of Baja California Plants in preparation by Jon Rebman.

California Channel Islands Checklist

The updated flora of the 8 California Channel Islands (Appendix 2; San Clemente, San Nicolas, Santa Catalina, Santa Barbara, Santa Rosa, Santa Cruz, Anacapa, and San Miguel) is based on the master checklist compiled by Gary Wallace (1985). We included published updates to individual island floras found in the

National Park Service checklist from Junak et al. (1997) for San Miguel, Santa Rosa, Santa Cruz, Anacapa, and Santa Barbara islands. For San Clemente Island we included updates from Ross et al. (1996) and for San Nicholas Island updates from Junak (2008). Additional taxa and island records are included based on recent collections on Santa Catalina Island by Sarah Ratay, observations and collections on San Clemente Island by Emily Howe (Soil Ecology and Restoration Group, SDSU), and herbarium specimens found in the Consortium of California Herbaria (CCH 2014), which are listed in footnotes. The nomenclatural revision of this checklist is consistent with taxonomy of the new Jepson Manual (Baldwin et al. 2012) through the use of the dynamic concordance tool provided on the Jepson e-flora website (Jepson Flora Project 2013). This checklist was developed to identify distribution patterns in the flora, and though the nomenclature has been updated, we have not confirmed identifications of questionable herbarium specimens, nor have we diligently pursued the lowest taxonomic rank beyond the published sources. We are also aware of additional updates to the flora of many of the Channel Islands in process by Steve Junak, including publication of the flora of Catalina Island; Junak's updates are not included here.

Exemplar Taxa

The identification of exemplar taxa was generated through a comparison of the 2 newly generated island checklists (Appendixes 1, 2) with the Jepson Manual (Baldwin et al. 2012) and the inventory of rare and endemic plants of CFP Baja California (O'Brien et al. 2014). A large number of species from CFP Baja California extend just slightly into southern California and are considered near-endemic to Baja California (O'Brien et al. 2014). As such, we include the near-endemic species of CFP Baja California as 'absent' in the mainland of Alta California (with the exception of *Crosso-soma californicum*, which occurs on the Palos Verde Peninsula, and *Euphorbia misera*, which occurs in the South Coast region of California and beyond; Baldwin et al. 2012). These few species are consistent with the concept of Diegan Scrub as proposed by Axelrod (1978). Diegan Scrub is named for its occurrence in southern San Diego County and south into Baja California. It is a coastal scrub, rich in

TABLE 1. The 26 exemplar taxa as they occur on 8 Baja California Pacific Islands and the 8 Channel California Islands.^a CRPR column provides the California Rare Plant List ranking, and the BC column provides the State of Baja California

Family	Exemplar taxa	Habit	NAT	CED	BEN	GUA	JER	MAR
Apiaceae	<i>Lomatium insulare</i>	Herb				GUA		
Asteraceae	<i>Hazardia cana</i>	Shrub				GUA		
Asteraceae	<i>Senecio lyonii</i>	Shrub			BEN			MAR
Boraginaceae	<i>Phacelia floribunda</i>	Herb				GUA		
Cactaceae	<i>Bergerocactus emoryi</i>	Succulent						MAR
Convolvulaceae	<i>Calystegia macrostegia</i> subsp. <i>macrostegia</i>	Vine				GUA		MAR
Crossosomataceae	<i>Crossosoma californicum</i>	Shrub				GUA		
Euphorbiaceae	<i>Euphorbia misera</i>	Shrub	NAT	CED	BEN	GUA		MAR
Fabaceae	<i>Acmispon argophyllus</i> subsp. <i>argenteus</i>	Shrub				GUA		
Fabaceae	<i>Lupinus guadalupensis</i>	Herb				GUA		
Fabaceae	<i>Trifolium palmeri</i>	Herb				GUA		
Fagaceae	<i>Quercus tomentella</i>	Tree				GUA		
Grossulariaceae	<i>Ribes viburnifolium</i>	Shrub		CED				
Lamiaceae	<i>Salvia brandegeei</i>	Shrub						
Papaveraceae	<i>Eschscholzia ramosa</i>	Herb	NAT	CED	BEN	GUA		MAR
Phmyraceae	<i>Mimulus latifolius</i>	Herb				GUA		
Plantaginaceae	<i>Gambelia speciosa</i>	Shrub				GUA		
Poaceae	<i>Dissanthelium californicum</i>	Herb				GUA		
Polemoniaceae	<i>Gilia nevinii</i>	Herb				GUA		
Polemoniaceae	<i>Leptosiphon pygmaeus</i> subsp. <i>pygmaeus</i>	Herb				GUA		
Rhamnaceae	<i>Ceanothus arboreus</i>	Shrub				GUA		
Rhamnaceae	<i>Rhamnus pirifolia</i>	Shrub				GUA		
Rosaceae	<i>Prunus ilicifolia</i> subsp. <i>lyonii</i>	Tree						
Saxifragaceae	<i>Jepsonia malvifolia</i>	Herb				GUA		
Scrophulariaceae	<i>Scrophularia villosa</i>	Shrub				GUA		
Solanaceae	<i>Solanum wallacei</i>	Shrub				GUA		
NUMBER OF SPECIES			2	3	3	21	0	5

^aNatividad [NAT], Cedros [CED], San Benito [BEN], Guadalupe [GUA], Jeronimo [JER], San Martín [MAR], Todos Santos [TOS], Coronados [COR], San Clemente

succulents, that includes many endemic and near-endemic species from CFP Baja; it also includes the coastal succulent scrub and coastal sage scrub ecoregions (González-Abraham et al. 2010).

RESULTS

The California Pacific Islands in total contain 1239 unique taxa. The California Islands separately contain 976 taxa and the Baja California Islands 535 taxa. Twenty-six of these taxa have a disjunct occurrence between the Baja California Pacific Islands and the California Channel Islands, absent from Alta California outside the Diegan Scrub (Table 1). These exemplar taxa represent 16 families and 26 unique genera. No one growth form predominates; of the 26 taxa, there are 12 shrubs, 10 herbaceous annuals, 2 trees, 1 vine, and 1 xerophytic succulent (Table 1). Fabaceae is the largest family with 3 species on the exemplar taxa list.

These 26 taxa fall into 6 biogeographic sub-patterns:

- (1) multiple California Channel Islands and Guadalupe Island, 13 taxa
- (2) Guadalupe Island–San Clemente Island only, 4 taxa (*Hazardia cana*, *Leptosiphon pygmaeus* ssp. *pygmaeus*, *Lupinus guadalupensis*, *Phacelia floribunda*)
- (3) Diegan Scrub and the Channel Islands only, 2 taxa (*Prunus ilicifolia* ssp. *lyonii* and *Salvia brandegeei*)
- (4) widespread, 1 taxon (*Eschscholzia ramosa*) occurs on 14 of 16 islands
- (5) certain Channel and Baja California Islands and Diegan Scrub, 4 taxa (*Bergerocactus emoryi*, *Crossosoma californicum*, *Euphorbia misera*, *Ribes viburnifolium*)
- (6) certain Channel and Baja California Islands, 2 taxa (*Calystegia macrostegia* ssp. *macrostegia* and *Senecio lyonii*)

DISCUSSION

The complex biogeography of the California Floristic Province can be explained in part

Islands are listed left to right by increasing latitude. The Mainland column indicates continental occurrences. The protected rankings.

TOS	COR	Mainland	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG	# ISL	CRPR	BC
		No	CLE	NIC							3	1B.2	1b
		No	CLE								2	1B.2	1b
		Baja only	CLE		CAT						4		2a
		No	CLE								2	1B.2	1b
TOS	COR	Baja & CA	CLE		CAT						5	2.2	4
		No			CAT		ROS	CRU	ANA	MIG	7		2a
		CA only	CLE		CAT						3	1B.2	1b
TOS	COR	Baja & CA	CLE		CAT			CRU			10	2.2	
		No	CLE	NIC	CAT						4		2a
		No	CLE								2	1B.2	1b
		No	CLE	NIC	CAT	BAR			ANA		5	4.2	2a
		No	CLE		CAT		ROS	CRU	ANA		6	4.2	2a
		Baja & CA			CAT						2	1B.2	4
		Baja only					ROS				1	1B.2	1b
TOS	COR	No	CLE	NIC	CAT	BAR	ROS	CRU			13	4.3	2a
		No			CAT			CRU			3	1A	1b
		No	CLE		CAT	BAR					4	1B.2	1b
		No	CLE		CAT						3	1B.2	1a
		No	CLE	NIC	CAT	BAR	ROS	CRU	ANA		8	4.3	2a
		No	CLE								2	1B.2	1b
		No			CAT		ROS	CRU			4		2a
		No	CLE		CAT		ROS	CRU		MIG	6	4.2	2a
		Baja only	CLE		CAT		ROS	CRU	ANA		5		
		No	CLE	NIC	CAT		ROS	CRU			6	4.2	2a
		No	CLE		CAT						3	1B.2	1b
		No			CAT		ROS	CRU			4	1B.1	1b
3	3		20	6	20	4	10	11	5	2		21	24

[CLE], San Nicolas [NIC], Santa Catalina [CAT], Santa Barbara [BAR], Santa Rosa [ROS], Santa Cruz [CRU], Anacapa [ANA], and San Miguel [MIG].

by analyzing unusual floristic patterns seen on the California Pacific Islands. The 26 taxa shared by the Baja California and Channel Islands indicate a clear connection between these isolated and disjunct regions. What precludes these taxa from occurring on the Alta California mainland, and what does this suggest for the past extent of the CFP? Did these taxa evolve locally and then migrate, or does this pattern instead reflect a distant legacy?

Three current hypotheses attempt to explain the presence of these disjunct populations on the California Pacific Islands: (1) these species have the ability to disperse long distances yet for some reason have failed to establish on the California mainland; (2) these species were historically more widespread, connected by former geologic linkages, and have been unable to persist on the Alta California mainland, remaining in refugia on the islands and in Baja California; or (3) the Channel Islands originally occurred farther south near San Diego (Atwater 1998) and as they

moved north, fog-moderated climates retained species native to that region.

A number of the exemplar taxa have distributions on the Channel Islands and farther south in Baja California, suggestive of the refugium hypothesis (i.e., these species were once more widespread). Epling and Lewis (1942) proposed that the diverse Diegan Scrub has many taxa derived from Miocene vegetation that came from the north Mexican plateau. Axelrod (1978) states that Diegan Scrub was more restricted in the Pleistocene and expanded in the Holocene as arid-adapted taxa moved northward into the southern Channel Islands. Many CFP species are found in disjunct occurrences, scattered across Arizona and Mexico, not unlike the presence of these 26 species on the islands (Valiente-Banuet et al. 1998, Bhaskar et al. 2007). Small-scale topographic niches and facilitation by other species often support these occurrences. Axelrod (1978) also points out that the most important conditions for Diegan Scrub vegetation

appear to be the absence of frost and the presence of a degree of summer moisture (in the form of fog). The cold California current and dense fog banks suggest that similarities in climate may help to explain the similarities in the floras (Fischer et al. 2008).

On the other hand, a number of the exemplar taxa are perhaps better explained as having evolved on the islands. This is especially true of many island *Lotus* species (Acmispon; McGlaughlin et al. 2011, McGlaughlin personal communication), *Eschscholzia ramosa* (Still and Potter 2013), and *Crossosoma californicum* (Wallace and Helenurm 2009), among others (Baldwin, 2007). For this pattern, we hypothesize local evolution and subsequent dispersal to similar niches on the CFP Baja Islands.

Guadalupe Island poses a particularly interesting study system. As the most isolated island, located roughly 270 km offshore, Guadalupe is a true oceanic island never connected to the Baja California Peninsula. Understanding the colonization of Guadalupe may contribute to understanding the dispersal patterns that we see today. Of 26 exemplar taxa, 21 of them occur on Guadalupe. Floristic similarities to the Channel Islands flora (at least 400 km north) may be due to the California current moving species from the California islands southward. Guadalupe Island has been above water for millions of years, and its current flora could represent the accumulation of species from the possible sources over this time.

In addition to a better understanding of the origin and evolution of the CFP, these species lists allow for improved conservation planning. Twenty-one of the 26 species are listed by the California Rare Plant Ranking (CNPS 2013) yet currently have no protection with the Mexican government. Twenty-five of the 26 species are listed in the rare plant ranking for Baja California (O'Brien et al. in press). These rankings are utilized in conservation planning in California and would be useful for land planning in Baja California. These combined islands species lists provide important information about the level of invasive species in the regions. Of the 535 taxa on the Baja California Islands, roughly 14% (74) are introduced species (excluding planted species, which were not included in our analyses). In comparison, of the 976 species on the California Channel Islands, roughly 28% (278) are introduced species. Presumably, the lower

proportion of invasive species on the Baja California Islands is due to less human use and fewer impacts to date.

The exemplar taxa identified by this process can now serve as the focal point of research to better understand the region's historical biogeography. Such research can incorporate phylogenetic relationships and their importance in community assembly (Webb et al. 2008). Functional trait analyses would help determine if these taxonomically diverse species share inherent traits that explain their disjunct distributions. Comparative phylogeographic studies of these shared taxa would test the specific hypothesis discussed above, among others, and offer a glimpse into the past. Additionally, the knowledge of patterns and modes of dispersal would provide valuable natural history information. Further genetic work to resolve the origin of these island specialist species would help to elucidate questions of timing, and definitively separate neo- and paleo-endemics in the exemplar list.

Conservation activity in Baja California has recently expanded, yet knowledge of plant distributions and ecology remains limited. We hope that these updated checklists of the California Pacific Islands will facilitate species status and distribution updates on both sides of the border, and foster well-informed conservation decisions that promote expanded science and management for the transborder ecoregion.

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Appendix 1 on page 169.

Appendix 2 on page 188.

APPENDIX 1. Plant species checklist for the 8 Baja California islands (Cedros [CED], Coronados [COR], Jernimo [JER], Guadalupe [GUA], Natividad [NAT], San Benito [BEN], San Martín [MAR], and Todos Santos [TOS]). An ampersand (&) indicates an extirpated species; a question mark (?) indicates an unvouchered taxon; and an asterisk (*) indicates a nonnative species.

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
FERNS									
Dryopteridaceae									
<i>Polystichum munitum</i> (Kaulf.) C. Presl						GUA			
Polypodiaceae									
<i>Polypodium californicum</i> Kaulf.		COR	TOS			GUA			
<i>Polypodium scolieri</i> Hook. & Grev.						GUA			
Pteridaceae									
<i>Adiantum capillus-veneris</i> L.								CED	
<i>Cheilanthes brandegeei</i> D.C. Eaton								CED	
Pteridaceae									
<i>Cheilanthes neuberryi</i> Domin						GUA			
<i>Notholaena californica</i> D.C. Eaton	ssp. <i>californica</i>					GUA		CED	
<i>Notholaena californica</i> D.C. Eaton	ssp. <i>leucophylla</i> Windham							CED	
<i>Pellaea andromedifolia</i> (Kaulf.) Fee		COR						CED	
<i>Pellaea mucronata</i> D.C. Eaton	var. <i>mucronata</i>					GUA			
<i>Pentagramma triangularis</i> (Kaulf.) Yatskievych et al.	ssp. <i>triangularis</i>	COR				GUA		CED	
<i>Pentagramma triangularis</i> (Kaulf.) Yatskievych et al.	ssp. <i>maxonii</i> (Weath.) Yatsk., Windham & E. Wollenw.					GUA		CED?	
<i>Pentagramma triangularis</i> (Kaulf.) Yatskievych et al.	ssp. <i>viscosa</i> (D.C. Eaton) Yatsk., Windham, & E. Wollenw.					GUA			
<i>Pentagramma triangularis</i> (Kaulf.) Yatskievych et al.	ssp. <i>senipallida</i> (J.T. Howell) Yatsk., Windham & E. Wollenw.					GUA			
GYMNOSPERMS									
Cupressaceae									
<i>Hesperocyparis guadalupensis</i> (S. Watson) Bartel ¹						GUA			
<i>Juniperus californica</i> Carrière						GUA		CED	
Ephedraceae									
<i>Ephedra aspera</i> S. Watson								CED	
Pinaceae									
<i>Pinus radiata</i> D. Don	var. <i>binata</i> (Engelm.) Lemmon					GUA			
<i>Pinus radiata</i> D. Don	var. <i>cedrosensis</i> (J.T. Howell) Axelrod							CED	
MONOCOTS									
Arecaceae									
<i>Brashea edulis</i> H. Wendl. ex S. Watson						GUA			

¹Synonym: *Cupressus guadalupensis* S. Watson

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
Agavaceae									
<i>Agave sebastianiana</i> Greene									
<i>Agave shawii</i> Engelm.									
<i>Yucca valida</i> Brandegee			TOS				BEN	CED	NAT
Cyperaceae									
<i>Carex spissa</i> L.H. Bailey									
<i>Eleocharis geniculata</i> (L.) Roemer & Schultes									
<i>Schoenoplectus californicus</i> (C.A. Mey) Sofak									
Juncaceae									
<i>Juncus acutus</i> L. ²	ssp. <i>leopoldii</i>								
<i>Juncus bufonius</i> L. ³	var. <i>bufonius</i>					GUA		CED	
<i>Juncus bufonius</i> L. ⁴	var. <i>congestus</i> Wahlenb					GUA			
Liliaceae									
<i>Calochortus splendens</i> Dougl.		COR							
Orchidaceae									
<i>Piperia cooperi</i> (S. Watson) Rydb		COR	TOS						
Poaceae									
<i>Agrostis pallens</i> Trin.		COR							
<i>Aristida adscensionis</i> L.						GUA		CED	
<i>Arundo donax</i> L. [*]									
<i>Avena barbata</i> Brot. [*]									
<i>Avena fatua</i> L. [*]		COR	TOS			GUA		CED	
<i>Bromus berteroaenus</i> Colla		COR	TOS	MAR		GUA		CED	
<i>Bromus carinatus</i> Hook. & Arn.				MAR		GUA		CED	
<i>Bromus diandrus</i> Roth. [*]		COR	TOS	MAR					
<i>Bromus hordeaceus</i> L. [*]		COR	TOS	MAR		GUA		CED	
<i>Bromus madritensis</i> L. [*]		COR	TOS	MAR		GUA		CED	
<i>Bromus tectorum</i> L. [*]				MAR		GUA			
<i>Cynodon dactylon</i> (L.) Pers. [*]		COR						CED?	
<i>Distichlis spicata</i> (L.) Greene		COR		MAR				CED	
<i>Distichlis littoralis</i> (Engelm.) H.L. Bell & Columbus ⁵	ssp. <i>rubens</i> (L.) Husnot			MAR					
<i>Elymus condensatus</i> J. Presl ⁶									
<i>Eragrostis pectinacea</i> (Michx.) Nees		COR	TOS						NAT
<i>Festuca bromioides</i> L. ^{7*}	var. <i>pectinacea</i>								
						GUA			

²Report confirmed, herbarium specimen @ SD
³New record; herbarium specimen @ RSA, SD
⁴New record; herbarium specimen @ RSA, SD
⁵Synonym: *Monanthochloe littoralis* Engelm.
⁶Synonym: *Legumin condensatus* (J. Presl) A. Löve
⁷Synonym: *Vulpia bromioides* (L.) Gray

APPENDIX I. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Festuca microstachys</i> Nutt. ⁸									
<i>Festuca myuros</i> L. ^{9*}	var. <i>pauciflora</i> Scribn.			MAR		GUA			
<i>Festuca octoflora</i> Walt. ¹⁰		COR	TOS			GUA		CED	
<i>Hordeum murinum</i> L. [*]	var. <i>octoflora</i>		TOS	MAR		GUA		CED	
	ssp. <i>glaucum</i> (Steud.) Tzvelev.	COR	TOS	MAR		GUA		CED	
<i>Hordeum murinum</i> L. [*]	ssp. <i>leporinum</i> (Link) Arcang	COR	TOS	MAR		GUA		CED	
<i>Lamarckia aurea</i> (L.) Moench [*]		COR	TOS	MAR		GUA		CED	
<i>Melica frutescens</i> Scribn									
<i>Melica imperfecta</i> Trin.		COR	TOS	MAR		GUA		CED	
<i>Muhlenbergia microserpa</i> (DC.) Kunth		COR	TOS	MAR		GUA		CED	
<i>Phalaris caroliniana</i> Walt.						GUA			
<i>Phalaris minor</i> Retz. [*]			TOS			GUA			NAT
<i>Pyptochaetium pringlei</i> (Beal) Parodi								CED	
<i>Poa annua</i> L. [*]						GUA			
<i>Poa secunda</i> J.S. Presl	ssp. <i>secunda</i>		TOS ¹¹			GUA			
<i>Poa thomasi</i> Refulio ¹²						GUA			
<i>Polypogon viridis</i> (Gouan) Breistr. ^{13*}								CED	
<i>Polypogon monspeliensis</i> * (L.) Desf.			TOS			GUA		CED	
<i>Schismus barbatus</i> (L.) Thell. [*]						GUA			
<i>Sorghum bicolor</i> (L.) Moench [*]								CED	
<i>Stipa speciosa</i> Trin. & Rupr. ¹⁴								CED	
<i>Stipa lepidota</i> A. Hitchc. ¹⁵						GUA		CED?	
<i>Stipa diegoensis</i> Swallen			TOS						
<i>Stipa pulchra</i> Hitchc.		COR							
<i>Triticum aestivum</i> L. [*]				MAR		GUA		CED?	
<i>Zea mays</i> L. [*]									NAT
Themidaceae									
<i>Dichelostemma capitatum</i> Alph. Wood									
<i>Triteleta guadalupensis</i> L.W. Lenz	ssp. <i>capitatum</i>								
<i>Triteleia guadalupensis</i> L.W. Lenz		COR	TOS	MAR		GUA	BEN	CED	
<i>Triteleopsis palmieri</i> (S.Watson) Hoover						GUA		CED?	
Typhaceae									
<i>Typha latifolia</i> L.								CED?	
Zosteraceae									
<i>Phyllospadix scouleri</i> Hook.		COR		MAR	JER			CED	NAT

⁸Synonym: *Vulpia microstachys* (Nutt.) Murno
⁹Synonym: *Vulpia myuros* (L.) C.C. Gmel.
¹⁰Synonym: *Vulpia octoflora* (Walter) Rydb. var. *octoflora* and V. o. var. *hirtella* (Piper) Henard
¹¹New record: herbarium specimen @ SD (Thorne 53921)
¹²Synonym: *Stenochloa californica* Nutt.
¹³Synonym: *Agrostis semiverticillata* (Forssk.) C. Chr.
¹⁴Synonym: *Achnatherum speciosum* (Trin. & Rupr.) Barkworth
¹⁵Synonym: *Nassella lepidota* (Hitchc.) Barkworth

APPENDIX I. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Phyllospadix torreyi</i> S. Watson									
<i>Zostera marina</i> L.			TOS	MAR	JER	GUA	BEN		
BASAL DICOTS				MAR		GUA			
Saururaceae									
<i>Anemopsis californica</i> (Nutt.) H. & A.								CED?	
EUDICOTS									
Aizoaceae									
<i>Carpolobrotus chilensis</i> (Molina) N.E. Br.*		COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Mesembryanthemum crystallinum</i> L.*		COR	TOS	MAR					
<i>Mesembryanthemum nodiflorum</i> L.*		COR	TOS	MAR		GUA	BEN	CED?	NAT
Anacardiaceae									
<i>Malosma laurina</i> (Nutt. in T. & G.) Nutt. ex Abrams			TOS			GUA		CED	
<i>Pachycornus discolor</i> (Benth.) Cov.								CED	NAT
<i>Rhus integrifolia</i> (Nutt.) Brewer & S. Watson			TOS			GUA		CED	
<i>Rhus integrifolia</i> × <i>lenticii</i>								CED	
<i>Rhus lentii</i> Kell.								CED	
Apiaceae									
<i>Cortandrum sativum</i> L.*								CED?	
<i>Foeniculum vulgare</i> Mill.*								CED	
<i>Apiastrum angustifolium</i> Nutt. in Torrey & A. Gray		COR	TOS					CED	
<i>Bowlesia incana</i> Ruiz & Pav.								CED?	
<i>Daucus pusillus</i> Michaux		COR	TOS			GUA			
<i>Lomatium insulare</i> (Eastw.) Munz.						GUA			
<i>Yabea microcarpa</i> (Hook. & Arn.) Koso-Pol. ¹⁶						GUA			
Apocynaceae									
<i>Asclepias subulata</i> Decne. in A. DC.								CED	
<i>Nerium oleander</i> L.*						GUA			
Araliaceae									
<i>Hydrocotyle umbellata</i> ¹⁷								CED	
Asteraceae									
<i>Agoseris heterophylla</i> (Nutt.) Greene						GUA			
<i>Anaauria rotundifolia</i> Benth.									
<i>Anhlyopappus pusillus</i> Hook. & Arn.				MAR					
<i>Ambrosia camphorata</i> (Greene) Payne		COR	TOS	MAR		GUA	BEN	CED	NAT
<i>Ambrosia chamissonis</i> (Less.) Greene				MAR?		GUA		CED	
<i>Ambrosia chenopodiifolia</i> (Benth.) Payne			TOS	MAR				CED?	
<i>Ambrosia magdalenae</i> (Brandegee) Payne								CED	NAT

¹⁶New record; herbarium specimen @ RSA, SD

¹⁷New record; herbarium specimen @ SD (166694, Amadeo Rea 1568, 22 Feb 1988)

APPENDIX I. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Artemisia californica</i> Less.									
<i>Baccharis sarothroides</i> A. Gray		COR	TOS			GUA		CED	
<i>Baccharis guadalupensis</i> J.T. Howell		COR				GUA		CED	
<i>Bahipopsis laciniata</i> A. Gray ¹⁸			TOS						
<i>Bebbia juncea</i> (Benth.) Greene	var. <i>juncea</i>							CED	NAT
<i>Brickellia microphylla</i> (Nutt.) A. Gray								CED?	
<i>Centaurea melitensis</i> L.*			TOS			GUA		CED	
<i>Chaenactis glabriuscula</i> DC. ¹⁹									
<i>Chaenactis lacera</i> Greene ²⁰	var. <i>glabriuscula</i>	COR							NAT
<i>Coreocarpus involutus</i> Greene									NAT
<i>Deinandra fasciculata</i> (DC.) Greene			TOS					CED	
<i>Deinandra frutescens</i> (A. Gray) B.G. Baldwin						GUA			
<i>Deinandra greeneana</i> (Rose) B.G. Baldwin						GUA			
<i>Deinandra palmeri</i> (Rose) B.G. Baldwin						GUA			
<i>Deinandra palmeri</i> × <i>D. greeneana</i>						GUA			
<i>Deinandra peninsularis</i> (Moran)			TOS						
B.G. Baldwin ²¹									
<i>Deinandra streeksii</i> (A. Gray) B.G. Baldwin							BEN		
<i>Encelia asperifolia</i> (S.F. Blake) Clark & Kyhos							BEN	CED	
<i>Encelia californica</i> Nutt.		COR ²²	TOS	MAR					
<i>Encelia palmeri</i> Vasey & Rose									NAT
<i>Encelia stenophylla</i> Greene								CED	
<i>Ericameria brachylepis</i> (A. Gray) Hall								CED	
<i>Erigeron sumatrensis</i> Retz. ^{23*}						GUA			
<i>Eriophyllum confertiflorum</i> (DC.) A. Gray		COR						CED	
<i>Eriophyllum lanatum</i> (Pursh) J. Forbes						GUA			
<i>Glebionis coronarium</i> (L.) Cass. ex Spach ^{24*}			TOS						
<i>Greenella ramulosa</i> Greene	var. <i>grandiflorum</i>							CED?	
<i>Gutierrezia sarothrae</i> (Pursh) Britt. & Rusby								CED	
<i>Hazardia berberidis</i> (A. Gray) Greene		COR	TOS						
<i>Hazardia cana</i> (A. Gray) Greene						GUA			
<i>Hazardia ocuttii</i> (A. Gray) Greene ²⁵		COR							
<i>Hypochoeris glabra</i> L.*			TOS			GUA		CED?	

¹⁸Synonym: *Viguiera laciniata* A. Gray
¹⁹New record; herbarium specimen @ SD
²⁰New record; herbarium specimen @ SD
²¹Synonym: *Hemizonia greeneana* Rose ssp. *peninsularis* (Moran) B.L. Turner
²²New record; herbarium specimens @ SD
²³Synonym: *Conyza floribunda* Kunth
²⁴Synonym: *Chrysanthemum coronarium* L.
²⁵New record; herbarium specimen @ SD (5248, Ralph Sumner, s.n. 1920-specimen recently identified)

APPENDIX I. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Isoetoma menziesii</i> (Hook. & Arn.) G.L. Nesom	var. <i>menziesii</i>		TOS					CED	
<i>Iva hayesiana</i> A. Gray								CED	
<i>Lasthenia coronaria</i> (Nutt.) Ornduff		COR	TOS			GUA		CED	
<i>Lasthenia gracilis</i> (DC.) Greene		COR	TOS			GUA		CED?	
<i>Lajia platyglossa</i> (Fisch. & Mey.) A. Gray						GUA			
<i>Leptosyne gigantea</i> Kellogg ²⁶						GUA			
<i>Leptosyne maritima</i> (Nutt.) A.Gray ²⁷		COR	TOS	MAR					
<i>Logfia arizonica</i> (A. Gray) Holub ²⁸						GUA		CED?	
<i>Logfia flaginoides</i> (Hook. & Arn.) Morefield ²⁹		TOS				GUA		CED	
<i>Malacothrix cleavelandii</i> A. Gray						GUA			
<i>Malacothrix foliosa</i> A. Gray		COR							
<i>Malacothrix insularis</i> Greene		COR							
<i>Malacothrix similis</i> Davis & Raven		COR	TOS					CED	
<i>Matricaria occidentalis</i> Greene ^{30*}						GUA			
<i>Micropus californicus</i> Fisch. & C.A. Mey.						GUA			
<i>Perityle californica</i> Benth.									
<i>Perityle emoryi</i> Torrey		COR	TOS	MAR		GUA	BEN	CED	NAT
<i>Perityle incana</i> A. Gray						GUA			
<i>Pluchea odorata</i> (L.) Cass.	var. <i>odorata</i>							CED	
<i>Porophyllum gracile</i> Benth.								CED	
<i>Pseudognaphalium beneolens</i> Davidson			TOS			GUA ³¹			
<i>Pseudognaphalium biolettii</i> Anderberg			TOS	MAR		GUA		CED	
<i>Pseudognaphalium luteoalbum</i> (L.) Hilliard & B.L. Burt		COR				GUA ³²			
<i>Pseudognaphalium microcephalum</i> Nutt.		COR							
<i>Pseudognaphalium ramosissimum</i> Nutt.		COR							
<i>Pseudognaphalium</i> sp. nov. ^{a33}									
<i>Pseudognaphalium stramineum</i> (Kunth) Anderberg						GUA		CED	
<i>Rafinesquia californica</i> Nutt.									
<i>Senecio aphanactis</i> Greene		COR	TOS	MAR				CED	
<i>Senecio cedrosensis</i> Greene							BEN	CED	

²⁶Synonym: *Coreopsis gigantea* (Kellogg) H.M. Hall
²⁷Synonym: *Coreopsis maritima* (Nutt.) Hook. f.
²⁸Synonym: *Coreopsis maritima* (Nutt.) Hook. f.
²⁹Synonym: *Coreopsis maritima* (Nutt.) Hook. f.
³⁰Synonym: *Coreopsis maritima* (Nutt.) Hook. f.
³¹New record; herbarium specimen @ RSA, SD
³²New record; herbarium specimen @ RSA, SD
³³New record; herbarium specimen @ RSA, SD (description pending)

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Senecio lyonii</i> A. Gray				MAR			BEN		
<i>Senecio palmieri</i> A. Gray						GUA			
<i>Senecio sylvaticus</i> L.*								CED?	
<i>Sonchus oleraceus</i> L.*		COR	TOS	MAR		GUA		CED	NAT
<i>Sonchus tenerrimus</i> L.*		COR	TOS	MAR		GUA	BEN	CED	NAT
<i>Stebbinosensis heterocarpa</i> (Nutt.) Chambers									
<i>Stephanomeria diegenis</i> Gottlieb									
<i>Stephanomeria guadalupensis</i> Brandegee									
<i>Trixis californica</i> Kell.	var. <i>californica</i>					GUA	BEN&	CED	
<i>Uropappus lindleyi</i> (DC.) Nutt.		COR	TOS	MAR		GUA		CED	
<i>Verbesina dissita</i> A. Gray			TOS						
<i>Verbesina hastata</i> Kell.								CED	
<i>Viguiera lanata</i> (Kell.) A. Gray							BEN&	CED	NAT
<i>Xylothamia diffusa</i> (Benth.) Nesom								CED	
Boraginaceae									
<i>Ansinckia inepta</i> J.F. Macbr.				MAR					
<i>Ansinckia menziesii</i> (Lehm.) Nels. & Macbr.			TOS			GUA		CED	
<i>Cryptantha barbigeru</i>	var. <i>barbigeru</i> (A. Gray) Greene							CED	
<i>Cryptantha clevelandii</i> Greene			TOS						
<i>Cryptantha foliosa</i> Reiche						GUA			
<i>Cryptantha graji</i> (V. & R.) Macr.	var. <i>cryptochaeta</i> I.M. Johnston							CED	
<i>Cryptantha intermedia</i> (A. Gray) Greene		COR	TOS	MAR					
<i>Cryptantha maritima</i> (Greene)	var. <i>cedrosensis</i> (Greene) Jtn.							CED	
<i>Cryptantha maritima</i> (Greene)	var. <i>maritima</i> Greene	COR				GUA	BEN	CED	NAT
<i>Cryptantha patula</i> Greene							BEN		
<i>Emmenanthe penduliflora</i> Benth.	var. <i>penduliflora</i>					GUA			
<i>Eucrypta chrysanthemifolia</i> (Benth.) Greene	var. <i>bipinnatifida</i> (Torr.) Constance					GUA		CED?	
<i>Eucrypta chrysanthemifolia</i> (Benth.) Greene	var. <i>chrysanthemifolia</i>	COR	TOS			GUA	BEN		
<i>Harpagonella palmieri</i> A. Gray						GUA			
<i>Heliotropium curassavicum</i> L.				MAR				CED	
<i>Johnstonella angelica</i> (I.M. Johnston) Hasenstab & M.G. Simpson ³⁴								CED	
<i>Pectocarya linearis</i> DC									
<i>Pectocarya recurvata</i> I.M. Johnst.	ssp. <i>ferocula</i> I.M. Johnst.					GUA		CED?	
<i>Phacelia cedrosensis</i> Rose						GUA		CED	NAT
<i>Phacelia cicutaria</i> Greene									
<i>Phacelia crenulata</i> Torr.	var. <i>hispida</i> (A. Gray) J. Howell		TOS					CED?	
<i>Phacelia distans</i> Benth.		COR							
<i>Phacelia floribunda</i> Greene			TOS			GUA			

³⁴Synonym: *Cryptantha angelica* I. M. Johnston; herbarium specimen @ SD (Moran 25430)

APPENDIX I. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Phacelia hirtuosa</i> A. Gray			TOS	MAR					
<i>Phacelia ixodes</i> Kell.		COR	TOS	MAR			BEN	CED	NAT
<i>Phacelia parryi</i> Torr.				MAR					
<i>Phacelia phyllomanica</i> A. Gray						GUA			
<i>Pholistoma auritum</i> (Lindl.) Lilja		COR	TOS						
<i>Pholistoma racemosum</i> (Nutt.) Const.		COR	TOS	MAR		GUA		CED	NAT
<i>Plagiobothrys acanthocarpus</i> (Piper) I.M. Johnst.						GUA			
<i>Plagiobothrys collinus</i> (Philbr.) I.M. Jhtn.	var. <i>californicus</i>					GUA		CED	
<i>Plagiobothrys collinus</i> (Philbr.) I.M. Jhtn.	var. <i>gracilis</i> Jtn.					GUA ³⁵			
Brassicaceae									
<i>Athyasenus pusillus</i> (Hook.) Greene								CED?	
<i>Brassica nigra</i> (L.) W.D.J. Koch*						GUA			
<i>Brassica rapa</i> L.*								CED	
<i>Brassica tournefortii</i> Gouan*								CED	
<i>Cakile maritima</i> Scop.*			TOS	MAR			BEN	CED	NAT
<i>Capsella bursapastoris</i> (L.) Medik.*						GUA			
<i>Caulanthus heterophyllus</i> Payson	var. <i>heterophyllus</i>							CED	
<i>Caulanthus lasiophyllus</i> (Hook. & Arn.) Payson ³⁶			TOS			GUA		CED	NAT
<i>Descurainia pinnata</i> (Walt.) Britt.	var. <i>brachycarpa</i> (Richardson) Dedling							CED	
<i>Descurainia pinnata</i>	ssp. <i>glabra</i> (Woot. & Standl.) Dedl.	COR						CED	
<i>Descurainia pinnata</i> (Cockerell) Dedling	ssp. <i>halictorum</i> (Cockerell) Dedling			MAR				CED	
<i>Descurainia pinnata</i> (Cockerell) Dedling	ssp. <i>menziesii</i> (DC.) Dedling					GUA			
<i>Draba cuneifolia</i> S. Watson	var. <i>integrifolia</i>		TOS					CED	
<i>Eruca vesicaria</i> (L.) Cav. ³⁷	ssp. <i>sativa</i>							CED	
<i>Erysimum moranii</i> Rollins						GUA			
<i>Hornungia procumbens</i> (L.) Hayek ^{38*}						GUA			
<i>Lepidium lasiocarpum</i> Nutt.	var. <i>latifolium</i>			MAR?		GUA	BEN?		NAT
<i>Lepidium nitidum</i> Torrey & A. Gray			TOS			GUA			
<i>Lepidium oblongum</i> Small	var. <i>insulare</i> C.L.Hitchc.		TOS	MAR		GUA	BEN	CED	NAT
<i>Raphanus sativus</i> L.*						GUA			
<i>Silbara angelorum</i> (S. Watson) Greene		COR	TOS			GUA		CED	
<i>Sisymbrium irio</i> L.*			TOS			GUA		CED	NAT
<i>Sisymbrium orientale</i> L.*						GUA			
<i>Thysanocarpus erectus</i> S. Watson								CED	
<i>Thysanocarpus laciniatus</i> Nuttall						GUA		CED	

³⁵New record; herbarium specimen @ RSA, SD
³⁶Synonym: *Gaillardia lasiophylla* (Hook. & Arn.) Greene
³⁷New record; herbarium specimen @ SD (John Brown, s.n., April 4 1983)
³⁸Synonym: *Hutchinsia procumbens* (L.) Desv.

APPENDIX I. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
Cactaceae									
<i>Bergroctactus emoryi</i> (Engelm.) Br. & R.									
<i>Cochemecia pondii</i> Walton		COR	TOS	MAR				CED	NAT
<i>Cylindropuntia alcahes</i> (F.A.C. Weber) F.M. Knuth	var. <i>alcahes</i>							CED	
<i>Cylindropuntia cholla</i> (F.A.C. Weber) F.M. Knuth								NAT	
<i>Cylindropuntia prolifera</i> (Engelm.) F.M. Knuth		COR	TOS	MAR?		GUA		CED?	
<i>Cylindropuntia</i> sp. nova ³⁹								CED	
<i>Echinocereus maritimus</i> (M.E. Jones) K. Schum.	var. <i>maritimus</i>			MAR			BEN	CED?	NAT?
<i>Ferocactus chrysacanthus</i> (Orcutt) Britt. & Rose								CED?	NAT
<i>Ferocactus fordii</i> (Orcutt) Britt. & Rose	var. <i>grandiflorus</i> G.E. Linds.			MAR				CED	
<i>Lophocereus schottii</i> (Engelm.) Br. & R.	var. <i>schottii</i>			MAR ⁴⁰			BEN	CED	
<i>Mammillaria blossfeldiana</i> Boedeker	var. <i>shurliana</i> Gates					GUA		CED	
<i>Mammillaria dioica</i> M.K. Brandegee		COR	TOS	MAR				CED	
<i>Mammillaria goodridgei</i> Scheer	var. <i>rectispina</i> E.Y. Dawson							CED	
<i>Mammillaria goodridgei</i> Scheer	var. <i>goodridgei</i>							CED	NAT
<i>Mammillaria hutchinsoniana</i> (Gates) Boed.								CED	
<i>Mammillaria louisae</i> G.E. Linds				MAR ⁴¹			BEN?		
<i>Mammillaria neopalmieri</i> R.T. Craig									
<i>Mrytillocactus cochal</i> (Orcutt) Britt. & Rose				MAR					
<i>Opuntia ficus-indica</i> (L.) Miller			TOS	MAR					
<i>Opuntia littoralis</i> (Engelm.) Cockerell		COR	TOS	MAR ⁴² aff.				CED?	
<i>Opuntia oricola</i> Philbrick		COR	TOS	MAR ⁴³				CED?	NAT
<i>Pachycereus pringlei</i> (S. Watson) Britton & Rose								CED	
<i>Stenocereus gummosus</i> (Engelm.) A.C.				MAR				CED	
Gibson & K.E. Horak									
Carnaulaceae									
<i>Githopsis diffusa</i> A. Gray	var. <i>guadalupeensis</i> (Morin) Lammers					GUA			
<i>Tridodanis biflora</i> (Ruiz & Pav.) Greene						GUA			
Cannabaceae									
<i>Celtis laevigata</i> ⁴⁴	var. <i>reticulata</i> (Torr.) Benson							CED?	
Capparaceae									
<i>Peritoma arborea</i> (Nutt.) Iltis ⁴⁵	var. <i>angustata</i> (Parish) Iltis							CED	
<i>Peritoma arborea</i> (Nutt.) Iltis ⁴⁶	var. <i>globosa</i> (Coville) Iltis	COR							

³⁹New record; pers. comm. Jon Rehman, SD (includes *Cylindropuntia cadrosensis* Rehman)

⁴⁰New record; herbarium specimen @ RSA, SD

⁴¹Re-identification, changed from *M. hutchinsoniana*

⁴²New record; herbarium specimen @ RSA

⁴³New record; herbarium specimen @ RSA

⁴⁴Synonym: *Celtis douglasii* Planch.

⁴⁵Synonym: *Isomeris arborea* Nutt. ssp. *angustata* Parish

⁴⁶New record; herbarium specimen @ SD Rehman 6230

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
Caprifoliaceae									
<i>Lonicera hispidula</i> Dougl. ⁴⁷						GUA			
<i>Lonicera subspicata</i> Hook. & Arn.	var. <i>denudata</i> Rehder							CED	
Caryophyllaceae									
<i>Achyronychia cooperi</i> Torrey & A. Gray									
<i>Cerastium glomeratum</i> Thuill.*						GUA		CED	
<i>Drymaria holosteoides</i> Benth.	var. <i>holosteoides</i>							CED	
<i>Herniaria hirsuta</i> L.	var. <i>cinerea</i> (DC.) Coutinho					GUA		CED	
<i>Polycarpon depressum</i> Nutt.			TOS						
<i>Silene antirrhina</i> L.			TOS			GUA			
<i>Silene gallica</i> L.*		COR	TOS			GUA		CED?	
<i>Silene laciniata</i> Cav. ⁴⁸	ssp. <i>laciniata</i>	COR							
<i>Spergularia bocconii</i> (Scheele) Merino*						GUA			
<i>Spergularia macrotheca</i> (Hornem. ex Cham. & Schltdl.) Heynh. ⁴⁹	var. <i>leucantha</i> (Greene) B. L. Rob.					GUA			
<i>Spergularia macrotheca</i> (Hornem. ex Cham. & Schltdl.) Heynh.	var. <i>talinum</i> (Greene) Jeps.					GUA			
<i>Spergularia marina</i> J. & K. Presl				MAR ⁵⁰		GUA			
<i>Spergularia villosa</i> (Pers.) Camb.*		COR							
<i>Stellaria media</i> (L.) Vill.*		COR							
<i>Stellaria pallida</i> (Dumort.) Crép*		COR				GUA		CED	
<i>Stellaria nitens</i> Nutt.									
<i>Allenrolfya occidentalis</i> (S. Watson) Kuntze									
Chenopodiaceae									
<i>Aphanisma blitoides</i> Nutt.		COR	TOS	MAR		GUA	BEN	CED	NAT
<i>Arthrocnemum subterminale</i> (Pursh) Standl. ⁵¹				MAR					
<i>Atriplex barlayana</i> (Benth.) Dietr.						GUA	BEN	CED?	NAT
<i>Atriplex californica</i> Moq.		COR	TOS			GUA		CED	
<i>Atriplex canescens</i> (Pursh) Nutt.	ssp. <i>canescens</i>	COR							
<i>Atriplex confertifolia</i> (Moq.) D. Dietr.							BEN	CED?	NAT?
<i>Atriplex julacea</i> S. Watson			TOS	MAR				CED	NAT
<i>Atriplex leucophylla</i> (Moq. in DC.) D. Dietr.				MAR				CED	NAT
<i>Atriplex pacifica</i> Nels.		COR		MAR				CED	NAT
<i>Atriplex semibaccata</i> R. Br.*		COR	TOS	MAR		GUA		CED	
<i>Atriplex serotena</i> A. Nelson ex Abrams	var. <i>dauidsonii</i> (Standl.) Munz	COR		MAR ⁵² aff.					NAT × aff.

⁴⁷Synonym: *Lonicera hispidula* (Lindl.) Douglas ex Torr. & A. Gray var. *vacillans* A. Gray

⁴⁸Synonym: *Silene laciniata* Cav. ssp. *major* C.L. Hitch. & Maguire

⁴⁹New record; herbarium specimen @ RSA, SD

⁵⁰New record; herbarium specimen @ RSA, SBBG

⁵¹Synonym: *Salicornia subterminalis* Pursh

⁵²New record; herbarium specimen @ RSA, potentially new species

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Atriplex suberecta</i> Verdoorn		COR ⁵³		MAR		GUA			
<i>Atriplex watsonii</i> A. Nelson									
<i>Chenopodium album</i> L.								CED?	
<i>Chenopodium californicum</i> (S. Watson) S. Watson		COR	TOS						
<i>Chenopodium flabellifolium</i> Standl.				MAR					
<i>Chenopodium murale</i> L.*		COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Salicornia pacifica</i> Standl. ⁵⁴				MAR					
<i>Salsola australis</i> R.Br.*		COR	TOS					CED	
<i>Suaeda nigra</i> (Rafinesque) J.F. Macbride							BEN		NAT
<i>Suaeda taxifolia</i> (Standl.) Standl.		COR		MAR	JER ⁵⁵	GUA	BEN	CED	
Convolvulaceae									
<i>Calyptegia macrostegia</i> (Greene) Brummitt			TOS						
<i>Calyptegia macrostegia</i> (Greene) Brummitt	ssp. <i>intermedia</i>	COR ⁵⁶		MAR		GUA			
<i>Calyptegia macrostegia</i> (Greene) Brummitt	ssp. <i>macrostegia</i>			MAR		GUA			NAT
<i>Cuscuta californica</i> Hook. & Arn.				MAR					
<i>Cuscuta corymbosa</i> Ruiz & Pavon						GUA			
<i>Cuscuta salina</i> Engelm. ⁵⁷	ssp. <i>salina</i>						BEN		
<i>Dichondra occidentalis</i> House		COR	TOS						
Crassulaceae									
<i>Crassula connata</i> (Ruiz Lopez & Pavon) A. Berger		COR	TOS	MAR		GUA	BEN?	CED	
<i>Dudleya acuminata</i> Rose								CED	
<i>Dudleya albiflora</i> Rose							BEN?	CED	NAT
<i>Dudleya anomala</i> (Davidson) Moran		COR	TOS						
<i>Dudleya anthonyi</i> Rose				MAR					
<i>Dudleya anthonyi</i> × <i>D. cultrata</i> Rose				MAR					
<i>Dudleya attenuata</i> (S. Watson) Moran		COR	TOS						
<i>Dudleya brittonii</i> D.A. Johans.			TOS						
<i>Dudleya candida</i> Britton		COR							
<i>Dudleya cedrosensis</i> Moran								CED	
<i>Dudleya cultrata</i> Rose				MAR					
<i>Dudleya guadalupensis</i> Moran						GUA			
<i>Dudleya ingens</i> Rose								CED?	aff
<i>Dudleya lanceolata</i> (Nutt.) Britton & Rose		COR							
<i>Dudleya linearis</i> (Greene) Britt. & Rose							BEN?		
<i>Dudleya pachyphyllum</i> Moran & Benedict								CED	

⁵³New record; pers. comm. Jon Rehman
⁵⁴Synonym: *Salicornia virginica* L.
⁵⁵New record; herbarium specimen @ SD
⁵⁶New record; pers. comm. Jon Rehman
⁵⁷New record; herbarium specimen @ RSA, SD Moran 20315

APPENDIX I. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Dudleya tirens</i> (Rose) Moran	ssp. <i>extima</i> Moran	COR	TOS			GUA			
<i>Dudleya × semiteres</i> (Rose) Moran									
Crossosomataceae									
<i>Crossosoma californicum</i> Nutt.						GUA			
Cucurbitaceae									
<i>Echinopepon minimus</i> (Kell.) S. Watson	var. <i>minimus</i>	COR	TOS	MAR		GUA		CED	NAT
<i>Marah guadalupensis</i> Greene									
<i>Marah macrocarpus</i> (Greene) Greene								CED	
Ericaceae									
<i>Arctostaphylos</i> sp.						GUA			
<i>Xylococcus bicolor</i> Nutt.								CED	
Euphorbiaceae									
<i>Acalypha californica</i> Benth.								CED	
<i>Andrachne ciliato-glandulosa</i> (Mills sp.) Croizat								CED	
<i>Euphorbia albomarginata</i> Torr. & A. Gray*								CED?	
<i>Euphorbia bartolomaei</i> Greene								CED	NAT
<i>Euphorbia crenulata</i> Engelm.			TOS						
<i>Euphorbia misera</i> Benth.		COR	TOS	MAR		GUA	BEN	CED	NAT
<i>Euphorbia polycarpa</i> Benth.				MAR				CED	NAT
<i>Euphorbia pondii</i> Millsp. ⁵⁸						GUA			
Fabaceae									
<i>Acmispon argophyllus</i> (A. Gray) Brouillet ⁵⁹	ssp. <i>argenteus</i> (Dunkle)					GUA		CED	
<i>Acmispon flexuosus</i> (Greene) Brouillet ⁶⁰									
<i>Acmispon glaber</i> (Vogel) Brouillet ⁶¹									
<i>Acmispon grandiflorus</i> (Benth.) Brouillet ⁶²	var. <i>grandiflorus</i> ssp. <i>brevitexillus</i> (Ottley) Brouillet	COR?				GUA	BEN	CED	NAT
<i>Acmispon maritimus</i> (Nutt.) D.D. Sokoloff ⁶³									
<i>Acmispon nudatus</i> (Greene) Brouillet ⁶⁴									
<i>Acmispon rigidus</i> (Benth.) Brouillet ⁶⁵									
<i>Acmispon strigosus</i> (Nutt.) Brouillet ⁶⁶									
<i>Astragalus</i> aff. <i>gambelianus</i> E. Sheld.			TOS	MAR				CED	
<i>Astragalus fastidius</i> (Kell.) M.E. Jones	var. <i>insularis</i>							CED	NAT
<i>Astragalus insularis</i> Kell.									

⁵⁸Synonymy: *Chamaesyce pondii* (Mills sp.) Millsp.
⁵⁹Synonymy & per Jon Rehmian may be recognized as: *Lotus argophyllus* (A. Gray) Greene ssp. *ornithopus* (Greene) P.H. Raven
⁶⁰Synonymy: *Lotus cedrosensis* Greene
⁶¹Synonymy: *Lotus scoparius* (Torr. & A. Gray) Ottley
⁶²Synonymy: *Lotus grandiflorus* (Benth.) Greene
⁶³Synonymy: *Lotus subsignatus* Greene ssp. *brevitexillus* Ottley
⁶⁴Synonymy: *Lotus nudatus* (Greene) Greene
⁶⁵Synonymy: *Lotus rigidus* (Benth.) Greene
⁶⁶Synonymy: *Lotus strigosus* (Nutt.) Greene

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Astragalus magdalenae</i> Greene	var. <i>magdalenae</i>								NAT
<i>Astragalus nuttallianus</i> DC.	var. <i>cedrosensis</i> M.E. Jones							CED	NAT
<i>Astragalus trichopodus</i> A. Gray	var. <i>lonchus</i> (M.E. Jones) Barneby	COR	TOS					CED?	
<i>Dalea mollis</i> Benth.									
<i>Ebenopsis confinis</i> (Standl.) Britton & Rose ⁶⁷									NAT
<i>Errazurizia benthamii</i> (Brandege) I.M. Johnst.							BEN?	CED	
<i>Lupinus concinnus</i> Agardh.	ssp. <i>concinnus</i>							CED	
<i>Lupinus guadalupensis</i> Greene						GUA			
<i>Lupinus niveus</i> S. Watson						GUA			
<i>Lupinus sparsiflorus</i> Benth.	var. <i>pondii</i> (Greene) C. P. Smith			MAR				CED	
<i>Lupinus succulentus</i> Dougl.		COR							
<i>Lupinus truncatus</i> Hook. & Arn.			TOS						
<i>Medicago polymorpha</i> L.*		COR				GUA			
<i>Melilotus indicus</i> (L.) All.*						GUA	BEN	CED	
<i>Phaseolus filiformis</i> Benth.							BEN?	CED	NAT
<i>Syrnathium watsonii</i> (Vasey & Rose) Brand ⁶⁸									
<i>Trifolium depauperatum</i> Desv.	var. <i>truncatum</i> (Greene) Martin ex Isely		TOS	MAR		GUA ⁶⁹			
<i>Trifolium gracilentum</i> Torr. & A. Gray		COR ⁷⁰	TOS			GUA			
<i>Trifolium microcephalum</i> Pursh						GUA			
<i>Trifolium palmeri</i> S. Watson						GUA			
<i>Trifolium willdenovii</i> Sprengel		COR	TOS						
<i>Viola hassei</i> S. Watson			TOS						
<i>Viola ludoviciana</i> Nutt.	ssp. <i>ludoviciana</i>					GUA			
<i>Vachellia farnesiana</i> (L.) Wight & Arn. ⁷¹ *	var. <i>minuta</i> (M.E. Jones) Seigler & Elbinger							CED	
<i>Quercus cedrosensis</i> C.H. Müll.						GUA		CED	
<i>Quercus tomentella</i> Engelm.									
Frankeniaceae									
<i>Frankenia palmeri</i> S. Watson									
<i>Frankenia salina</i> (Molina) I.M. Johnst.									
Garryaceae						GUA	BEN	CED	NAT
<i>Garrya veatchii</i> Kell.		TOS						CED	
Gentianaceae									
<i>Zeltnera venusta</i> (A. Gray) G. Mans. ⁷²								CED	

⁶⁷Synonym: *Pithecellobium confine* Standl.
⁶⁸Synonym: *Lotus watsonii* (Vasey & Rose) Greene
⁶⁹New record; pers. comm. Jon Rehman
⁷⁰New record; herbarium specimen @ SD
⁷¹New record; pers. comm. Jon Rehman, photovoucher @ SD; synonym: *Acacia farnesiana* var. *minuta*
⁷²Synonym: *Centaureum venustum* (A. Gray) B.L. Rob.

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
Geraniaceae									
<i>Erodium botrys</i> (Cav.) Bertol.*		COR							
<i>Erodium brachycarpum</i> (Godr.) Thell. *						GUA			
<i>Erodium cicutarium</i> (L.) L'Her. ex Ait. *		COR	TOS	MAR		GUA		CED?	
<i>Erodium moschatum</i> (L.) L'Her. ex Ait. *		COR	TOS	MAR		GUA	BEN?		
<i>Erodium texanum</i> A. Gray								CED?	
<i>Pelargonium</i> × <i>hortorum</i> L. H. Bailey*			TOS						NAT
Grossulariaceae									
<i>Ribes tortuosum</i> Benth.									
<i>Ribes viburnifolium</i> A. Gray			TOS					CED	
Lamiaceae									
<i>Clinopodium palmeri</i> (A. Gray) Kuntze ⁷³									
<i>Marrubium vulgare</i> L. *						GUA			
<i>Monardella thymifolia</i> Greene			TOS					CED	
<i>Pogogyne tenuiflora</i> A. Gray						GUA			
<i>Salvia cedrosensis</i> Greene								CED	
<i>Salvia columbariae</i> Benth.								CED	
<i>Teucrium glandulosum</i> Kell.								CED	
Loasaceae									
<i>Eucnide cordata</i> Kell.								CED	
<i>Mentzelia adhaerens</i> Bentham								CED	
<i>Mentzelia hirsutissima</i> S. Watson	var. <i>nesiotes</i>						BEN	CED?	NAT
<i>Mentzelia micrantha</i> (Hook. & Arn.) Torr. & A. Gray						GUA			
Petaloxy linearis Greene									
<i>Petalonyx linearis</i> Greene							BEN	CED	
Malvaceae									
<i>Abutilon californicum</i> Benth.									
<i>Eremalche exilis</i> (A. Gray) Greene			TOS					CED?	NAT?
<i>Malva assurgentiflora</i> (Kellogg) M.F. Ray ^{74*}	ssp. <i>assurgentiflora</i>		TOS				BEN?		NAT
<i>Malva lindsajii</i> (Moran) M.F. Ray ⁷⁵									
<i>Malva pacifica</i> M.F. Ray ⁷⁶						GUA			
<i>Malva parviflora</i> L. *					JER				
<i>Malva occidentalis</i> (S. Watson) M.F. Ray ⁷⁷			TOS?	MAR		GUA	BEN	CED?	NAT
<i>Sphaeralcea fulva</i> Greene		COR				GUA	BEN?	CED?	NAT
<i>Sphaeralcea palmeri</i> Jeps.		COR							
<i>Sphaeralcea sulphurea</i> S. Watson						GUA		CED	NAT

⁷³Synonym: *Satureja palmeri* (A. Gray) Briq.
⁷⁴Synonym: *Lacatera lindsajii* Moran
⁷⁵Synonym: *Lacatera occidentalis* S. Watson
⁷⁶Synonym: *Lacatera venosa* S. Watson
⁷⁷Synonym: *Lacatera assurgentifolia* Kellogg

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
Montiaceae									
<i>Calandrinia ciliata</i> (Ruiz Lopez & Pavon) DC.									
<i>Cistanthe guadalupensis</i> (Dudley)			TOS	MAR		GUA			
Carolín ex Hershk.						GUA			
<i>Cistanthe maritima</i> (Nutt.) ⁷⁸		COR	TOS	MAR		GUA	BEN	CED	NAT
Carolín ex Hershkovitz									
<i>Claytonia parviflora</i> Dougl. ex Hook. ⁷⁹	ssp. <i>parviflora</i>					GUA			
<i>Claytonia perfoliata</i> Willd. & Chambers	ssp. <i>mexicana</i> (Rydberg) Miller (Chambers)	COR	TOS	MAR		GUA		CED	
<i>Claytonia spatulata</i> Douglas								CED?	
Myrsinaceae									
<i>Anagallis arvensis</i> L.*						GUA			
Nyctaginaceae									
<i>Abronia maritima</i> Nutt. ex S. Watson				MAR				CED?	NAT
<i>Mirabilis laevis</i> (Benth.) Curran	var. <i>crassifolia</i> (Choisy) Spellenb.	COR	TOS	MAR		GUA	BEN?	CED?	NAT
Oleaceae									
<i>Hesperelaea palmieri</i> A. Gray						GUA			
Onagraceae									
<i>Camissoniopsis cheiranthifolia</i> (Hornem. ex Spreng.) W.L. Wagner & Hoch ⁸⁰	ssp. <i>suffruticosa</i> (S. Watson) W.L. Wagner & Hoch			MAR					
<i>Camissoniopsis guadalupensis</i> (S. Watson) W.L. Wagner & Hoch ⁸¹	ssp. <i>guadalupensis</i>					GUA			
<i>Camissoniopsis robusta</i> (P.H. Raven) W.L. Wagner & Hoch ⁸²						GUA			
<i>Chylisma cardiophylla</i> (Torr.) Small ⁸³	ssp. <i>cedrosensis</i> (Greene) W.L. Wagner & Hoch							CED	
<i>Eulobus californica</i> Nutt. ex Torr. & A. Gray ⁸⁴			TOS	MAR					
<i>Eulobus crassifolius</i> (Greene) W.L. Wagner & Hoch ⁸⁵								CED?	NAT
<i>Epilobium foliosum</i> (Torr. & A. Gray) Suksdorf						GUA			
<i>Xylonegra arborea</i> (Kell.) Donn.-Smith & Rose	ssp. <i>arborea</i>							CED	
<i>Xylonegra arborea</i> (Kell.) Donn.-Smith & Rose	ssp. <i>wigginsii</i>							CED	
Orobanchaceae									
<i>Castilleja attenuata</i> (A. Gray) Chuang & Heckard						GUA			

⁷⁸Synonym: *Calandrinia maritima* Nutt.
⁷⁹New record; herbarium specimen @ RSA, SD
⁸⁰Synonym: *Camissonia cheiranthifolia* (Hornem. ex Spreng.) Raim. ssp. *suffruticosa* (S. Watson) P.H. Raven
⁸¹Synonym: *Camissonia guadalupensis* S. Watson) P.H. Raven ssp. *guadalupensis*
⁸²Synonym: *Camissonia robusta* P.H. Raven
⁸³Synonym: *Camissonia cardiophylla* (Torr.) P.H. Raven ssp. *cedrosensis* (Greene) P.H. Raven
⁸⁴Synonym: *Camissonia californica* (Nutt. ex Torr. & A. Gray) P.H. Raven
⁸⁵Synonym: *Camissonia crassifolia* (Greene) P.H. Raven

APPENDIX I. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Castilleja exserta</i> (A. Heller) Chuang & Heckard	ssp. <i>exserta</i>		TOS			GUA			
<i>Castilleja fruticosa</i> Moran						GUA			
<i>Castilleja gualanensis</i> Brandegee						GUA			
<i>Castilleja subinclusa</i> Greene	ssp. <i>subinclusa</i>		TOS						
Papaveraceae									
<i>Eschscholzia californica</i> Cham.		COR	TOS			GUA			
<i>Eschscholzia elegans</i> Greene.						GUA			
<i>Eschscholzia palmeri</i> Rose						GUA			
<i>Eschscholzia ramosa</i> Greene		COR	TOS	MAR		GUA	BEN	CED	NAT
<i>Platystemon californicus</i> Benth.						GUA			
<i>Papaver heterophyllum</i> A. Gray ⁸⁶		COR	TOS	MAR					
Phrymaceae									
<i>Diplacus ×australis</i> (McMinn ex Munz) Tulig ⁸⁷			TOS?					CED	
<i>Diplacus brandegeei</i> (Pennell) G.L. Nesom ⁸⁸						GUA			
<i>Erythranthe cardinalis</i> ⁸⁹								CED	
Plantaginaceae									
<i>Antirrhinum nuttallianum</i> Benth.									
<i>Antirrhinum watsonii</i> Vasey & Rose	ssp. <i>subsessile</i> (A. Gray) D.M. Thomps.	COR	TOS	MAR		GUA	BEN	CED	NAT
<i>Collinsia heterophylla</i> Buist.	var. <i>heterophylla</i>	COR							
<i>Gambelia juncea</i> (Benth.) D.A. Sutton ⁹⁰								CED	
<i>Gambelia speciosa</i> Nutt. ⁹¹						GUA			
<i>Nuttallanthus texanus</i> (Scheele) D.A. Sutton ⁹²		COR	TOS			GUA		CED?	
<i>Penstemon cedrosensis</i> Kell.								CED	
<i>Plantago ovata</i> Forssk.	ssp. <i>insularis</i>					GUA	BEN?	CED?	NAT
Polemoniaceae									
<i>Allophyllum giloides</i> (Benth.) A. & V. Grant									
<i>Gilia angelensis</i> V.E. Grant						GUA			
<i>Gilia capitata</i> Sims	ssp. <i>abrotanifolia</i> (Nutt. ex Greene) V.E. Grant	COR	TOS						
<i>Gilia nevinii</i> A. Gray									
<i>Leptosiphon pygmaeus</i> (Brand) J.T. Howell ⁹³	ssp. <i>pygmaeus</i>					GUA			
<i>Linanthus dianthiflorus</i> (Benth.) Greene		COR				GUA			

⁸⁶Synonymy: *Stylomecon heterophylla* (Benth.) G. Taylor
⁸⁷Synonymy: *Minidius aurantiacus* Curtis var. *aurantiacus*
⁸⁸Synonymy: *Minidius latifolius* A. Gray, *Diplacus latifolius* (A. Gray) G.L. Nesom (Douglas ex Benth.) Spach
⁸⁹Synonymy: *Minidius cardinalis* Douglas ex Benth.
⁹⁰Synonymy: *Galvezia juncea* (Benth.) Ball
⁹¹Synonymy: *Galvezia speciosa* (Nutt.) A. Gray
⁹²Synonymy: *Linaria texana* Scheele and *Linaria canadensis* (L.) Dum. Cours.
⁹³Synonymy: *Linanthus pygmaeus* (Brand) J.T. Howell ssp. *pygmaeus*

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Linanthus uncialis</i> (Brandege) Moran	<i>Microsteris gracilis</i> (Hook.) Greene	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
<i>Linanthus vetchii</i> (C. Parry) J.M.									
Porter & L.A. Johnson									
Polygonaceae									
<i>Eriogonum fasciculatum</i> Benth.	var. <i>testudinum</i> Reveal	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
<i>Eriogonum grande</i> Greene									
<i>Eriogonum intricatum</i> Benth.									
<i>Eriogonum molle</i> Greene	var. <i>taxifolium</i> (Greene) Parish	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
<i>Eriogonum pondii</i> Greene Torrey ex Benth.									
<i>Eriogonum zapatoense</i> Moran									
<i>Eriogonum virgittii</i>	var. <i>fruticosa</i> (Greene) Reveal	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
<i>Harfordia macroptera</i> (Benth.)									
Greene & Parry									
<i>Lastarriacea coriacea</i> (Goodman) Hoover ⁹⁴	ssp. <i>insulare</i> (H.J. Thoms.) Reveal	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
<i>Pterostegia drymaroides</i> F. & M.									
Portulacaceae									
<i>Portulaca oleracea</i> L.*	ssp. <i>microphylla</i>	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
Primulaceae									
<i>Dodecatheon cleveandii</i> Greene									
Ranunculaceae									
<i>Clenatis pauciflora</i> Nutt.	ssp. <i>microphylla</i>	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
<i>Delphinium cardinale</i> Hook.									
<i>Delphinium parryi</i> A. Gray									
<i>Myosurus minimus</i> L.	ssp. <i>microphylla</i>	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
<i>Ranunculus hebecarpus</i> H. & A.									
Resedaceae									
<i>Oligomeris linifolia</i> (Vahl.) Macbr.	ssp. <i>microphylla</i>	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
Rhamnaceae									
<i>Ceanothus arboreus</i> Greene									
<i>Ceanothus crassifolius</i> Torr.	ssp. <i>microphylla</i>	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
<i>Ceanothus cuneatus</i> (Hook.) Nutt.									
<i>Ceanothus perplexans</i> Trel. ⁹⁵									
<i>Ceanothus verrucosus</i> Nutt.	ssp. <i>microphylla</i>	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
<i>Rhamnus insula</i> Kellogg									
<i>Rhamnus pirifolia</i> Greene									
<i>Ziziphus parryi</i> Torr.	ssp. <i>microphylla</i>	COR	TOS	TOS	GUA	GUA	BEN	CED	NAT
Rosaceae									
<i>Adenostoma fasciculatum</i> Hook. & Arn.									

⁹⁴Synonym: *Chorizanthe corticea* Goodman
⁹⁵New record; herbarium specimen @ RSA, SD, SBBG; synonym: *Ceanothus greggii* A. Gray var. *perplexans* (Trel.) Jeps.

APPENDIX I. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Aphanes occidentalis</i> Rydberg									
<i>Heteromeles arbutifolia</i> (Lindl.) M. Roem.									
Rubiaceae									
<i>Galium angulosum</i> A. Gray						GUA			
<i>Galium angustifolium</i> Nutt.	ssp. <i>angustifolium</i>	COR							
<i>Galium aparine</i> L.		COR ⁹⁶		MAR		GUA		CED?	
<i>Galium coronadoense</i> Dempster		COR							
<i>Galium stellatum</i> Kellogg	var. <i>eremiticum</i> Hilend & J. Howell							CED	
Rutaceae									
<i>Ruta chalepensis</i> L.						GUA			
Sapindaceae									
<i>Aesculus parryi</i> A. Gray		COR							
Saxifragaceae									
<i>Jepsonia multifolia</i> (Greene) Small						GUA			
Saxifragaceae									
<i>Jepsonia parryi</i> (Torr.) Small.		COR							
Scrophulariaceae									
<i>Myoporum laetum</i> Forst. f. Ngao. *		COR							
<i>Scrophularia villosa</i> Pennell						GUA			
Simmondsiaceae									
<i>Simmondsia chinensis</i> (Link) C. Schneider						GUA		CED	NAT
Solanaceae									
<i>Datura discolor</i> Bernh.				MAR			BEN?		NAT
<i>Datura wrightii</i> Regel									
<i>Lycium andersonii</i> A. Gray				MAR				CED?	
<i>Lycium brevipes</i> Benth.	var. <i>brevipes</i>		TOS	MAR	JER			CED?	NAT
<i>Lycium californicum</i> Nutt.			TOS	MAR		GUA	BEN?		NAT
<i>Lycium exsertum</i> A. Gray		COR		MAR			BEN	CED?	
<i>Lycium fremontii</i> A. Gray						GUA			
<i>Lycopersicon esculentum</i> L. *		COR	TOS						
<i>Nicotiana attenuata</i> Torr.						GUA			
<i>Nicotiana clevelandii</i> A. Gray		COR	TOS	MAR				CED	NAT
<i>Nicotiana glauca</i> Grah. *						GUA			
<i>Physalis crassifolia</i> Benth.	var. <i>crassifolia</i>		TOS					CED	
<i>Solanum americanum</i> Miller*			TOS	MAR		GUA			
<i>Solanum douglasii</i> Dunal						GUA			
<i>Solanum hindistanum</i> Benth.									
<i>Solanum nodiflorum</i> Jacq. *		COR						CED	

⁹⁶New record; herbarium specimen @ SD.

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
<i>Solanum palmieri</i> Vasey & Rose									
<i>Solanum wallacei</i> (A. Gray) Parish									
Tamaricaceae	<i>ssp. clokeji</i>		TOS	MAR		GUA			
<i>Tamarix ramosissima</i> Ledeb.*								CED	
Urticaceae									
<i>Hesperocnide tenella</i> Torrey									
<i>Parietaria hespera</i> B.D. Hinton			TOS	MAR		GUA			
<i>Urtica urens</i> L.*		COR	TOS			GUA		CED?	
Verbenaceae		COR							
<i>Glandularia lilacina</i> (Greene) Umber ⁹⁷								CED	
Visceaeae									
<i>Phoradendron densum</i> Torr. ex Trel.						GUA			
Zygophyllaceae									
<i>Fagonia laevis</i> Standl.									
<i>Viscainoa geniculata</i> (Kellogg) Greene									
	<i>var. geniculata</i>								
NUMBER OF SPECIES		129	145	107	8	232	57	266	79

⁹⁷Synonym: *Verbena lilacina* Green

APPENDIX 2. Plant species checklist for the 8 California Channel Islands (Anacapa [ANA], San Clemente [CLE], San Miguel [MIG], San Nicolas [NIC], Santa Barbara [BAR], Santa Catalina [CAT], Santa Cruz [CRU], and Santa Rosa [ROS]). An ampersand (&) indicates an extirpated species; a question mark (?) indicates an unvouchered taxa; and an asterisk (*) indicates a nontative species.

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
FERNS									
Azollaceae									
<i>Azolla filiculoides</i> Lam.				CAT					
Blechnaceae									
<i>Woodwardia fimbriata</i> Sm.		CLE? ¹		CAT ²		ROS	CRU		
Dennstaedtiaceae									
<i>Pteridium aquilinum</i> (L.) Kuhn	var. <i>pubescens</i> Underw.			CAT		ROS	CRU		
Dryopteridaceae									
<i>Dryopteris arguta</i> (Kaulf.) Maxon		CLE		CAT		ROS	CRU	ANA	MIG
<i>Polystichum munithum</i> (Kaulf.) C. Presl						ROS	CRU		
Equisetaceae									
<i>Equisetum hyemale</i> L.	ssp. <i>affine</i> (Engelm.) Calder & Roy L. Taylor					ROS	CRU		
<i>Equisetum laevigatum</i> A. Braun				CAT		ROS	CRU		
<i>Equisetum telmateia</i> Ehrh.	ssp. <i>braunii</i> (J. Milde) Hauke			CAT			CRU		
Polypodiaceae									
<i>Polypodium californicum</i> Kaulf.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	
<i>Polypodium scolieri</i> Hook. & Grev.							CRU		
Pteridaceae									
<i>Adiantum aleuticum</i> (Rupr.) C.A. Paris							CRU		
<i>Adiantum capillus-veneris</i> L.				CAT		ROS	CRU	ANA	
<i>Adiantum jordanii</i> Müll. Hal.		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Aspidotis californica</i> (Hook.) Copel.				CAT			CRU		
<i>Cheilanthes clevelandii</i> D.C. Eaton						ROS	CRU		
Cheilanthes cooperae D.C. Eaton									
<i>Cheilanthes neuberryi</i> (D.C. Eaton) Domin		CLE					CRU		
<i>Pellaea andromedifolia</i> (Kaulf.) Fée		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Pellaea mucronata</i> (D.C. Eaton)	var. <i>mucronata</i>	CLE? ³		CAT		ROS	CRU		
D.C. Eaton									
<i>Pentagramma triangularis</i> (Kaulf.) Yatsk., Windham, & E. Wollenw.	ssp. <i>triangularis</i>	CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Pentagramma triangularis</i> (Kaulf.) Yatsk., Windham, & E. Wollenw.	ssp. <i>viscosa</i> (D.C. Eaton) Yatsk.et al.	CLE		CAT		ROS	CRU		
Selaginellaceae									
<i>Selaginella bigelovii</i> Underw.		CLE		CAT		ROS	CRU	ANA	

¹Pers. com. E. Howe
²S. Ratay collection
³Pers. com. E. Howe

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Woodsiaceae									
<i>Athyrium filix-femina</i> (L.) Roth						ROS	CRU		
<i>Cystopteris fragilis</i> (L.) Bernh.	var. <i>cyclosorum</i> Rupr.						CRU		
GYMNOSPERMS									
Cupressaceae									
<i>Hesperocyparis macrocarpa</i> (Hartw.) Bartel [*]				CAT		ROS	CRU	ANA	
Pinaceae									
<i>Pinus muricata</i> D. Don	var. <i>muricata</i>					ROS	CRU		
<i>Pinus pinea</i> L. [*]							CRU		
<i>Pinus radiata</i> D. Don [*]									MIG
<i>Pinus torreyana</i> Parry ex Carrière	ssp. <i>insularis</i> J.R. Haller					ROS			
MONOCOTS									
Agavaceae									
<i>Agave americana</i> L. [*]							CRU		
Agavaceae									
<i>Chlorogalum pomeridianum</i> (DC.) Kunth				CAT		ROS			
Alliaceae									
<i>Allium lacunosum</i> S. Watson	var. <i>lacunosum</i>					ROS	CRU		
<i>Allium praecox</i> Brandegee		CLE		CAT		ROS	CRU		MIG
Amaryllidaceae									
<i>Anaryllis belladonna</i> L. [*]							CRU	ANA	MIG
<i>Narcissus tazetta</i> L. [*]									
Araceae									
<i>Lemna minor</i> L.									MIG
<i>Zantedeschia aethiopica</i> (L.) Spreng. [*]									MIG
Arecaceae									
<i>Washingtonia filifera</i> (André) de Bary							CRU		MIG
Asparagaceae									
<i>Asparagus asparagoides</i> (L.) Druce [*]			NIC						
<i>Asparagus officinalis</i> L. [*]				CAT					
Asphodelaceae									
<i>Asphodelus fistulosus</i> L. [*]		CLE ⁴							
Cyperaceae									
<i>Bolboschoenus maritimus</i> (L.) Palla	ssp. <i>paludosus</i> (A. Nelson) T. Koyama						CRU		MIG
<i>Carex barbarae</i> Dewey							CRU		
<i>Carex globosa</i> Boott				CAT		ROS	CRU		
<i>Carex gracilior</i> Mack.						ROS			
<i>Carex harfordii</i> Mack.						ROS	CRU		

⁴NY: T.S. Ross, 6137, 04.13.1992

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Carex pansa</i> L.H. Bailey						ROS			MIG
<i>Carex praegracilis</i> W. Boott				CAT		ROS			MIG
<i>Carex senta</i> Boott							CRU		
<i>Carex subbracteata</i> Mack.						ROS	CRU		
<i>Carex triquetra</i> Boott				CAT					
<i>Carex tumulicola</i> Mack.		CLE				ROS	CRU		
<i>Cyperus eragrostis</i> Lam.				CAT ⁵					
<i>Cyperus esculentus</i> L.		CLE		CAT					
<i>Cyperus involucratus</i> Rottb.*							CRU		
<i>Cyperus odoratus</i> L.*				CAT ⁶			CRU		
<i>Eleocharis macrostachya</i> Britton				CAT		ROS			
<i>Isolepis cernua</i> (Vahl) Roem. & Schult.		CLE	NIC			ROS			MIG
<i>Schoenoplectus americanus</i> (Pers.) Schinz & R. Keller			NIC	CAT ⁷		ROS			
<i>Schoenoplectus californicus</i> (C.A. Mey.) Soják						ROS	CRU		
<i>Schoenoplectus pungens</i> (Vahl) Palla						ROS	CRU		
Iridaceae									
<i>Sisyrinchium bellum</i> S. Watson	var. <i>longispicatus</i> (Britton) S.G. Sm.					ROS	CRU		MIG
Juncaceae									
<i>Juncus acutus</i> L.	ssp. <i>leopoldii</i> (Pard.) Snogerup			CAT					
<i>Juncus balticus</i> Willd.	ssp. <i>ater</i> (Rydb.) Snogerup			CAT		ROS			MIG
<i>Juncus bufonius</i> L.		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Juncus effusus</i> L.	ssp. <i>pacificus</i> (Fernald & Weigand) Piper & Beattie					ROS			
<i>Juncus mexicanus</i> Willd.				CAT		ROS	CRU		MIG
<i>Juncus patens</i> E. Mey.		CLE				ROS	CRU		MIG
<i>Juncus phaeocephalus</i> Engelm.	var. <i>phaeocephalus</i>					ROS			
<i>Juncus texilis</i> Buchenau				CAT					
<i>Juncus xiphioides</i> E. Mey.				CAT			CRU		
<i>Luzula subsemissilis</i> (S. Watson) Buchenau ⁵						ROS	CRU		
Liliaceae									
<i>Calochortus albus</i> (Benth.) Benth.				CAT		ROS	CRU		
<i>Calochortus catalinae</i> S. Watson				CAT		ROS	CRU		
<i>Calochortus luteus</i> Lindl.							CRU		
<i>Calochortus splendens</i> Benth.									
<i>Lilium humboldtii</i> Duch.	ssp. <i>ocellatum</i> (Kellogg) Thorne			CAT		ROS	CRU	ANA	

⁵RSA: Mark Hoefs, Steven A. Junak, Janet Takara, M. Cay, 2384, Jul 14 1995

⁶SBBC: M.L. Hoefs, R.F. Thorne, 2458, Jul 26 1995

⁷RSA: Mark Hoefs, R.F. Thorne, Janet Takara Jul 26 1995 2462

⁸Synonym: *Luzula comosa* E. Mey.; taxonomic issues

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Melanthiaceae									
<i>Toxicoscordion fremontii</i> (Torr.) Rydb.									
Orchidaceae									
<i>Epipactis gigantea</i> Hook.		CLE? ⁹		CAT			CRU		
<i>Piperia cooperi</i> (S. Watson) Rydb.				CAT ¹⁰		ROS	CRU	ANA	MIG
<i>Piperia elongata</i> Rydb.							CRU		
<i>Piperia michaelii</i> (Greene) Rydb.									
Poaceae									
<i>Aegilops cylindrica</i> Host*							CRU		
<i>Agrostis exarata</i> Trin.				CAT		ROS	CRU		
<i>Agrostis pallens</i> Trin.		CLE		CAT		ROS	CRU	ANA	
<i>Agrostis stolonifera</i> * L.				CAT					
<i>Annophila arenaria</i> (L.) Link*			NIC						
<i>Andropogon glomeratus</i> (Walter) Britton et al.	var. <i>scabriglumis</i> C.S. Campb.						CRU		
<i>Aristida adscensionis</i> L.		CLE		CAT		ROS	CRU		
<i>Aristida ternipes</i> Cav.							CRU		
<i>Arundo donax</i> L.*	var. <i>gentilis</i> (Henrard) Allred		NIC			ROS	CRU		MIG
<i>Avena barbata</i> Link*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Avena fatua</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Avena sativa</i> L.*		CLE		CAT		ROS	CRU		
<i>Bothriochloa barbinodis</i> (Lag.) Herter				CAT					
<i>Brachypodium distachyon</i> (L.) P. Beauv.*		CLE? ¹¹	NIC	CAT			CRU		
<i>Briza minor</i> L.*								ANA	
<i>Bromus arizonicus</i> (Shear) Stebbins		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Bromus berteroaenus</i> Colla ¹²		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Bromus carinatus</i> Hook. & Arn.	var. <i>carinatus</i>	CLE? ²	NIC	CAT		ROS	CRU	ANA	MIG
<i>Bromus maritimus</i> (Piper) Hitchc.						ROS	CRU	ANA	MIG
<i>Bromus catharticus</i> Vahl*		CLE ¹³	NIC				CRU		
* <i>Bromus diandrus</i> Roth*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Bromus hordeaceus</i> L.* ¹⁴		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Bromus laevipes</i> Shear*				CAT		ROS	CRU		
<i>Bromus madritensis</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Bromus vulgaris</i> (Hook.) Shear ^{15*}				CAT		ROS	CRU		
<i>Calamagrostis rubescens</i> Buckley							CRU		

⁹Pers. com. E. Howe
¹⁰SBBG: S.A. Jumaik Apr 30 1998 SC.a-568
¹¹Pers. com. E. Howe
¹²Synonym: *Bromus triarii* Desv.; Per Jepson Interchange: molecular evidence needed to resolve question of nativity
¹³SBBG: T.S. Ross: E. Kellogg Apr 11 1992 6122
¹⁴Synonym: *Bromus nudis* L.
¹⁵UCSB: Dan Hancock 03/30/1961 146

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Chloris virgata</i> Sw.*		CLE ¹⁶							
<i>Cortaderia selloana</i> (Schult. & Schult. f.) Asch. & Graebn.*		CLE? ¹⁷	NIC	CAT			CRU		MIG
<i>Crypsis vaginiflora</i> (Forssk.) Opiz*				CAT ¹⁸					
<i>Crypsis alopecuroides</i> (Piller & Mitterp.) Schrad.*		CLE? ¹⁹							
<i>Cynodon dactylon</i> (L.) Pers.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Dactylis glomerata</i> L.*		CLE		CAT			CRU		
<i>Danthonia californica</i> Bol.						ROS			
<i>Deschampsia danthonioides</i> (Trin.) Munro		CLE							
<i>Desmazeria rigida</i> (L.) Tutin*				CAT ²⁰					
<i>Digitaria sanguinalis</i> (L.) Scop.*				CAT ²¹					
<i>Dissanathelium californicum</i> (Nutt.) Benth.		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Distichlis spicata</i> (L.) Greene				CAT		ROS			
<i>Distichlis littoralis</i> (Engelm.) H.L.				CAT					
Bell & Columbus									
<i>Echinochloa crus-galli</i> (L.) P. Beauv.*		CLE		CAT					
<i>Ehrharta calycina</i> * Sm.		CLE		CAT					
<i>Ehrharta erecta</i> Lam.*				CAT ²²			CRU		
<i>Elymus glaucus</i> Buckley				CAT		ROS	CRU		
<i>Elymus repens</i> (L.) Gould*	ssp. <i>glaucus</i>								MIG
<i>Elymus condensatus</i> J. Presl		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Elymus pacificus</i> Gould			NIC			ROS			MIG
<i>Elymus triticoides</i> Buckley			NIC	CAT		ROS	CRU	ANA	MIG
<i>Festuca arundinacea</i> Schreb.*		CLE	NIC	CAT		ROS	CRU		MIG
<i>Festuca perennis</i> (L.) Columbus & J.P. Sm.*		CLE	NIC	CAT	BAR	ROS	CRU		MIG
<i>Festuca temulenta</i> (L.) Columbus & J.P. Sm.*		CLE		CAT		ROS	CRU		
<i>Festuca bromioides</i> L.*		CLE		CAT		ROS	CRU	ANA	MIG
<i>Festuca microstachys</i> Nutt.		CLE		CAT		ROS	CRU	ANA	MIG
<i>Festuca myuros</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Festuca octoflora</i> Walter		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Gastridium phleoides</i> (Nees & Meyen) C.E. Hubb.*		CLE		CAT		ROS	CRU		
<i>Hainardia cylindrica</i> (Willd.) Greuter*		CLE ²³		CAT ²⁴		ROS	CRU		MIG

¹⁶CAS: Steven A. Junak 9 Nov 1990 SCI-143
¹⁷Pers. com. E. Howe
¹⁸RSA: Mark Hoefs, R.F. Thorne, Janet Takara, M. Gay Jul 27 1995 2491
¹⁹Pers. com. E. Howe
²⁰CAS: Peter H. Raven 22 May 1962 17826
²¹UCD: Beecher Crampton 08 10 1968 S322
²²SSBG: S.A. Junak Jun 13 1998 SCa-743
²³SSBG: S.A. Junak May 14 1985 SCI-71
²⁴SSBG: S.A. Junak, M. L. Hoefs Jun 4 1997 SCa-421

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Hordeum brachyantherum</i> Nevski	ssp. <i>californicum</i> (Covas & Stebbins) Bothmer et al.		NIC	CAT ²⁵		ROS	CRU	ANA	
<i>Hordeum depressum</i> (Scribn. & J.G. Sm.) Rydb.									
<i>Hordeum intercedens</i> Nevski		CLE ²⁶	NIC	CAT ²⁷	BAR	ROS	CRU	ANA	MIG
<i>Hordeum marinum</i> Huds.*	ssp. <i>gussoneanum</i> (Parl.) Thell.	CLE ²⁸	NIC			ROS	CRU		
<i>Hordeum murinum</i> L.*	ssp. <i>glaucum</i> (Steud.) Tzvelev	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Hordeum murinum</i> L.*	ssp. <i>leporinum</i> (Link) Arcang.	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Hordeum vulgare</i> L.*		CLE	NIC	CAT		ROS	CRU		
<i>Koeleria macrantha</i> (Ledeb.) Schult.									
<i>Koeleria gerardii</i> (Vill.) Shimmers*							CRU		
<i>Lamarckia aurea</i> (L.) Moench*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Melica imperfecta</i> Trin.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Muhlenbergia appressa</i> C.O. Goodl.									
<i>Muhlenbergia microsperma</i> (DC.) Kunth		CLE ²⁹		CAT	BAR	ROS	CRU	ANA	MIG
<i>Parapholis incurva</i> (L.) C.E. Hubb.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Paspalum dilatatum</i> Poir.*		CLE		CAT					
<i>Paspalum distichum</i> L.							CRU		
<i>Pennisetum clandestinum</i> Chiov.*			NIC	CAT		ROS	CRU	ANA	MIG
<i>Pennisetum setaceum</i> (Forssk.) Chiov.*									
<i>Phalaris aquatica</i> L.*		CLE	NIC	CAT ³⁰					
<i>Phalaris canariensis</i> L.*			NIC	CAT			CRU	ANA	
<i>Phalaris caroliniana</i> Walter*		CLE	NIC	CAT	BAR		CRU		
<i>Phalaris lemmonii</i> Vasey		CLE							
<i>Phalaris minor</i> Retz.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Phalaris paradoxa</i> * L.		CLE	NIC	CAT ³¹			CRU	ANA	
<i>Poa annua</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Poa palustris</i> L.*									
<i>Poa howellii</i> Vasey & Scribn.							CRU		
<i>Poa douglasii</i> Nees									
<i>Poa secunda</i> J. Presl		CLE ³²	NIC	CAT ³³		ROS	CRU	ANA	MIG
<i>Polypogon viridis</i> (Gouan) Breistr.*	ssp. <i>secunda</i>				BAR	ROS	CRU	ANA	
<i>Polypogon interruptus</i> Kunth*		CLE		CAT		ROS	CRU		MIG

25SBBG: L.W. Nuttall May 12 1920 190
26POM: F.A. Munz Apr 8 1923 6613
27SBBG: S.A. Jumaik May 3 2001 SCa-1464
28SBBG: P.H. Raven May 10 1962 17738
29CAS: E.R. Blakley 7 Dec. 1963 6327
30S: Ratay collection
31SBBG: S.A. Jumaik, M.L. Hoels Jun 5 1997 SCa-427
32UC: Peter H. Raven Apr 12 1962 17332
33UC: F.R. Fosberg Mar 20 1931 54310

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Polypogon monspeliensis</i> (L.) Desf.*		CLE	NIC	CAT					
<i>Schismus arabicus</i> Nees*		CLE ³⁴	NIC	CAT ³⁵	BAR	ROS	CRU	ANA	MIG
<i>Schismus barbatus</i> (L.) Thell.*				CAT	BAR		CRU		
<i>Stenotaphrum secundatum</i> (Walter) Kuntze*			NIC						
<i>Stipa diegoensis</i> Swallen			NIC			ROS	CRU	ANA	MIG
<i>Stipa ceruua</i> Stebbins & Love		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Stipa lepida</i> Hitchc.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Stipa pulchra</i> Hitchc.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Stipa miliacea</i> (L.) Hoover*	var. <i>miliacea</i>	CLE	NIC	CAT ³⁶		ROS	CRU	ANA	MIG
<i>Triticum aestivum</i> L.*		CLE	NIC						
Potamogetonaceae									
<i>Potamogeton crispus</i> L.*				CAT					
<i>Stuckenia pectinata</i> (L.) Börner		CLE ^{2,37}		CAT		ROS	CRU		
Ruppiaceae									
<i>Ruppia maritima</i> L.		CLE	NIC	CAT		ROS	CRU		
Themiaceae									
<i>Bloomeria crocea</i> (Torr.) Coville				CAT		ROS	CRU		
<i>Brodiaea jolonensis</i> Eastw.	var. <i>crocea</i>			CAT		ROS	CRU		MIG
<i>Brodiaea kinkiensis</i> T.F. Niehaus		CLE							
<i>Dichelostemma capitatum</i> (Benth.) Alph. Wood		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Fritteleia clementina</i> Hoover		CLE					CRU		
<i>Fritteleia hyacinthina</i> (Lindl.) Greene									
Typhaceae									
<i>Typha angustifolia</i> L. ³⁸ ?		CLE							
<i>Typha domingensis</i> Pers.		CLE ³⁹	NIC	CAT		ROS	CRU		MIG
<i>Typha latifolia</i> L.		CLE	NIC	CAT			CRU		
Zannichelliaceae									
<i>Zannichellia palustris</i> L.				CAT ⁴⁰			CRU		
Zosteraceae									
<i>Phyllospadix seouleri</i> Hook.		CLE	NIC	CAT	BAR		CRU	ANA	MIG
<i>Phyllospadix torreyi</i> S. Watson		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Zostera marina</i> L.		CLE ^{2,41}		CAT		ROS	CRU	ANA	
<i>Zostera pacifica</i> S. Watson			NIC	CAT ⁴²		ROS	CRU	ANA ⁴³	

³⁴RSA: E. Kellogg Jun 12 1992 s.n.
³⁵SBBC: S.A. Junak Mar 22 1998 SCa-512
³⁶SD: Robert F Thorne Sep 14, 1966 36643
³⁷Pers. com. E. Howe
³⁸Pers. com. E. Howe
³⁹SBBC: P.H. Raven Jul 11 1962 18018
⁴⁰UC: Carl B. Wolf May 12 1932
⁴¹Pers. com. E. Howe
⁴²RSA: R.F. Thorne Sep 16 1966 36714

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG	
BASAL DICOTS										
Saururaceae										
<i>Anemopsis californica</i> (Nutt.) Hook. & Arn.										
EUDICOTS										
Adoxaceae										
<i>Sambucus nigra</i> L.	ssp. <i>caerulea</i> (Raf.) Bolli	CLE		CAT		ROS	CRU			
Aizoaceae										
<i>Carpobrotus chilensis</i> (Molina) N.E. Br.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG	
<i>Carpobrotus edulis</i> * (L.) N.E. Br.		CLE ⁴⁴	NIC	CAT ⁴⁵		ROS	CRU	ANA		
<i>Delosperma litorale</i> * (Kensit) L. Bolus			NIC							
<i>Malephora crocea</i> * (Jacq.) Schwantes		CLE ⁴⁶	NIC					ANA		
<i>Mesembryanthemum crystallinum</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG	
<i>Mesembryanthemum nodiflorum</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG	
<i>Sesuvium verrucosum</i> Raf.		CLE								
<i>Tetragonia tetragonoides</i> (Pall.) Kuntze*			NIC			ROS	CRU	ANA	MIG	
Amaranthaceae										
<i>Amaranthus albus</i> L.*				CAT		ROS	CRU	ANA		
<i>Amaranthus blitoides</i> S. Watson						ROS	CRU			
<i>Amaranthus deflexus</i> L.*				CAT			CRU			
<i>Amaranthus powellii</i> S. Watson							CRU	ANA		
<i>Malosma laurina</i> (Nutt.) Abrams		CLE		CAT						
<i>Rhus integrifolia</i> (Nutt.) Rothr.		CLE		CAT		ROS	CRU	ANA	MIG	
<i>Rhus ovata</i> S. Watson		CLE ^{2,47}		CAT			CRU			
<i>Schinus molle</i> L.*		CLE	NIC	CAT		ROS	CRU			
<i>Toxicodendron diversilobum</i> (Torr. & A. Gray) Greene		CLE	NIC	CAT		ROS	CRU	ANA	MIG	
Apiaceae										
<i>Apiastrum angustifolium</i> Nutt.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG	
<i>Apium graveolens</i> L.*		CLE	NIC			ROS	CRU			
<i>Berula erecta</i> (Huds.) Coville			NIC				CRU		MIG	
<i>Bowlesia incana</i> Ruiz & Pav.		CLE		CAT		ROS	CRU			
<i>Conium maculatum</i> L.*			NIC	CAT			CRU			
<i>Daucus carota</i> L.*			NIC							
<i>Daucus pusillus</i> Michx.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG	
<i>Foeniculum vulgare</i> Mill.*		CLE	NIC	CAT		ROS	CRU		MIG	
<i>Lomatium caruifolium</i> (Hook. & Arn.) J.M. Coult. & Rose						ROS	CRU		MIG	

⁴³RSA: M.B. Dunkle Aug 20 1940 7671
⁴⁴RSA: PH. Raven Jul 12 1962 18045
⁴⁵POM: FR. Fishberg. 4732, Apr 29 1931
⁴⁶SBBG: S.A. Junak Aug 26 1997 SCI-936
⁴⁷Pers. com. E. Howe

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Lomatium insulare</i> (Eastw.) Munz		CLE	NIC						
<i>Sanicula arguta</i> J.M. Coul. & Rose		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Sanicula crassicaulis</i> DC.		CLE? ⁴⁸		CAT					
<i>Sanicula hoffmannii</i> (Munz) R.H. Shan & Constance						ROS	CRU		
<i>Torilis arvensis</i> (Huds.) Link*							CRU		
<i>Torilis nodosa</i> (L.) Gaertn.*			NIC	CAT		ROS	CRU		MIG
<i>Yabea microcarpa</i> (Hook. & Arn.) Koso-Pol.		CLE ⁴⁹		CAT ⁵⁰			CRU		
Apocynaceae									
<i>Asclepias fascicularis</i> Decne.				CAT		ROS	CRU		
<i>Funastrum cynanchoides</i> (Decne.) Schltr.	var. <i>hartwegii</i> (Vail) Krings			CAT					
<i>Vinca major</i> L.*				CAT			CRU		
Asteraceae									
<i>Achillea millefolium</i> L.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Achyrochaena mollis</i> Schauer		CLE		CAT ⁵¹		ROS	CRU		
<i>Acourtia microcephala</i> DC.				CAT		ROS	CRU		
<i>Agoseris apargioides</i> (Less.) Greene	var. <i>apargioides</i>					ROS			
<i>Agoseris grandiflora</i> (Nutt.) Greene						ROS	CRU		MIG
<i>Agoseris heterophylla</i> (Nutt.) Greene						ROS			
<i>Anabipappus pusillus</i> Hook. & Arn.						ROS	CRU	ANA	MIG
<i>Ambrosia chamissonis</i> (Less.) Greene		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Ambrosia psilostachya</i> DC.			NIC	CAT		ROS			MIG
<i>Anthemis cotula</i> L.*				CAT		ROS	CRU		
<i>Arcetium minus</i> (Hill) Bernh.*									
<i>Argemoneum frutescens</i> (L.) Sch. Bip.*				CAT					
<i>Artemisia californica</i> Less.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Artemisia douglasiana</i> Besser				CAT		ROS	CRU		
<i>Artemisia dracunculul</i> L.				CAT					
<i>Artemisia nesiotica</i> P.H. Raven		CLE	NIC		BAR				
<i>Baccharis glutinosa</i> Pers. ⁵²		CLE		CAT		ROS	CRU		MIG
<i>Baccharis salicina</i> Torr. & A. Gray		CLE ⁵³		CAT	BAR				
<i>Baccharis pilularis</i> DC.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Baccharis plummerae</i> A. Gray	ssp. <i>plummerae</i>						CRU	ANA	

⁴⁸Pers. com. E. Howe
⁴⁹POM: P.A. Munz Apr 9 1923 6652
⁵⁰UCD: Robert F. Thorne 04 28 1966 36224
⁵¹CAS: Tim Ross, J. Takara, Stacey Otte 24 April 1993 6946
⁵²Synonym: *Baccharis douglasii* DC.
⁵³DS: Ira L. Wiggins Feb. 22, 1949 11961

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Baccharis salicifolia</i> (Ruiz & Pav.) Pers.									
<i>Baccharis sarothroides</i> A. Gray		CLE ⁵⁴	NIC	CAT ⁵⁵		ROS	CRU	ANA	MIG
<i>Bahipopsis laciniata</i> (A. Gray) E. E. Schilling & Panero ⁵⁶ ?		CLE		CAT					
<i>Blennosperma nanum</i> (Hook.) S.F. Blake	var. <i>nanum</i>						CRU		
<i>Brickellia californica</i> (Torr. & A. Gray) A. Gray		CLE ⁵⁷		CAT			CRU	ANA	
<i>Calendula officinalis</i> L.*			NIC						
<i>Carduus pycnocephalus</i> L.*				CAT ⁵⁸		ROS			MIG
<i>Centaurea melitensis</i> L.*		CLE	NIC	CAT	BAR ⁵⁹	ROS	CRU	ANA	MIG
<i>Centaurea solstitialis</i> L.*			NIC	CAT			CRU		
<i>Centaurea benedicta</i> (L.) L.*							CRU		
<i>Centromadia pungens</i> (Hook. & Arn.) Greene				CAT ⁶⁰					
<i>Centromadia fitchii</i> (A. Gray) Greene							CRU		
<i>Chaenactis glaberrimula</i>	var. <i>lanosa</i> (DC.) H.M. Hall					ROS			
<i>Cichorium intybus</i> L.*							CRU		
<i>Cirsium brevistylum</i> Cronquist							CRU		
<i>Cirsium occidentale</i> (Nutt.) Jeps.	var. <i>californicum</i> (A. Gray) D.J. Keil & C.E. Jumer			CAT ⁶¹		ROS	CRU		
<i>Cirsium occidentale</i> (Nutt.) Jeps.	var. <i>coulteri</i>	CLE ⁶²							
<i>Cirsium occidentale</i> (Nutt.) Jeps.	var. <i>occidentale</i>	CLE ⁶³	NIC	CAT ⁶⁴		ROS	CRU		MIG
<i>Cirsium occidentale</i> (Nutt.) Jeps.	var. <i>venustum</i> (Greene)					ROS			
<i>Cirsium ochrocentrum</i> A. Gray*						ROS			
<i>Cirsium vulgare</i> (Savi) Ten.*				CAT		ROS	CRU		MIG
<i>Constancea nevini</i> (A. Gray) B.G. Baldwin		CLE		CAT	BAR				
<i>Corethrogyne filaginifolia</i> (Hook. & Arn.) Nutt.				CAT ⁶⁵		ROS	CRU	ANA	MIG
<i>Cotula australis</i> (Spreng.) Hook f.*		CLE ⁶⁶		CAT	BAR	ROS	CRU	ANA	
<i>Cotula coronopifolia</i> L.*			NIC	CAT		ROS	CRU	ANA	MIG
<i>Cymara cardunculus</i> L.*		CLE ^{67,68}	NIC	CAT ⁶⁸					

⁵⁴SD: Peter H. Raven May 08, 1962 17629
⁵⁵HSC: James Henrickson Jan 1973 8113
⁵⁶Pers. com. E. Howe
⁵⁷CAS: Steven A. Junak 2 Oct 1996 SCI- 703
⁵⁸SBBC: S.A. Junak, M.L. Hoefs, R.N. Phalbrick, SCA-1532, May 18 2001
⁵⁹RSA: R.F.Thorne, 37492, Apr 28 1968, suspected incorrect georeferencing
⁶⁰RSAMark Hoefs, 309, Jun 4 1973
⁶¹SD: Robert F. Thorne, P. Everett Jun 23, 1965 35015
⁶²SBBC: T. Ross, O. Mistretta, M. Hammit May 20 1991 5325
⁶³UCR: Steve Boyd, T.S. Ross, Laurel Arnseth Apr 7 1990 4271
⁶⁴UCR: F.R. Fosberg Apr 29 1931 S-4709
⁶⁵SBBC: E.R. Bladley Sep 23 1961 4740
⁶⁶SBBC: S.A. Junak Feb 25 1997 SCI-724
⁶⁷Pers. com. E. Howe
⁶⁸SBBC: S.A. Junak, M.L. Hoefs, K. Kirkland

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Deinandra clementina</i> (Brandeege) B.G. Baldwin		CLE	NIC	CAT	BAR		CRU	ANA	
<i>Deinandra fasciculata</i> (DC.) Greene		CLE		CAT	BAR	ROS	CRU	ANA	
<i>Deinandra increscens</i> (D.D. Keck) B.G. Baldwin	ssp. <i>increscens</i>					ROS	CRU		
<i>Delairea odorata</i> Lem.*						ROS		ANA	
<i>Encelia californica</i> Nutt.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	
<i>Ericameria ericoides</i> (Less.) Jeps.							CRU		
<i>Ericameria palmieri</i> (A. Gray) H.M. Hall	var. <i>pachylepis</i> (H.M. Hall) G.L. Nesom			CAT					
<i>Erigeron bonariensis</i> L.*		CLE ⁶⁹	NIC	CAT ⁷⁰	BAR	ROS	CRU	ANA	MIG
<i>Erigeron canadensis</i> L.		CLE ⁷¹	NIC	CAT ⁷²	BAR	ROS	CRU	ANA	MIG
<i>Erigeron foliosus</i> Nutt.	var. <i>foliosus</i>			CAT		ROS	CRU	ANA	MIG
<i>Erigeron glaucus</i> Ker Gawl.						ROS	CRU	ANA	
<i>Erigeron sanctarum</i> S. Watson						ROS	CRU		MIG
<i>Eriophyllum confertiflorum</i> (DC.) A. Gray	var. <i>confertiflorum</i>	CLE		CAT ⁷³		ROS	CRU	ANA	MIG
<i>Eriophyllum staechadifolium</i> Lag.						ROS	CRU	ANA	MIG
<i>Eurybia radulina</i> (A. Gray) G.L. Nesom						ROS	CRU		
<i>Euthamia occidentalis</i> Nutt.								ANA	
<i>Gnaphalium pulchellum</i> (Nutt.) Holub				CAT		ROS	CRU	ANA	MIG
<i>Glebionis coronaria</i> (L.) Spach* ⁷⁴		CLE	NIC	CAT			CRU		
<i>Gnaphalium palustre</i> Nutt.		CLE	NIC	CAT			CRU		
<i>Grindelia camporum</i> Greene				CAT		ROS	CRU	ANA	
<i>Grindelia hirsutula</i> Hook. & Arn.			NIC ⁷⁵			ROS			MIG?
<i>Grindelia stricta</i> DC.	var. <i>platyphylla</i> (Greene) M.A. Lane					ROS	CRU	ANA	
<i>Hazardia cana</i> (A. Gray) Greene		CLE							
<i>Hazardia detonsa</i> (Greene) Greene						ROS	CRU	ANA	
<i>Hazardia squarrosa</i> (Hook. & Arn.) Greene	var. <i>grindelioides</i> (DC.) W.D. Clark			CAT	BAR	ROS	CRU	ANA	MIG
<i>Hedysmopsis cretica</i> (L.) Dum. Cours.*		CLE ⁷⁶							
<i>Helianthus puberulum</i> DC.				CAT ⁷⁷					
<i>Helianthus annuus</i> L.*		CLE ⁷⁸	NIC	CAT ⁷⁹			CRU	ANA	
<i>Helminthotheca echioides</i> (L.) Holub*			NIC	CAT			CRU		
<i>Hesperetax sparsiflora</i> (A. Gray) Greene		CLE ⁸⁰				ROS			

⁶⁹SBBG: S.A. Jumaik, SCL-681, Sep 29 1996
⁷⁰POM: ER. Fosberg, 5364, Jul 10 1931
⁷¹SBBG: S.A. Jumaik Oct 28 1997 SCL-981
⁷²SBBG: S.A. Jumaik, K. Kirkland, M. Bushman Oct 21 1998 SCL-813
⁷³BSA: Mark Hoefs, D. Propst Mar 14 1973 119
⁷⁴Synonym: *Chrysanthemum coronarium* L.
⁷⁵UC: R.M. Beauchamp and H.A. Wier Jun 29 1978
⁷⁶CAS: Steven A. Jumaik 16 May 1996 SCL-470
⁷⁷DS: A.J. McClatchie Sept. 1893 s.n.
⁷⁸SBBG: H.L. Ferguson, R.M. Beauchamp Sep 15 1979 14
⁷⁹POM: L.W. Nuttall, s.n., May 22 1920
⁸⁰SBBG: S.A. Jumaik Mar 13 1997 SCL-784

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Heterotheca grandiflora</i> Nutt.									
<i>Hieracium argutum</i> Nutt.		CLE	NIC	CAT		ROS	CRU		
<i>Hypochaeris glabra</i> L. *		CLE		CAT		ROS	CRU	ANA	
<i>Hypochaeris radicata</i> L. *		CLE	NIC			ROS	CRU		
<i>Isoetoma menziesii</i> (Hook. & Arn.) G.L. Nesom	var. <i>decumbens</i> (Greene) G.L. Nesom	CLE		CAT ⁸¹					
<i>Isoetoma menziesii</i> (Hook. & Arn.) G.L. Nesom	var. <i>menziesii</i>	CLE ⁸²	NIC	CAT ⁸³					
<i>Isoetoma menziesii</i> (Hook. & Arn.) G.L. Nesom	var. <i>sedoides</i> (Greene) G.L. Nesom			CAT ⁸⁴		ROS	CRU	ANA	MIG
<i>Isoetoma menziesii</i> (Hook. & Arn.) G.L. Nesom	var. <i>vernonioides</i> (Nutt.) G.L. Nesom	CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Jaumea carnosa</i> (Less.) A. Gray				CAT		ROS	CRU		MIG
<i>Lactuca saligna</i> L. *				CAT ⁸⁵		ROS	CRU		MIG
<i>Lactuca serriola</i> L. *		CLE ⁸⁶	NIC	CAT		ROS	CRU	ANA	MIG
<i>Laennecia coulteri</i> (A. Gray) G.L. Nesom		CLE ⁸⁷		CAT	BAR				MIG
<i>Lasthenia californica</i> Lindl.		CLE		CAT	BAR	ROS	CRU	ANA	MIG
<i>Lasthenia glabrata</i> Lindl.	ssp. <i>coulteri</i> (A. Gray) Ornduff					ROS			MIG
<i>Lasthenia gracilis</i> (DC.) Greene			NIC	CAT					
<i>Lajia platyglossa</i> (Fisch. & C.A. Mey.) A. Gray		CLE		CAT		ROS	CRU		MIG
<i>Lepidospartum squamatum</i> (A. Gray) A. Gray							CRU		
<i>Leptosyne gigantea</i> Kellogg		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Logfia arizonica</i> (A. Gray) Holub		CLE		CAT	BAR				
<i>Logfia flaginoides</i> (Hook. & Arn.) Morefield		CLE		CAT	BAR	ROS	CRU	ANA	MIG
<i>Logfia gallica</i> (L.) Coss. & Germ. *		CLE ⁸⁸		CAT		ROS	CRU		
<i>Madia exigua</i> (Sm.) A. Gray				CAT			CRU		
<i>Madia gracilis</i> (Sm.) Applegate				CAT			CRU		
<i>Madia sativa</i> Molina *		CLE		CAT			CRU		
<i>Malacothrix clevelandii</i> A. Gray						ROS			
<i>Malacothrix coulteri</i> Harv. & A. Gray						ROS	CRU		
<i>Malacothrix foliosa</i> A. Gray	ssp. <i>crispifolia</i> W.S. Davis							ANA	
<i>Malacothrix foliosa</i> A. Gray	ssp. <i>foliosa</i>	CLE							
<i>Malacothrix foliosa</i> A. Gray	ssp. <i>philbrickii</i> W.S. Davis				BAR				
<i>Malacothrix foliosa</i> A. Gray	ssp. <i>polycephala</i> W.S. Davis		NIC						
<i>Malacothrix incana</i> (Nutt.) Torr. & A. Gray		CLE	NIC			ROS			MIG
<i>Malacothrix incanora</i> Greene						ROS	CRU	ANA	MIG
<i>Malacothrix junakii</i> W.S. Davis									

⁸¹ Collections of this taxa have been made on Catalina, but there are taxonomic issues
⁸² U.C. T.S. Brandegee Aug 25 1894
⁸³ D. E.R. Blakeley Sep 24, 1961 4781
⁸⁴ U.C. F.R. Fosberg Apr 29 1931 S4707
⁸⁵ SBBG: S.A. Junak, K. Kirkland Jul 17 1998 SCa-777
⁸⁶ R.S.A. Steven A. Junak Oct 2 1996 SCL700
⁸⁷ SBBG: S.A. Junak Sep 28 1996 SCL-673
⁸⁸ SBBG: S.A. Junak May 15 1985 SCL-74

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Malacothrix saxatilis</i> (Nutt.) Torr. & A. Gray									
<i>Malacothrix saxatilis</i> (Nutt.) Torr. & A. Gray*									
<i>Malacothrix similis</i> W.S. Davis & P.H. Raven									
<i>Malacothrix squalida</i> Greene									
<i>Matricaria occidentalis</i> Greene				CAT ⁸⁰					
<i>Matricaria discoidea</i> DC.*				CAT ⁹¹		ROS	CRU	ANA	
<i>Micropus californicus</i> Fisch. & C.A. Mey.	var. <i>californicus</i>			CAT ⁹²		ROS	CRU		
<i>Microseris douglasii</i> (DC.) Sch. Bip.	ssp. <i>douglasii</i>	CLE	NIC						
<i>Microseris douglasii</i> (DC.) Sch. Bip.	ssp. <i>tenella</i> (A. Gray)		NIC			ROS	CRU		MIG
	K.L. Chambers								
<i>Microseris douglasii</i> (DC.) Sch. Bip.	ssp. <i>platycarpa</i> (A. Gray)	CLE		CAT					
	K.L. Chambers								
<i>Microseris elegans</i> A. Gray		CLE	NIC				CRU		MIG
<i>Munzothamnus blairii</i> (Munz & I.M. Johnston) P.H. Raven		CLE							
<i>Pentachaeta lyonii</i> A. Gray				CAT					
<i>Perityle emoryi</i> Torr.		CLE		CAT	BAR	ROS	CRU	ANA	
<i>Pluchea odorata</i> (L.) Cass.				CAT			CRU		
<i>Pluchea sericea</i> (Nutt.) Coville				CAT					
<i>Pseudognaphalium biolettii</i> Anderb.		CLE	NIC	CAT	BAR ⁹³	ROS	CRU	ANA	MIG
<i>Pseudognaphalium californicum</i> (DC.) Anderb.		CLE ⁹⁴	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Pseudognaphalium beneolens</i> (Davidson) Anderb.		CLE	NIC	CAT		ROS	CRU		MIG
<i>Pseudognaphalium microcephalum</i> (Nutt.) Anderb.		CLE ⁹⁵		CAT	BAR	ROS	CRU	ANA	
<i>Pseudognaphalium luteoalbum</i> (L.) Hilliard & B.L. Burtt*			NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Pseudognaphalium ramosissimum</i> (Nutt.) Anderb.		CLE		CAT			CRU		
<i>Pseudognaphalium stramineum</i> (Kunth) Anderb.			NIC	CAT		ROS	CRU	ANA	MIG
<i>Psilocarphus brevissimus</i> Nutt.	var. <i>brevissimus</i>	CLE ⁹⁶							
<i>Psilocarphus tenellus</i> Nutt.		CLE		CAT		ROS	CRU		
<i>Rafinesquia californica</i> Nutt.		CLE		CAT	BAR	ROS	CRU	ANA	
<i>Senecio glomeratus</i> Poir.*							CRU		
<i>Senecio aphanactis</i> Greene				CAT					
<i>Senecio flaccidus</i> Less.		CLE		CAT		ROS	CRU		MIG
	var. <i>douglasii</i> (DC.) B.L. Turner & T.M. Barkley								
	A. Gray	CLE		CAT					

89RSA: Steven A. Junak, Mary C. Hochberg, H.L. Ferguson Jul 28 1981 sc113
90SD: Robert F. Thorne Apr 29 1966 36278
91SBBG: R.F. Thorne Apr 29 1966 36290
92RSA: Tim Ross, Janet Takara, S. Otte Apr 24 1993 6957
93NPS Park flora checklist
94UC: Tim Ross Apr 16 1992 6207
95SDSU: R. M. Beauchamp March 19, 1967 315
96RSA: Tim Ross, Orlando Mistretta, Mike Hammitt May 18 1991 5184

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Senecio vulgaris</i> L.*		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Silybum marianum</i> (L.) Gaertn.*			NIC	CAT	BAR ⁹⁷	ROS	CRU		
<i>Solidago velutina</i> DC.	ssp. <i>californica</i> (Nutt.) Semple			CAT		ROS	CRU		
<i>Sonchus asper</i> (L.) Hill*		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Sonchus oleraceus</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Sonchus tenerrimus</i> L.*		CLE	NIC	CAT	BAR				
<i>Stebbinsoseris heterocarpa</i> (Nutt.) K.L. Chambers ⁹⁸		CLE	NIC	CAT		ROS	CRU	ANA	
<i>Stephanomeria cichoriacea</i> A. Gray		CLE	NIC	CAT		ROS	CRU		
<i>Stephanomeria diegensis</i> Gottlieb		CLE		CAT		ROS	CRU		
<i>Stephanomeria exigua</i> Benth.	ssp. <i>coronaria</i> (Greene) Gottlieb			CAT ⁹⁹		ROS	CRU		MIG
<i>Stephanomeria virgata</i> Benth.	ssp. <i>virgata</i>	CLE		CAT		ROS	CRU		
<i>Stylocline gnaphaloides</i> Nutt.		CLE ¹⁰⁰		CAT		ROS	CRU		
<i>Symphiotrichum chilense</i> (Nees) G.L. Nesom						ROS	CRU		
<i>Symphiotrichum subulatum</i> (Michx.) G.L. Nesom		CLE				ROS	CRU		
<i>Taraxacum erythrospermum</i> Besser*				CAT ¹⁰¹			CRU ¹⁰²		
<i>Taraxacum officinale</i> F.H. Wigg.*			NIC	CAT ¹⁰³		ROS	CRU		
<i>Thelesperma megapotamicum</i> (Spreng.) Kuntze*				CAT					
<i>Trigopogon porrifolius</i> L.*		CLE	NIC				CRU		
<i>Uropappus lindleyi</i> (DC.) Nutt. ¹⁰⁴		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Venegasia carpestoides</i> DC.						ROS	CRU		
<i>Xanthium spinosum</i> L. ¹⁰⁵				CAT	BAR&	ROS	CRU		MIG
<i>Xanthium strumarium</i> L. ¹⁰⁶			NIC	CAT			CRU		
Bataceae									
<i>Batis maritima</i> L.		CLE							
Berberidaceae									
<i>Berberis pinnata</i> Lag.	ssp. <i>insularis</i> Munz					ROS	CRU	ANA	
Boraginaceae									
<i>Ansinckia intermedia</i> Fisch. & C.A. Mey.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Ansinckia menziesii</i> (Lehm.) A. Nelson & J.F. Macbr.		CLE ¹⁰⁷		CAT			CRU	ANA	MIG
<i>Ansinckia spectabilis</i> Fisch. & C.A. Mey.	var. <i>spectabilis</i>	CLE	NIC		BAR	ROS	CRU	ANA	MIG
<i>Cryptantha intermedia</i> (A. Gray) Greene	var. <i>intermedia</i>	CLE		CAT					

⁹⁷SBBG: R.N. Phalbrick Mar 18 1968 B68-20
⁹⁸Synonym: *Microseris heterocarpa* (Nutt.) K.L. Chambers
⁹⁹RSA: FR. Fosberg. 4460. Apr. 3 1931
¹⁰⁰BSA: Orlando Mistretta. Apr. 5 1992 206
¹⁰¹SD: Robert F. Thorne Sep 15, 1966 36698
¹⁰²SD: Robert F. Thorne, P. Everett. 36823. Apr 18, 1967
¹⁰³SBBG: M.L. Hoels, R.F. Thorne Apr 6 1996 2665
¹⁰⁴Synonym: *Microseris linearifolia* (DC.) Sch. Bip.
¹⁰⁵Native status on islands unknown
¹⁰⁶Native status on islands unknown
¹⁰⁷UCR: J.R. Ekhoﬀ May 16 2001 s.n.

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Cryptantha clevelandii</i> Greene									
<i>Cryptantha leiocarpa</i> (Fisch. & C.A. Mey.) Greene		CLE		CAT	BAR	ROS	CRU	ANA	MIG
<i>Cryptantha maritima</i> (Greene) Greene						ROS			MIG
<i>Cryptantha micromeres</i> (A. Gray) Greene		CLE	NIC	CAT ¹⁰⁸	BAR				
				CAT		ROS	CRU		
<i>Cryptantha microstachys</i> (A. Gray) Greene				CAT					
<i>Cryptantha muricata</i> (Hook. & Arn.)							CRU		
A. Nelson & J.F. Macbr.									
<i>Cryptantha traskiae</i> I.M. Johnst.		CLE	NIC	CAT ¹⁰⁹					
<i>Cryptantha wigginii</i> I.M. Johnst.				CAT ¹¹⁰					
<i>Emmenanthe penduliflora</i> Benth.	var. <i>penduliflora</i>	CLE		CAT			CRU		
<i>Eriodictyon traskiae</i> Eastw.	ssp. <i>traskiae</i>			CAT					
<i>Eucryptia chrysanthemifolia</i> (Benth.) Greene	var. <i>chrysanthemifolia</i>	CLE		CAT	BAR	ROS	CRU	ANA	MIG
<i>Harpagoneella palmieri</i> A. Gray				CAT					
<i>Heliotropium curassavicum</i> L.	var. <i>oculatum</i> (A. Heller)	CLE	NIC	CAT		ROS	CRU	ANA	MIG
	I.M. Johnst. ex Tidestr.								
<i>Nama stenocarpum</i> A. Gray		CLE ¹¹¹							
<i>Nemophila menziesii</i> Hook. & Arn.				CAT					
<i>Nemophila pedunculata</i> Benth.			NIC			ROS	CRU		MIG
<i>Pectocarya linearis</i> (Ruiz & Pav.) DC.		CLE ¹¹²	NIC	CAT		ROS	CRU	ANA	
<i>Pectocarya penticillata</i> (Hook. & Arn.) A. DC.	ssp. <i>ferocula</i> (I.M. Johnst.) Thorne			CAT			CRU		
<i>Phacelia cicutaria</i> Greene		CLE		CAT		ROS	CRU	ANA	
<i>Phacelia hubbii</i> (J.F. Macbr.) L.M. Garrison ¹¹³	var. <i>hispida</i> J.T. Howell						CRU		
<i>Phacelia distans</i> Benth.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Phacelia floribunda</i> Greene		CLE							
<i>Phacelia grandiflora</i> (Benth.) A. Gray				CAT		ROS	CRU ¹¹⁴		
<i>Phacelia insularis</i> Munz	var. <i>insularis</i>					ROS			MIG
<i>Phacelia lyonii</i> A. Gray		CLE		CAT					
<i>Phacelia ramosissima</i> Douglas ex Lehm.						ROS	CRU		MIG
<i>Phacelia viscida</i> (Lindl.) Torr.				CAT		ROS	CRU	ANA	MIG
<i>Pholistoma auritum</i> (Lindl.) Lilja	var. <i>auritum</i>	CLE?		CAT	BAR		CRU		
<i>Pholistoma racemosum</i> (A. Gray) Constance				CAT			CRU		
<i>Plagiobothrys acanthocarpus</i> (Piper) I.M. Johnst.		CLE		CAT ¹¹⁵	BAR		CRU		
<i>Plagiobothrys canescens</i> Benth.		CLE		CAT		ROS	CRU	ANA	

¹⁰⁸UTC: T.S. Brandegee May 20 1890
¹⁰⁹SD: R. Mitchell Beauchamp, M. Douglas Mar. 24, 1973 3222
¹¹⁰UC: Michael G. Simpson, Lori L. Simpson April 21 2012 3682
¹¹¹USA: E. Kellogg Jun 28 1992 s.n.
¹¹²BBG: S.A. Junak Mar 7 1987 SCI-732
¹¹³Synonym: *Phacelia cicutaria* Greene var. *hubbii* (J.F. Macbr.) J.T. Howell
¹¹⁴In Wallace 1985 but not NPS list
¹¹⁵UCR: T.S. Ross Apr 22 1983 6895

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Plagiobothrys collinus</i> (Phil.) I.M. Johnston	var. <i>gracilis</i> (I.M. Johnston) Higgins	CLE		CAT			CRU	ANA	MIG
<i>Plagiobothrys collinus</i> (Phil.) I.M. Johnston	var. <i>californicus</i> (A. Gray) Higgins	CLE ¹¹⁶		CAT ¹¹⁷			CRU ¹¹⁸		
Brassicaceae									
<i>Athyrium pusillus</i> (Hook.) Greene		CLE		CAT			CRU		
<i>Boechera hoffmannii</i> (Munz) Al-Shehbaz						ROS	CRU		
<i>Brassica nigra</i> (L.) W.D.J. Koch*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Brassica tournefortii</i> Gouan*			NIC						
<i>Brassica rapa</i> L.*		CLE		CAT		ROS	CRU		MIG
<i>Cakile edentula</i> (Bigelow) Hook.*			NIC			ROS			MIG
<i>Cakile maritima</i> Scop.*		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Capsella bursa-pastoris</i> (L.) Medik.*		CLE		CAT		ROS	CRU		MIG
<i>Cardamine californica</i> (Nutt.) Greene				CAT		ROS	CRU	ANA	MIG
<i>Cardamine oligosperma</i> Nutt.							CRU		
<i>Caulanthus lasiophyllus</i> (Hook. & Arn.) Payson ¹¹⁹		CLE		CAT	BAR	ROS	CRU	ANA	MIG
<i>Descurainia pinnata</i> (Walter) Britton		CLE		CAT		ROS	CRU	ANA	
<i>Dithyrea maritima</i> (Davidson) Davidson			NIC	CAT ¹²⁰					MIG
<i>Draba cuneifolia</i> Nutt. ex Torr. & A. Gray		CLE	NIC	CAT			CRU		
<i>Erysimum amnophilum</i> A. Heller						ROS			MIG
<i>Erysimum cheiri</i> (L.) Crantz*				CAT					
<i>Erysimum insulare</i> Greene						ROS	CRU	ANA	MIG
<i>Hirschfeldia incana</i> (L.) Lagr.-Fossat ¹²¹ *		CLE	NIC	CAT		ROS	CRU		MIG
<i>Hornungia procumbens</i> (L.) Hayek		CLE ² ¹²²	NIC		BAR	ROS	CRU	ANA	MIG
<i>Lepidium draba</i> L.*				CAT		ROS	CRU		
<i>Lepidium lasiocarpum</i> Nutt.		CLE	NIC	CAT					
<i>Lepidium latipes</i> Hook.		CLE		CAT			CRU		
<i>Lepidium nitidum</i> Nutt.		CLE	NIC			ROS	CRU		MIG
<i>Lepidium oblongum</i> Small		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Lepidium strictum</i> (S. Watson) Rattan*		CLE	NIC	CAT		ROS	CRU		
<i>Lepidium virginicum</i> L. ¹²⁴ *				CAT ¹²³					
<i>Lobularia maritima</i> (L.) Desv.*	ssp. <i>menziesii</i> (DC.) Thell.	CLE		CAT			CRU		MIG
<i>Nasturtium officinale</i> W.T. Aiton ¹²⁶		CLE ¹²⁵	NIC	CAT					
			NIC	CAT			CRU		

¹¹⁶POM: P.A. Munz Apr 10 1923 6705
¹¹⁷RSA: R.F. Thorne, R.C. Rollins, D. Propst, R. Carolin, 36761, Mar 19 1967
¹¹⁸UC: T.S. Brandegee, Apr 1888
¹¹⁹Synonym: *Gallinia lasiophylla* (Hook. & Arn.) Greene
¹²⁰No specimens in CCH; extirpated from Catalina? per: <http://www.rareplants.cmpg.org/detail/571.html>
¹²¹Synonym: *Brassica gentioides* (Desf.) Benth.
¹²²Pers. com. E. Howe
¹²³SBBG: S.A. Junak, M.L. Hoeft, J. Takara Mar 28 1987 SCA-388
¹²⁴Synonym: *Lepidium virginicum* var. *pubescens* (Greene) Thell.; *Lepidium virginicum* var. *robinsonii* (Thell.) C.L. Hitchc.
¹²⁵SBBG: S.A. Junak, M.C. Hochberg, H. Ferguson Jul 28 1981 SCI-17
¹²⁶Native status on islands unknown, doubtful

APPENDIX 2. Continued

Family/species	ssp./var. and infraname				CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Raphanus raphanistrum</i> L.*					CLE		CAT		ROS	CRU		
<i>Raphanus sativus</i> L.*					CLE	NIC	CAT		ROS	CRU		MIG
<i>Sibara filifolia</i> (Greene) Greene					CLE ¹²⁷		CAT			CRU		
<i>Sinapis arvensis</i> L. ^{125*}					CLE ² ¹²⁹		CAT			CRU		
<i>Sisymbrium albus</i> L.*					CLE	NIC	CAT				ANA	
<i>Sisymbrium officinale</i> (L.) Scop.*					CLE ¹³⁰	NIC	CAT			CRU	ANA	MIG
<i>Sisymbrium orientale</i> L.*												
<i>Thysanocarpus conchuliferus</i> Greene					CLE ¹³¹		CAT			CRU		
<i>Thysanocarpus curvipes</i> Hook.					CLE		CAT		ROS	CRU		
<i>Thysanocarpus laciniatus</i> Nutt.					CLE		CAT					
<i>Tropidocarpum gracile</i> Hook.												
<i>Turritis glabra</i> L.										CRU		
Cactaceae												
<i>Bergerocactus emoryi</i> (Engelm.) Britton & Rose					CLE		CAT					
<i>Cylindropuntia prolifera</i> (Engelm.) F.M. Knuth					CLE	NIC	CAT	BAR	ROS	CRU	ANA	
<i>Opuntia ficus-indica</i> (L.) Mill.*					CLE	NIC	CAT			CRU	ANA	
<i>Opuntia littoralis</i> (Engelm.) Cockerell					CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Opuntia oricola</i> Philbrick					CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Campanulaceae												
<i>Cithopsis diffusa</i> A. Gray				ssp. <i>diffusa</i>						CRU		
<i>Triodanis biflora</i> (Ruiz & Pav.) Greene							CAT		ROS	CRU		
Caprifoliaceae												
<i>Lonicera hispidula</i> (Lindl.) Torr. & A. Gray							CAT		ROS	CRU		
<i>Lonicera interrupta</i> Benth.					CLE					CRU		
<i>Lonicera subspicata</i> Hook. & Arn.							CAT		ROS	CRU		
<i>Symphoricarpos mollis</i> Nutt.							CAT		ROS	CRU		
Caryophyllaceae												
<i>Cardionema ramosissimum</i> (Weinm.) A. Nelson									ROS	CRU		MIG
& J.E. Macbr.												
<i>Cerastium glomeratum</i> Thuill.*					CLE		CAT		ROS	CRU	ANA	MIG
<i>Herniaria hirsuta</i> L.*					CLE	NIC	CAT ¹³²	BAR	ROS			MIG
<i>Loeflingia squarrosa</i> Nutt.						NIC						
<i>Mniuraria douglasii</i> (Torr. & A. Gray) Mattf.					CLE		CAT		ROS	CRU		
<i>Polycarpon depressum</i> Nutt.					CLE		CAT			CRU		MIG

¹²⁷TRSA: Orlando Mistretta Apr 5 1992 142
¹²⁸Synonym: *Brassica kaber* (DC.) L.C. Wheeler
¹²⁹Pers. com. E. Howe
¹³⁰SBBG: S.A. Junak May 29 1996 SCI-545
¹³¹UC: Tim Ross Apr 14 1992 6153
¹³²SBBG: S.A. Junak Mar 27 1997 5Ca-346

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Polycarpon tetraphyllum</i> (L.) L.*				CAT		ROS	CRU	ANA	MIG
<i>Sagina apetala</i> Ard.			NIC			ROS	CRU	ANA	MIG
<i>Sagina decumbens</i> (Elliott) Torr. & A. Gray	ssp. <i>occidentalis</i> (S. Watson) G.E. Crow			CAT		ROS	CRU	ANA	MIG
<i>Silene antirrhina</i> L.		CLE		CAT		ROS	CRU	ANA	MIG
<i>Silene gallica</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Silene laciniata</i> Cav.	ssp. <i>laciniata</i>	CLE		CAT		ROS	CRU	ANA	MIG
<i>Silene confiflora</i> Oth.				CAT			CRU		
<i>Spergula arvensis</i> L.*				CAT		ROS			
<i>Spergularia bocconii</i> (Scheele) Graebn.*		CLE	NIC	CAT	BAR		CRU	ANA	
<i>Spergularia macrotheca</i> (Cham. & Schltdl.) Heynh.	ssp. <i>macrotheca</i>	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Spergularia marina</i> (L.) Besser		CLE	NIC	CAT	BAR	ROS	CRU	ANA	
<i>Spergularia villosa</i> (Pers.) Cambess.*		CLE		CAT		ROS	CRU		
<i>Stellaria media</i> (L.) Vill.*		CLE		CAT		ROS	CRU	ANA	MIG
<i>Stellaria nitens</i> Nutt.				CAT		ROS	CRU		
<i>Aphanisma blitoides</i> Moq.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Arthrocnemum subterminale</i> (Parish) Standl.		CLE		CAT		ROS	CRU		
<i>Atriplex argentea</i> Nutt.	ssp. <i>expansa</i> (S. Watson) S.L. Welsh & Reveal	CLE	NIC	CAT		ROS	CRU		
<i>Atriplex californica</i> Moq.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Atriplex canescens</i> (Pursh) Nutt.*	var. <i>canescens</i>		NIC						
<i>Atriplex coulteri</i> (Moq.) D. Dietr.		CLE		CAT		ROS	CRU	ANA	MIG
<i>Atriplex lentiformis</i> (Torr.) S. Watson	(S. Watson) H.M. Hall & Clem.	CLE	NIC	CAT			CRU	ANA	
<i>Atriplex leucophylla</i> (Moq.) D. Dietr.		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Atriplex pacifica</i> A. Nelson		CLE	NIC	CAT	BAR	ROS	CRU	ANA	
<i>Atriplex semibaccata</i> R. Br.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Atriplex serenana</i> Abrams	var. <i>davidsonii</i> (Standl.) Munz			CAT ¹³³		ROS	CRU		
<i>Atriplex serenana</i> Abrams	var. <i>serenana</i>			CAT					
<i>Atriplex prostrata</i> DC.*		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Atriplex watsonii</i> Abrams		CLE	NIC	CAT			CRU		
<i>Bassia hyssopifolia</i> (Pall.) Kuntze*		CLE	NIC	CAT					
<i>Beta vulgaris</i> L.*	ssp. <i>maritima</i> (L.) Arcang.	CLE		CAT		ROS	CRU	ANA	MIG
<i>Chenopodium berlandieri</i> Moq.		CLE				ROS	CRU	ANA	
<i>Chenopodium californicum</i> (S. Watson) S. Watson		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Chenopodium murale</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Dysphania ambrosioides</i> (L.) Mosyakin & Clemants*		CLE	NIC	CAT		ROS	CRU		
<i>Dysphania multifida</i> (L.) Mosyakin & Clemants*		CLE				ROS			
<i>Monolepis nuttalliana</i> (Schult.) Greene		CLE			BAR	ROS	CRU		MIG
<i>Salicornia depressa</i> Standl.			NIC						
<i>Salicornia pacifica</i> Standl.		CLE		CAT		ROS	CRU	ANA	MIG

¹³³RSA: Blanche Trask Mar 1901 s.n.

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Salsola australis</i> R. Br. ^{134*}		CLE	NIC	CAT		ROS	CRU		
<i>Suaeda calceoliformis</i> (Hook.) Moq.		CLE	NIC	CAT ¹³⁵		ROS	CRU	ANA	MIG
<i>Suaeda taxifolia</i> (Standl.) Standl.		CLE	NIC	CAT	BAR	ROS	CRU		
Cistaceae									
<i>Helianthemum greenei</i> B.L. Rob.		CLE	NIC	CAT		ROS	CRU		MIG&
<i>Helianthemum scoparium</i> Nutt.		CLE [?] ¹³⁶		CAT		ROS	CRU		
Cleomeaceae									
<i>Peritoma arborea</i> (Nutt.) H.H. Iltis		CLE		CAT		ROS			
Convolvulaceae									
<i>Calystegia macrostegia</i> (Greene) Brummitt		CLE	NIC		BAR				
<i>Calystegia macrostegia</i> (Greene) Brummitt	ssp. <i>amplissima</i> Brummitt			CAT					
<i>Calystegia macrostegia</i> (Greene) Brummitt	ssp. <i>cyclostegia</i> (House) Brummitt			CAT					
<i>Calystegia macrostegia</i> (Greene) Brummitt	ssp. <i>internedia</i> (Abrams) Brummitt			CAT		ROS	CRU	ANA	MIG
<i>Calystegia macrostegia</i> (Greene) Brummitt	ssp. <i>macrostegia</i>		NIC&						
<i>Calystegia malacophylla</i> (Greene) Munz*	ssp. <i>pedicellata</i> (Eps.) Munz								
<i>Calystegia soldanella</i> (L.) R. Br.*		CLE	NIC	CAT		ROS	CRU		MIG
<i>Convolvulus arvensis</i> L.*			NIC	CAT		ROS	CRU		
<i>Convolvulus simulans</i> L. M. Perry		CLE		CAT		ROS	CRU		
<i>Cressa truxillensis</i> Kunth		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Cuscuta californica</i> Hook. & Arn.		CLE		CAT		ROS	CRU ¹³⁷		
<i>Cuscuta campestris</i> Yünek.				CAT ¹³⁸					
<i>Cuscuta occidentalis</i> Millsp.				CAT					
<i>Cuscuta pacifica</i> Costea & M. Wright	var. <i>pacifica</i>					ROS	CRU	ANA	
<i>Dichondra occidentalis</i> House				CAT		ROS	CRU		MIG
<i>Ipomoea cairica</i> (L.) Sweet*				CAT					
Corniaceae									
<i>Cornus glabrata</i> Benth.				CAT					
Crassulaceae									
<i>Crassula aquatica</i> (L.) Schönl.				CAT					
<i>Crassula connata</i> (Ruiz & Pav.) A. Berger		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Crassula ovata</i> (Mill.) Druce*		CLE							
<i>Dudleya blochmaniae</i> (Eastw.) Moran	ssp. <i>blochmaniae</i>						CRU		
<i>Dudleya blochmaniae</i> (Eastw.) Moran	ssp. <i>insularis</i> (Moran) Moran					ROS		ANA	
<i>Dudleya caespitosa</i> (Haw.) Britton & Rose						ROS	CRU		MIG
<i>Dudleya candelabrum</i> Rose						ROS	CRU		MIG
<i>Dudleya greenei</i> Rose				CAT		ROS	CRU		MIG
<i>Dudleya gnoma</i> S. W. McCabe						ROS			

¹³⁴Synonym: *Salsola tragus* L.
¹³⁵SBBG: S.A. Jarak Oct 22 1998 SCA-823
¹³⁶pers. com. E. Howe
¹³⁷SBBG: M.R. Benedict Sep 30 1969
¹³⁸RSA: George B. Grant 4541

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Dudleya nesiotica</i> (Moran) Moran							CRU		
<i>Dudleya traskiae</i> (Rose) Moran					BAR				
<i>Dudleya vires</i> (Rose) Moran	ssp. <i>hassei</i> (Rose) Moran			CAT					
<i>Dudleya vires</i> (Rose) Moran	ssp. <i>insularis</i>		NIC	CAT					
<i>Dudleya vires</i> (Rose) Moran	ssp. <i>virens</i>	CLE							
Crossosomataceae									
<i>Crossosoma californicum</i> Nutt.		CLE	NIC	CAT					
Cucurbitaceae									
<i>Cucurbita foetidissima</i> Kunth							CRU		
<i>Marah fabacea</i> (Naudin) Greene		CLE ¹³⁹	NIC ¹⁴⁰	CAT ¹⁴¹			CRU		MIG ¹⁴²
<i>Marah macrocarpa</i> (Greene) Greene		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Ericaceae									
<i>Arbutus menziesii</i> Pursh				CAT			CRU		
<i>Arctostaphylos catalinae</i> P.V. Wells									
<i>Arctostaphylos confertiflora</i> Eastw.						ROS			
<i>Arctostaphylos insularis</i> Parry							CRU		
<i>Arctostaphylos crustacea</i> Eastw.	ssp. <i>insulicola</i> (P.V. Wells) V.T. Parker et al.					ROS	CRU		
<i>Arctostaphylos viridastrea</i> Eastw.	ssp. <i>subcordata</i> (Eastw.) V.T. Parker et al.					ROS	CRU		
<i>Arctostaphylos viridissima</i> (Eastw.) McMinn							CRU		
<i>Comarostaphylis diversifolia</i> (Parry) Greene	ssp. <i>planifolia</i> (Jeps.) G.D. Wallace			CAT		ROS	CRU	ANA	
<i>Vaccinium ovatum</i> Pursh						ROS	CRU		
<i>Xylococcus bicolor</i> Nutt.				CAT					
Euphorbiaceae									
<i>Chamaesyce maculata</i> (L.) Small*		CLE ¹⁴³			BAR		CRU	ANA	
<i>Chamaesyce serpens</i> (Kunth) Small*		CLE							
<i>Chamaesyce serpyllifolia</i> (Pers.) Small									
<i>Croton setigerus</i> Hook.		CLE		CAT		ROS	CRU		
<i>Euphorbia crenulata</i> Engelm.				CAT					
<i>Euphorbia misera</i> Benth.		CLE		CAT			CRU		
<i>Euphorbia pepplus</i> L.*		CLE		CAT		ROS	CRU		
<i>Euphorbia spathulata</i> Lam.		CLE		CAT					
<i>Ricinus communis</i> L.*		CLE	NIC	CAT					
<i>Stillingia linearifolia</i> S. Watson							CRU		
Fabaceae									
<i>Acacia cyclops</i> C. Don*		CLE? ¹⁴⁴							

¹³⁹RSA: FH. Elmore Feb 19 1939 422
¹⁴⁰BBG: M.B. Dunkle Jul 26 1939 8359
¹⁴¹SD: Darlev F Howe Feb 24 1968 4486
¹⁴²BBG: M.B. Dunkle Jul 31 1939 8402
¹⁴³RSA: Steven A. Junaak Nov 9 1990 SCI144
¹⁴⁴Pers. com. E. Howe

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Acacia decurrens</i> Willd. *				CAT					
<i>Acacia dealbata</i> Link. *							CRU		
<i>Acacia melanoxylon</i> R. Br. *				CAT			CRU		
<i>Acacia americanus</i> (Nutt.) Rydb. ¹⁴⁵	var. <i>americanus</i>			CAT			CRU		
<i>Acmispon argophyllus</i> (A. Gray) Brouillet	var. <i>adsurgens</i> (Dunkle)	CLE							
<i>Acmispon argophyllus</i> (A. Gray) Brouillet	var. <i>argenteus</i> (Dunkle)	CLE	NIC	CAT	BAR	ROS ¹⁴⁶	CRU		MIG ¹⁴⁷
<i>Acmispon argophyllus</i> (A. Gray) Brouillet	var. <i>niveus</i> (Greene)								
<i>Acmispon brachycarpus</i> (Benth.) D.D. Sokoloff ¹⁴⁸				CAT					
<i>Acmispon dendroideus</i> (Greene) Brouillet	var. <i>dendroideus</i>	CLE		CAT		ROS	CRU	ANA	
<i>Acmispon dendroideus</i> (Greene) Brouillet	var. <i>teutchii</i> (Greene) Brouillet								
<i>Acmispon dendroideus</i> (Greene) Brouillet	var. <i>traskiae</i> (Abrams) Brouillet	CLE							
<i>Acmispon grandiflorus</i> (Benth.) Brouillet	var. <i>grandiflorus</i>			CAT		ROS	CRU		
<i>Acmispon heermannii</i> (Durand & Hilg.) Brouillet				CAT					
<i>Acmispon maritimus</i> (Nutt.) D.D. Sokoloff ¹⁴⁹	var. <i>maritimus</i>		NIC	CAT		ROS	CRU	ANA	MIG
<i>Acmispon micranthus</i> (Torr. & A. Gray) Brouillet ¹⁵⁰		CLE		CAT		ROS	CRU		
<i>Acmispon parviflorus</i> (Benth.) D.D. Sokoloff ¹⁵¹							CRU		
<i>Acmispon strigosus</i> (Nutt.) Brouillet		CLE		CAT		ROS	CRU	ANA	MIG
<i>Acmispon urangelianus</i> (Fisch. & C.A. Mey.) D.D. Sokoloff ¹⁵²				CAT		ROS	CRU	ANA	MIG
<i>Albizia lophantha</i> (Willd.) Benth. *							CRU		
<i>Astragalus curtipes</i> A. Gray									
<i>Astragalus didymocarpus</i> Hook. & Arn.	var. <i>didymocarpus</i>	CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Astragalus gambelianus</i> E. Sheld.				CAT			CRU		
<i>Astragalus miguelensis</i> Greene		CLE				ROS	CRU	ANA	MIG
<i>Astragalus nevadii</i> A. Gray		CLE							
<i>Astragalus traskiae</i> Eastw.									
<i>Astragalus trichopodus</i> (Nutt.) A. Gray			NIC		BAR				
<i>Astragalus trichopodus</i> (Nutt.) A. Gray	var. <i>lonchus</i> (M.E. Jones) Barnely			CAT		ROS	CRU	ANA	
<i>Astragalus trichopodus</i> (Nutt.) A. Gray	var. <i>trichopodus</i>			CAT					
<i>Caesalpinia spinosa</i> (Molina) Kuntze *				CAT ¹⁵³					
<i>Coronilla valentina</i> L. *				CAT					
<i>Genista linifolia</i> L. *				CAT					
<i>Genista monspessulana</i> (L.) L.A.S. Johnson *				CAT					

¹⁴⁵Synonym: *Lotus purshianus* Clem. & E.G. Clem.
¹⁴⁶CAS: L.R. Abrams, L.L. Wiggins 30 June, 1931 239
¹⁴⁷DS: E.R. Blodley 3 April 1962 5081
¹⁴⁸Synonym: *Lotus humistratus* Greene; Wallace listed *L. humistratus* on Cruz, but NPS Park Flora did not
¹⁴⁹Synonym: *Lotus subnigrosus* Greene
¹⁵⁰Synonym: *Lotus hanatus* Greene
¹⁵¹Synonym: *Lotus micranthus* Benth.
¹⁵²Synonym: *Lotus urangelianus* Fisch. & C.A. Mey; *Lotus subpinnatus* Lag. misappl.
¹⁵³RSA: Tim Ross Apr 23 1993 6934

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Lathyrus odoratus</i> L.*		CLE ¹⁵⁴							
<i>Lathyrus tingitanus</i> L.*				CAT					
<i>Lathyrus vestitus</i> Nutt.	var. <i>alefeldii</i> (TG. White) Isley			CAT					
<i>Lathyrus vestitus</i> Nutt.	var. <i>vestitus</i>	CLE		CAT		ROS	CRU	ANA	
<i>Lotus corniculatus</i> L.*				CAT			CRU		
<i>Lupinus albiifrons</i> Benth.	var. <i>douglasii</i> (J. Agardh) C.P. Sm.		NIC	CAT		ROS	CRU	ANA	MIG
<i>Lupinus arboreus</i> Sims						ROS	CRU		MIG
<i>Lupinus bicolor</i> Lindl.		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Lupinus chamissonis</i> Eschsch.						ROS			MIG
<i>Lupinus concinnus</i> J. Agardh		CLE ¹⁵⁵		CAT		ROS	CRU		
<i>Lupinus guadalupensis</i> Greene		CLE							
<i>Lupinus hirsutissimus</i> Benth.		CLE		CAT		ROS	CRU	ANA	
<i>Lupinus microcarpus</i> Sims		CLE	NIC	CAT		ROS	CRU		MIG
<i>Lupinus succulentus</i> K. Koch						ROS	CRU	ANA	MIG
<i>Lupinus truncatus</i> Nutt.		CLE		CAT		ROS	CRU	ANA	
<i>Lupinus varicolor</i> Steud.									MIG
<i>Medicago polymorpha</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Medicago sativa</i> L.*		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Melilotus albus</i> Medik.*		CLE	NIC	CAT			CRU	ANA	
<i>Melilotus indicus</i> (L.) All.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Pickeringia montana</i> Nutt.	var. <i>montana</i>						CRU		
<i>Pisum sativum</i> L.*			NIC				CRU		
<i>Robinia pseudoacacia</i> L.*			NIC	CAT			CRU		
<i>Spartium junceum</i> L.*			NIC				CRU		
<i>Trifolium albopurpureum</i> Torr. & A. Gray			NIC ¹⁵⁶	CAT		ROS	CRU		MIG
<i>Trifolium barbigerrum</i> Torr.						ROS			
<i>Trifolium ciliolatum</i> Benth.				CAT		ROS	CRU		
<i>Trifolium depauperatum</i> Desv.	var. <i>amplectens</i> (Torr. & A. Gray) McDermott	CLE		CAT					
<i>Trifolium depauperatum</i> Desv.	var. <i>truncatum</i> (Greene) Isely	CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Trifolium fucatum</i> Lindl.		CLE		CAT		ROS	CRU	ANA	MIG
<i>Trifolium gracilentum</i> Torr. & A. Gray		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Trifolium hirtum</i> All.		CLE							
<i>Trifolium macraei</i> Hook. & Arn.		CLE	NIC	CAT		ROS	CRU		MIG
<i>Trifolium microcephalum</i> Pursh						ROS	CRU		
<i>Trifolium microdon</i> Hook. & Arn.		CLE						ANA	
<i>Trifolium palmeri</i> S. Watson		CLE	NIC	CAT	BAR			ANA	
<i>Trifolium repens</i> L.*			NIC	CAT					

¹⁵⁴IsD: Steven A. Junak May 19, 1997 SCL877
¹⁵⁵SBBG: M.R. Benedict Jun 26 1971
¹⁵⁶JEFS93564 (SN-546) det. var. *dichotomum* (= *T. dichotomum* in TJM2) by Michael Vincent in 2005.

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Trifolium variegatum</i> Nutt.	var. <i>major</i> Loja.	CLE ¹⁵⁷		CAT ¹⁵⁸	BAR	ROS	CRU	ANA	MIG
<i>Trifolium willdenotii</i> Spreng.							CRU		
<i>Vicia americana</i> Willd.							CRU		
<i>Vicia benghalensis</i> L. *							CRU		
<i>Vicia hassei</i> S. Watson							CRU		
<i>Vicia ludoviciana</i> Torr. & A. Gray	ssp. <i>ludoviciana</i> ssp. <i>nigra</i> (L.) Erhart ssp. <i>sativa</i> (Host) Corb. var. <i>agrifolia</i>	CLE ¹⁶⁰	NIC	CAT ¹⁶¹		ROS	CRU	ANA	MIG
<i>Vicia sativa</i> L. *							CRU		
<i>Vicia sativa</i> L. *							CRU		
<i>Vicia villosa</i> Roth							CRU		
<i>Quercus agrifolia</i> Née							CRU		
<i>Quercus chrysolepis</i> Liebm.	var. <i>parvula</i>	CLE		CAT		ROS	CRU	ANA	
<i>Quercus douglasii</i> Hook. & Arn.							CRU		
<i>Quercus engelmannii</i> Greene							CRU		
<i>Quercus kelloggii</i> Newb.							CRU		
<i>Quercus lobata</i> Née							CRU		
<i>Quercus xmacdonaldii</i> Greene	var. <i>parvula</i>	CLE		CAT		ROS	CRU	ANA	
<i>Quercus pacifica</i> Nixon & C.H. Mull.							CRU		
<i>Quercus parvula</i> Greene							CRU		
<i>Quercus tomentella</i> Engelm.							CRU		
<i>Quercus</i>							CRU		
Frankeniaceae	var. <i>parvula</i>	CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Frankenia salina</i> (Molina) I.M. Johnston.							CRU		
Garryaceae							CRU		
<i>Garrya veatchii</i> Kellogg							CRU		
Gentianaceae							CRU		
<i>Zeltnera darjii</i> (Jeps.) G. Mans.	var. <i>parvula</i>	CLE	NIC	CAT		ROS	CRU	ANA	
<i>Zeltnera venusta</i> (A. Gray) G. Mans.							CRU		
Geraniaceae							CRU		
<i>Californiella macrophylla</i> (Hook. & Arn.) J.J. Aldasoroet							CRU		
<i>Erodium botrys</i> (Cav.) Berol. *							CRU		
<i>Erodium brachycarpum</i> (Godr.) Thell. *	var. <i>parvula</i>	CLE ¹⁶⁵	NIC	CAT ¹⁶⁶	BAR	ROS	CRU	ANA	MIG
<i>Erodium cicutarium</i> (L.) Aiton *							CRU		
<i>Erodium moschatum</i> (L.) Aiton *							CRU		
							CRU		
							CRU		

¹⁵⁷IRSA: PH. Raven May 8 1962 17614
¹⁵⁸UC: FR. Fishberg Mar 25 1931 4367
¹⁵⁹BBG: PH. Raven May 20 1962 17789
¹⁶⁰UCR: Steve Boyd, T.S. Ross, L. Arnsch. Apr 7 1990 4260
¹⁶¹BBG: R.F. Thorne Mar 7 1966 35954
¹⁶²SD: Robert F. Thorne, D. Propst May 29, 1968 37691
¹⁶³GH: W.A. Wallace
¹⁶⁴BBG: S.A. Junak, K. Kirkland, L. Vorobik May 16 1998 SCA-697
¹⁶⁵BBG: T. Ross, O. Mistretta, M. Hammit May 18 1991 5191
¹⁶⁶BBG: S.A. Junak, M.L. Hoels, K. Kirkland Apr 5 1998 SCA-549

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Erodium texanum</i> A. Gray				CAT					
<i>Geranium carolinianum</i> L.				CAT		ROS	CRU		
<i>Geranium dissectum</i> L.*						ROS			
<i>Geranium molle</i> L.*							CRU		
<i>Pelargonium ×hortorum</i> L.H. Bailey*		CLE ¹⁶⁷	NIC	CAT		ROS	CRU		MIG ¹⁶⁸
<i>Pelargonium peltatum</i> (L.) L'Her.*			NIC						
Grossulariaceae									
<i>Ribes malvaceum</i> Sm.	var. <i>malvaceum</i>	CLE				ROS	CRU	ANA	
<i>Ribes viburnifolium</i> A. Gray				CAT					
<i>Ribes thacherianum</i> (Jeps.) Munz							CRU		
Juglandaceae									
<i>Juglans californica</i> S. Watson*				CAT			CRU		
<i>Juglans regia</i> L.*									
Lamiaceae									
<i>Clinopodium douglasii</i> (Benth.) Kuntze				CAT		ROS	CRU		
<i>Lamium amplexicaule</i> L.*							CRU		
<i>Lepechinia fragrans</i> (Greene) Epling				CAT		ROS	CRU		
<i>Marrubium vulgare</i> L.*		CLE	NIC	CAT		ROS	CRU		MIG
<i>Mentha aquatica</i> L.*				CAT					
<i>Mentha spicata</i> L.*				CAT			CRU		
<i>Nepeta cataria</i> L.*				CAT					
<i>Salvia apiana</i> Jeps.				CAT					
<i>Salvia brandegeei</i> Munz						ROS			
<i>Salvia columbariae</i> Benth.		CLE		CAT		ROS	CRU		
<i>Salvia leucophylla</i> Greene							CRU		
<i>Salvia mellifera</i> Greene		CLE? ¹⁶⁹		CAT			CRU	ANA	
<i>Scutellaria tuberosa</i> Benth.						ROS	CRU		MIG
<i>Stachys ajugoides</i> Benth.									
<i>Stachys bullata</i> Benth.						ROS	CRU	ANA	
<i>Trichostema lanceolatum</i> Benth.				CAT					
Linaceae									
<i>Hesperaloe micranthum</i> (A. Gray) Small				CAT					
Loasaceae									
<i>Mentzelia affinis</i> Greene									
<i>Mentzelia micrantha</i> (Hook. & Arn.) Torr. & A.		CLE	NIC	CAT		ROS	CRU		
Lythraceae		CLE		CAT			CRU		
<i>Ammannia robusta</i> Heer & Regel				CAT					

¹⁶⁷SBBG: T. Ross May 22 1991 5435
¹⁶⁸SBBG: R.N. Philbrick Mar 25 1966 B66-91
¹⁶⁹Pers. com. E. Howe

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Lythrum californicum</i> Torr. & A. Gray							CRU		
<i>Lythrum hyssopifolia</i> L.*		CLE	NIC	CAT ¹⁷⁰		ROS	CRU		
Malvaceae									
<i>Alcea rosea</i> L.*				CAT			CRU		
<i>Eremalche exilis</i> (A. Gray) Greene		CLE		CAT			CRU		
<i>Lavatera assurgentiflora</i>	ssp. <i>assurgentiflora</i>	CLE*	NIC*			ROS	CRU	ANA	MIG
<i>Lavatera assurgentiflora</i>	ssp. <i>glabra</i> (Munz & I.M. Johnston) Kearney	CLE		CAT			CRU*		
<i>Malacothamnus clementinus</i>	var. <i>catalinensis</i> (Eastw.) Kearney	CLE		CAT					
<i>Malacothamnus fasciculatus</i> (Torr. & A. Gray) Greene	var. <i>nesioficus</i> (B.L. Rob.) Kearney						CRU		
<i>Malacothamnus fasciculatus</i> (Torr. & A. Gray) Greene		CLE ¹⁷¹				ROS		ANA	
<i>Malva pseudolavatera</i> Webb & Berthel.*						ROS	CRU		
<i>Malva nicaeensis</i> All.*						ROS	CRU		
<i>Malva parviflora</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Malvella leprosa</i> (Ortega) Krapov.		CLE		CAT		ROS	CRU	ANA	
<i>Sidalcea multiflora</i> (DC.) A. Gray	ssp. <i>multiflora</i>					ROS	CRU		MIG
Montiaceae									
<i>Calandrinia breweri</i> S. Watson						ROS	CRU		
<i>Calandrinia ciliata</i> Fisch. & C.A. Mey.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Cistanthe maritima</i> (Nutt.) Hershk.		CLE		CAT	BAR	ROS	CRU	ANA	
<i>Claytonia parviflora</i> Hook.	ssp. <i>parviflora</i>		NIC	CAT ¹⁷²	BAR		CRU		MIG
<i>Claytonia perfoliata</i> Willd.	ssp. <i>mexicana</i> (Rydb.) John M. Mill. & K.L. Chambers	CLE ¹⁷³	NIC	CAT ¹⁷⁴	BAR	ROS	CRU	ANA	MIG
<i>Claytonia perfoliata</i> Willd.	ssp. <i>perfoliata</i>	CLE		CAT		ROS	CRU		
<i>Montia fontana</i> L.				CAT			CRU		
Moraceae									
<i>Ficus carica</i> L.*		CLE ¹⁷⁵		CAT			CRU		MIG
Myrsinaceae									
<i>Anagallis arvensis</i> L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Anagallis minima</i> (L.) E.H.L. Krause						ROS			
Myrtaceae									
<i>Eucalyptus camaldulensis</i> Dehnh.*				CAT ¹⁷⁶		ROS	CRU		
<i>Eucalyptus cladocalyx</i> F. Muell.*				CAT ¹⁷⁷					
<i>Eucalyptus globulus</i> Labill.*		CLE		CAT	BAR	ROS	CRU	ANA	

¹⁷⁰BSA: Mark Hofs; Steven A. Junak, Janet Takara, M. Gay Jul 14 1995 2401
¹⁷¹SD: Steven A. Junak Apr 23, 1997 SCI858
¹⁷²BBG: S.A. Junak, K. Kirkland Apr 13 2001 SCA-1421
¹⁷³BBG: Tim Ross, Orlando Mistretta, Mike Hammitt May 19 1991 5286
¹⁷⁴BBG: E.R. Blackley Apr 7 1963 5537
¹⁷⁵BBG: S.A. Junak May 20 1996
¹⁷⁶UCR: T.S. Ross Apr 23 1993 6926
¹⁷⁷UCR: O.F. Clarke Feb 25 1968 s.n.

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Eucalyptus polyanthemos</i> Schauer* <i>Eucalyptus sideroxylon</i> Woolls* <i>Eucalyptus tereticornis</i> Sm. *				CAT ¹⁷⁸		ROS	CRU CRU		
Nyctaginaceae									
<i>Abronia latifolia</i> Eschsch. <i>Abronia maritima</i> S. Watson <i>Abronia umbellata</i> Lam. <i>Mirabilis laevis</i> (Benth.) Curran		CLE CLE CLE var. <i>crassifolia</i> (Choisy) Spellentb.	NIC NIC NIC	CAT CAT CAT		ROS ROS ROS	CRU CRU CRU	ANA ANA ANA	MIG MIG MIG
Oleaceae									
<i>Olea europaea</i> L.*					BAR		CRU	ANA	
Onagraceae									
<i>Camissonia strigulosa</i> (Fisch. & C.A. Mey.) P.H. Raven <i>Camissoniopsis cheiranthifolia</i> (Spreng.) W.L. Wagner & Hoch		CLE	NIC		BAR	ROS ROS	CRU		MIG
<i>Camissoniopsis cheiranthifolia</i> (Spreng.) W.L. Wagner & Hoch	ssp. <i>suffruticosa</i> (S. Watson) W.L. Wagner & Hoch		NIC						
<i>Camissoniopsis guadalupensis</i> (S. Watson) W.L. Wagner & Hoch	ssp. <i>clementina</i> (P.H. Raven) W.L. Wagner & Hoch	CLE					CRU		
<i>Camissoniopsis hirtella</i> (Greene) W.L. Wagner & Hoch									
<i>Camissoniopsis ignota</i> (Jeps.) W.L. Wagner & Hoch <i>Camissoniopsis intermedia</i> (P.H. Raven) W.L. Wagner & Hoch				CAT		ROS	CRU CRU		MIG
<i>Camissoniopsis micrantha</i> (Spreng.) W.L. Wagner & Hoch		CLE		CAT		ROS	CRU	ANA	MIG
<i>Camissoniopsis robusta</i> (P.H. Raven) W.L. Wagner & Hoch		CLE		CAT			CRU		MIG
<i>Clarkia davisii</i> (Jeps.) H. Lewis & M. Lewis <i>Clarkia epilobioides</i> (Torr. & A. Gray) A. Nelson & J.F. <i>Clarkia prostrata</i> H. Lewis & M. Lewis		CLE		CAT		ROS ROS	CRU CRU	ANA	
<i>Clarkia purpurea</i> (Curtis) A. Nelson & J.F. Macbr. <i>Clarkia unguiculata</i> Lindl. <i>Epilobium brachycarpum</i> C. Presl	ssp. <i>quadrivulnera</i> (Lindl.) H. Lewis & M. Lewis			CAT		ROS	CRU		
<i>Epilobium canum</i> (Greene) P.H. Raven ¹⁸⁰ <i>Epilobium canum</i> (Greene) P.H. Raven		CLE? ¹⁷⁹		CAT			CRU CRU		
	ssp. <i>angustifolium</i> ssp. <i>canum</i>	CLE		CAT ¹⁸¹ CAT		ROS	CRU CRU	ANA ANA	MIG

¹⁷⁸UCR: T.S. Ross, Janet Takara, Stacey Otte Apr 24 1993 6964

¹⁷⁹Pers. com. E. Howe

¹⁸⁰This taxa unresolved

¹⁸¹SDSU: R.M. Beauchamp August 8, 1966 54

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Epilobium ciliatum</i> Raf.	ssp. <i>ciliatum</i>			CAT			CRU		MIG
<i>Eulobus californicus</i> Torr. & A. Gray	ssp. <i>ciliatum</i>			CAT		ROS	CRU		
<i>Ludwigia peploides</i> (Kunth) P.H. Raven	ssp. <i>peploides</i>						CRU		
<i>Oenothera oenogaura</i> W.L. Wagner & Hoch*							CRU		
<i>Oenothera sinuosa</i> W.L. Wagner & Hoch*	ssp. <i>hirsutissima</i> (S. Watson) W. Dietr.			CAT			CRU		
<i>Oenothera elata</i> Kunth.									
Orobanchaceae									
<i>Castilleja affinis</i> Hook. & Arn.	ssp. <i>affinis</i>			CAT		ROS	CRU	ANA	MIG
<i>Castilleja attenuata</i> (A. Gray) T.I. Chuang & Heckard							CRU		
<i>Castilleja densiflora</i> (Benth.) T.I. Chuang & Heckard			NIC			ROS	CRU		MIG
<i>Castilleja exserta</i> (A. Heller) T.I. Chuang & Heckard				CAT		ROS	CRU		MIG
<i>Castilleja foliolosa</i> Hook. & Arn.				CAT					
<i>Castilleja grisea</i> Dunkle		CLE							
<i>Castilleja hololeuca</i> Greene						ROS	CRU	ANA	MIG
<i>Castilleja mollis</i> Pennell						ROS			MIG
<i>Kopsiopsis strobilacea</i> (A. Gray) Beck						ROS			
<i>Orobanche bulbosa</i> Beck				CAT		ROS	CRU		
<i>Orobanche californica</i> Cham. & Schltdl.	ssp. <i>grandis</i> Heckard					ROS			
<i>Orobanche fasciculata</i> Nutt.		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Orobanche parishii</i> (Jeps.) Heckard	ssp. <i>brachyloba</i> Heckard		NIC	CAT		ROS	CRU		MIG
<i>Orobanche uniflora</i> L.		CLE? ¹⁸²					CRU		
Oxalidaceae									
<i>Oxalis articulata</i> Savigny*	ssp. <i>rubra</i> (A. St.-Hil.) Lourteig			CAT		ROS	CRU		
<i>Oxalis californica</i> (Abrams) R. Knuth									
<i>Oxalis corniculata</i> L.*		CLE ¹⁸³	NIC	CAT		ROS	CRU		
<i>Oxalis pes-caprae</i> L.*		CLE	NIC	CAT			CRU		
Papaveraceae									
<i>Dendromecon harfordii</i> Kellogg		CLE		CAT		ROS	CRU		
<i>Ehrendorferia ochroleuca</i> (Engelm.) Fukuhara							CRU		
<i>Eschscholzia californica</i> Cham.		CLE ¹⁸⁴	NIC	CAT		ROS	CRU		MIG
<i>Eschscholzia ramosa</i> (Greene) Greene		CLE	NIC	CAT	BAR	ROS	CRU		
<i>Meconella denticulata</i> Greene							CRU		
<i>Papaver californicum</i> A. Gray						ROS	CRU		
<i>Papaver heterophyllum</i> (Benth.) Greene		CLE		CAT	BAR	ROS	CRU	ANA	MIG
<i>Papaver somniferum</i> L.*				CAT			CRU		
<i>Platystemon californicus</i> Benth.			NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Romneya coulteri</i> Harv.*				CAT					

¹⁸²Pers. com. E. Howe
¹⁸³IPSA: Steven A. Junak May 14 1985 SC1-56
¹⁸⁴IPSA: M.B. Dunkle May 27 1928 1983

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Phrymaceae									
<i>Minulus aurantiacus</i> Curtis	var. <i>aurantiacus</i>			CAT ¹⁸⁵					
<i>Minulus aurantiacus</i> Curtis	var. <i>parviflorus</i> (Greene) D.M. Thomps.	CLE				ROS	CRU	ANA	
<i>Minulus aurantiacus</i> Curtis	var. <i>pubescens</i> (Torr.) D.M. Thomps.					ROS	CRU		
<i>Minulus aurantiacus</i> Curtis	var. <i>puniceus</i> (Nutt.) D.M. Thomps.			CAT					
<i>Minulus carolinadis</i> Benth.				CAT			CRU		
<i>Minulus floribundus</i> Lindl.		CLE ¹⁸⁶		CAT		ROS			
<i>Minulus guttatus</i> DC.		CLE		CAT		ROS	CRU		
<i>Minulus latifolius</i> A. Gray				CAT ¹⁸⁷			CRU		
<i>Minulus traskiae</i> A.L. Grant				CAT					
Pittosporaceae									
<i>Pittosporum undulatum</i> Vent. *				CAT ¹⁸⁸					
Plantaginaceae									
<i>Antirrhinum kelloggii</i> Greene				CAT			CRU		
<i>Antirrhinum multiflorum</i> Pennell							CRU		
<i>Antirrhinum nuttallianum</i> A. DC.	ssp. <i>subsessile</i> (A. Gray) D.M. Thomps.	CLE		CAT		ROS	CRU	ANA	MIG
<i>Callitriche marginata</i> Torr.		CLE		CAT					
<i>Collinsia heterophylla</i> Graham		CLE			BAR	ROS			
<i>Gambelia speciosa</i> Nutt.		CLE		CAT					
<i>Keckiella cordifolia</i> (Benth.) Straw		CLE		CAT		ROS	CRU	ANA	
<i>Kickxia elatine</i> (L.) Dumort. *				CAT ¹⁸⁹					
<i>Linaria bipartita</i> (Vent.) Willd. *				CAT					
<i>Nuttallanthus texanus</i> (Scheele)		CLE		CAT		ROS	CRU	ANA	MIG
D.A. Sutton									
<i>Veronica anagallis-aquatica</i> L. *							CRU		
<i>Plantago coronopus</i> L. *			NIC	CAT				ANA	MIG
<i>Plantago elongata</i> Pursh						ROS	CRU		MIG
<i>Plantago erecta</i> E. Morris		CLE		CAT		ROS	CRU	ANA	
<i>Plantago lanceolata</i> L. *		CLE		CAT ¹⁹⁰			CRU		MIG
<i>Plantago major</i> L. *			NIC	CAT			CRU		
<i>Plantago maritima</i> L.						ROS			
<i>Plantago ovata</i> Forsk.	var. <i>insularis</i> (Eastw.) S.C. Meyers & A. Liston	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Plantago subnuda</i> Pilg. *						ROS	CRU		
Plantanaceae									
<i>Platanus racemosa</i> Nutt.				CAT*			CRU		

¹⁸⁵OBI: John Knapp, Denise Knapp, 7, April 13, 2003
¹⁸⁶BBG: S. Boyd, T. Ross, L. Arnsdeth Apr 8 1990 4291
¹⁸⁷Dave M. Thompson 2012, *Minulus*, in Jepson Flora Project (eds.) Jepson eFlora, accessed on May 7 2014
¹⁸⁸GH: R.F. Thorne & A.D. Probst 1974-09-12 45100
¹⁸⁹BBG: M.L. Hoefs, R.F. Thorne, J. Takara Jul 25 1995 2438
¹⁹⁰BBG: M.L. Hoefs, R.F. Thorne Apr 6 1996 2671

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Plumbaginaceae									
<i>Armeria maritima</i> (Mill.) Willd.	ssp. <i>californica</i> (Boiss.) A.E. Porsild	CLE [?] 191				ROS			
<i>Limnium californicum</i> (Boiss.) A. Heller*									
<i>Limnium peresii</i> (Stapf) F.T. Hubb. *		CLE		CAT					
<i>Limnium sinuatum</i> (L.) Mill. *				CAT				ANA &	MIG &
Polemoniaceae									
<i>Allophyllum glutinosum</i> (Benth.) A.D. Grant & V.E. Grant		CLE		CAT			CRU		
<i>Eriastrum filifolium</i> (Nutt.) Wooton & Standl.									
<i>Gilia achilleifolia</i> Benth.	ssp. <i>multicaulis</i> (Benth.) V.E. Grant & A.D. Grant	CLE		CAT		ROS	CRU		
<i>Gilia engelensis</i> V.E. Grant				CAT			CRU		
<i>Gilia capitata</i> Sims	ssp. <i>abrotanifolia</i> (Greene) V.E. Grant								
<i>Gilia clivorum</i> (Jeps.) V.E. Grant		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Gilia nevadensis</i> A. Gray				CAT	BAR	ROS	CRU	ANA	
<i>Gilia tenuiflora</i> Benth.	ssp. <i>hoffmannii</i> (Eastw.) A.D. Grant & V.E. Grant					ROS			
<i>Leptosiphon bicolor</i> Nutt.		CLE		CAT					
<i>Leptosiphon parviflorus</i> Benth.						ROS	CRU		MIG
<i>Leptosiphon pygmaeus</i> (Brand) J.M. Porter & L.A. Johnson	ssp. <i>pygmaeus</i>	CLE							
<i>Linanthus dianthiflorus</i> (Benth.) Greene				CAT			CRU		
<i>Navarretia atractyloloides</i> (Benth.) Hook. & Arn.		CLE		CAT		ROS	CRU		
<i>Navarretia hamata</i> Greene	ssp. <i>leptantha</i> (Greene) H. Mason	CLE		CAT					
Polygalaceae									
<i>Polygala californica</i> Nutt.							CRU		
<i>Chorizanthe staticoides</i> Benth.				CAT					
<i>Chorizanthe wheeleri</i> S. Watson						ROS	CRU		
<i>Eriogonum arborescens</i> Greene						ROS	CRU	ANA	
<i>Eriogonum chinereum</i> Benth.			NIC ^{192*}			ROS			
<i>Eriogonum fasciculatum</i> Benth. *	var. <i>fasciculatum</i>			CAT ¹⁹³					
<i>Eriogonum fasciculatum</i> Benth. *	var. <i>polifolium</i> (Benth.) Torr. & A. Gray		NIC						
<i>Eriogonum giganteum</i> S. Watson	var. <i>compactum</i> Dunkle				BAR				
<i>Eriogonum giganteum</i> S. Watson	var. <i>formosum</i> K. Brandegee	CLE							
<i>Eriogonum giganteum</i> S. Watson	var. <i>giganteum</i>			CAT			CRU*		
<i>Eriogonum grande</i> Greene	var. <i>grande</i>	CLE		CAT		ROS	CRU	ANA	

191Pers. com. E. Howe
192SBBG; S.A. Junak, T. Murphrey, SN-432, Feb 21, 1990
193JISC; R.F. Thorne, D. Propst, M. Haefs Sep 12 1974 45110

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Eriogonum grande</i> Greene	var. <i>rubescens</i> (Greene) Munz					ROS	CRU	ANA	MIG
<i>Eriogonum grande</i> Greene	var. <i>tinorum</i> Reveal		NIC	CAT		ROS	CRU		
<i>Lastarriaea coriacea</i> (Goodman) Hoover							CRU		
<i>Persicaria lapathifolia</i> (L.) Gray							CRU		
<i>Polygonum argyrocoleon</i> Kunze*		CLE	NIC	CAT			CRU		
<i>Polygonum aviculare</i> L.*	ssp. <i>depressum</i> (Meisn.) Arcang.	CLE	NIC	CAT		ROS	CRU	ANA	
<i>Pterostegia drymarioides</i>	Fisch. & C.A. Mey.	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Rumex acetosella</i> L.*		CLE ¹⁹⁴		CAT		ROS	CRU		
<i>Rumex conglomeratus</i> Murray*		CLE	NIC	CAT		ROS	CRU	ANA	MIG
<i>Rumex crispus</i> L.*		CLE	NIC	CAT					MIG
<i>Rumex fueginus</i> Phil.			NIC	CAT					
<i>Rumex obtusifolius</i> L.*							CRU		
<i>Rumex pulcher</i> L.*							CRU		
<i>Rumex salicifolius</i> Weimm.		CLE	NIC	CAT		ROS	CRU		MIG
Portulacaceae									
<i>Portulaca oleracea</i> L.*				CAT			CRU		
Primulaceae									
<i>Dodecatheon cleveandtii</i> Greene	ssp. <i>insulare</i> H.J. Thomps.	CLE	NIC	CAT		ROS	CRU	ANA	MIG
Ranunculaceae									
<i>Clematis lasiantha</i> Nutt.							CRU		
<i>Clematis ligusticifolia</i> Nutt.				CAT		ROS	CRU		
<i>Clematis pauciflora</i> Nutt.							CRU		
<i>Delphinium parryi</i> A. Gray	ssp. <i>maritimum</i> (Davidson) M.J. Warnock			CAT		ROS	CRU	ANA	MIG
<i>Delphinium parryi</i> A. Gray	ssp. <i>parryi</i>			CAT			CRU		
<i>Delphinium variegatum</i> Torr. & A. Gray	ssp. <i>kinikense</i> (Munz) M.J. Warnock	CLE							
<i>Delphinium variegatum</i> Torr. & A. Gray	ssp. <i>thornei</i> Munz	CLE							
<i>Delphinium variegatum</i> Torr. & A. Gray				CAT		ROS	CRU		MIG
<i>Ranunculus californicus</i> Benth.				CAT					
<i>Ranunculus hebecarpus</i> Hook. & Arn.									
Resedaceae									
<i>Oligomeris linifolia</i> (Homem.) J.F. Macbr.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Reseda odorata</i> L.*				CAT					
Rhamnaceae									
<i>Ceanothus arboreus</i> Greene				CAT		ROS	CRU		
<i>Ceanothus megacarpus</i> Nutt.	var. <i>insularis</i> (Eastw.) Munz	CLE		CAT		ROS	CRU	ANA	MIG&
<i>Ceanothus megacarpus</i> Nutt.	var. <i>megacarpus</i>	CLE		CAT			CRU		
<i>Frangula californica</i> (Eschsch.) A. Gray	ssp. <i>californica</i>						CRU		MIG&
<i>Rhamnus pirifolia</i> Greene		CLE		CAT		ROS	CRU		
Rosaceae									
<i>Adenostoma fasciculatum</i> Hook. & Arn.	var. <i>fasciculatum</i>	CLE		CAT		ROS	CRU		

¹⁹⁴SD: Steven A. Junak May 18, 1996 SCI488a

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Adenostoma fasciculatum</i> Hook. & Arn.									
<i>Aphanes occidentalis</i> (Nutt.) Rydb.	var. <i>prostratum</i> Dunkle			CAT		ROS	CRU		
<i>Cercocarpus betuloides</i> Nutt.	var. <i>betuloides</i>	CLE		CAT		ROS	CRU		
<i>Cercocarpus betuloides</i> Nutt.	var. <i>blanchetiae</i> (C.K. Schneid.) Little			CAT		ROS	CRU		
<i>Cercocarpus traskiae</i> Eastw.				CAT					
<i>Drymocalis glandulosa</i> (Lindl.) Rydb. ¹⁹⁵				CAT					
<i>Heteromeles arbutifolia</i> (Lindl.) M. Roem.		CLE		CAT		ROS	CRU	ANA	MIG
<i>Holodiscus discolor</i> (Pursh) Maxim.				CAT			CRU		
<i>Lyonothamnus floribundus</i> A. Gray	ssp. <i>asplenifolius</i> (Greene) P.H. Raven	CLE		CAT		ROS	CRU		
<i>Lyonothamnus floribundus</i> A. Gray	ssp. <i>floribundus</i>			CAT					
<i>Potentilla anserina</i> L.	ssp. <i>paeifica</i> (Howell) Rousi						CRU		MIG
<i>Poterium sanguisorba</i> L.*				CAT ¹⁹⁶					
<i>Prunus ilicifolia</i> (Hook. & Arn.) D. Dietr.	ssp. <i>lyonii</i> (Eastw.) P.H. Raven	CLE		CAT		ROS	CRU	ANA	
<i>Rosa californica</i> Cham. & Schltdl.				CAT		ROS	CRU		
<i>Rubus ursinus</i> Cham. & Schltdl.				CAT		ROS	CRU		MIG
Rubiaceae									
<i>Galium angustifolium</i> subsp.	ssp. <i>foliosum</i> (Hilend & J.T. Howell)					ROS	CRU	ANA	
	Dempster & Stebbins								
<i>Galium angustifolium</i> A. Gray	ssp. <i>angustifolium</i>	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Galium aparine</i> L.				CAT			CRU		MIG
<i>Galium buxifolium</i> Greene									
<i>Galium californicum</i> Hook. & Arn.	ssp. <i>flaccidum</i> (Greene) Dempster & Stebbins								
<i>Galium californicum</i> Hook. & Arn.	ssp. <i>miguelense</i> (Greene)					ROS			MIG
	Dempster & Stebbins								
<i>Galium catalinense</i> A. Gray	ssp. <i>acrispum</i> Dempster	CLE							
<i>Galium catalinense</i> A. Gray	ssp. <i>catalinense</i>			CAT					
<i>Galium nuttallii</i> A. Gray	ssp. <i>insulare</i> Ferris			CAT		ROS	CRU		
<i>Galium parisiense</i> L.*				CAT ¹⁹⁷		ROS			
<i>Galium porrigens</i> Dempster	var. <i>porrigens</i>			CAT		ROS	CRU		
Rutaceae									
<i>Ruta chalepensis</i> L.*				CAT					
Salicaceae									
<i>Populus fremontii</i> S. Watson				CAT			CRU		
<i>Populus trichocarpa</i> Hook.	ssp. <i>fremontii</i>			CAT		ROS			
<i>Salix exigua</i> Nutt.			NIC				CRU		
<i>Salix gooddingii</i> C.R. Ball		CLE							
<i>Salix laevigata</i> Bebb				CAT			CRU		

¹⁹⁵Synonym: *Potentilla glandulosa* Lindl.
¹⁹⁶J.C. Tim Ross, 6923, Apr 22, 1993
¹⁹⁷SBBC: S.A. Junak, M.L. Hoefs, K. Kirkland Jul 17, 1998 SCA-769

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Salix lasiandra</i> Benth.	var. <i>lasiandra</i>	CLE? ¹⁹⁸	NIC	CAT		ROS	CRU	ANA	MIG
<i>Salix lasiolepis</i> Benth.							CRU		
Sapindaceae							CRU		
<i>Acer macrophyllum</i> Pursh							CRU		
Saxifragaceae									
<i>Heuchera maxima</i> Greene						ROS	CRU	ANA	
<i>Jepsonia malvifolia</i> (Greene) Small		CLE	NIC	CAT		ROS	CRU		
<i>Lithophragma affine</i> A. Gray				CAT					
<i>Lithophragma cymbalaria</i> Torr. & A. Gray						ROS	CRU		
<i>Lithophragma maximum</i> Baccig.		CLE							
<i>Micranthes californica</i> (Greene) Small ¹⁹⁹		CLE ²⁰⁰				ROS	CRU		
Scrophulariaceae									
<i>Myoporum laetum</i> G. Forst. *		CLE ²⁰¹	NIC			ROS	CRU&		
<i>Scrophularia californica</i>									
Cham. & Schltdl.									
<i>Scrophularia villosa</i> Pennell		CLE		CAT			CRU		
<i>Verbascum thapsus</i> L. *									
Solanaceae									
<i>Datura wrightii</i> Regel		CLE? ^{202*}		CAT		ROS	CRU		
<i>Lycium brevipes</i> Benth.		CLE	NIC	CAT&					
<i>Lycium californicum</i> Nutt.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Lycium fremontii</i> A. Gray									
<i>Lycium verrucosum</i> Eastw.			NIC&						
<i>Lycopersicon esculentum</i> Mill. *		CLE? ²⁰³	NIC	CAT ²⁰⁴	BAR&		CRU	ANA&	MIG&
<i>Nicotiana clevelandii</i> A. Gray				CAT ²⁰⁵	BAR		CRU	ANA	
<i>Nicotiana glauca</i> Graham *		CLE? ²⁰⁶	NIC	CAT			CRU		
<i>Nicotiana quadrivalvis</i> Pursh				CAT ²⁰⁷					
<i>Petunia parviflora</i> Juss.						ROS			
<i>Solanum americanum</i> Mill. *		CLE ²⁰⁸	NIC			ROS ²⁰⁹		ANA	
<i>Solanum douglasii</i> Dunal		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG

¹⁹⁸Pers. com. E. Howe
¹⁹⁹Synonym: *Stafraga californica* Greene
²⁰⁰SBBG: S.A. Junak Mar 13 1997 SCI-770
²⁰¹SBBG: S.A. Junak Jul 31 1981 SCI-53
²⁰²Pers. com. E. Howe
²⁰³Pers. com. E. Howe
²⁰⁴USA: R.F. Thorne, 47381, Sep 4 1975
²⁰⁵USA: Blanche Trask Mar 1901 s.n.
²⁰⁶Pers. com. E. Howe
²⁰⁷SD: Robert F. Thorne, P. Everett, 34883, Jun 22, 1965
²⁰⁸SBBG: H.L. Ferguson, R.M. Beauchamp Sep 15 1979
²⁰⁹SBBG: S.A. Junak Sep 22 1998 SR-896

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Solanum elaeagnifolium</i> Cav.*									
<i>Solanum wallacei</i> (A. Gray) Parish				CAT		ROS	CRU		
Tamaricaceae				CAT		ROS	CRU		
<i>Tamarix aphylla</i> (L.) H. Karst.*						ROS			
<i>Tamarix chinensis</i> Lour.*		CLE? ²¹⁰							
<i>Tamarix parviflora</i> DC.*				CAT ²¹¹				ANA	
<i>Tamarix ramosissima</i> Ledeb.*		CLE	NIC			ROS	CRU		MIG
Theophrastaceae									
<i>Samolus parviflorus</i> Raf.							CRU		
Tropaeolaceae									
<i>Tropaeolum majus</i> L.*		CLE ²¹²		CAT	BAR&				
Ulmaceae									
<i>Ulmus xhollandica</i> Mill.*							CRU		
Urticaceae									
<i>Hesperocnide tenella</i> Torr.		CLE		CAT	BAR	ROS	CRU		
<i>Parietaria hespera</i> Hinton		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
<i>Soleirolia soleirolii</i> (Req.) Dandy.*			NIC						
<i>Urtica dioica</i> L.	ssp. <i>holosericea</i> (Nutt.) Thorne			CAT		ROS	CRU	ANA	
<i>Urtica urens</i> L.*				CAT		ROS	CRU		MIG
Valerianaceae									
<i>Centranthus ruber</i> (L.) DC.*				CAT			CRU		
<i>Plectritis ciliosa</i> (Greene) Jeps.							CRU		
Verbenaceae									
<i>Phyla nodiflora</i> (L.) Greene*		CLE ²¹³		CAT			CRU ²¹⁴		
<i>Verbena bracteata</i> Lag. & Rodr.		CLE ²¹⁵		CAT		ROS			
<i>Verbena lasiostachys</i> Link	var. <i>lasiostachys</i>	CLE	NIC	CAT					
<i>Verbena lasiostachys</i> Link	var. <i>scabrida</i> Moldenke			CAT		ROS	CRU		MIG
Violaceae									
<i>Viola pedunculata</i> Torr. & A. Gray		CLE		CAT		ROS	CRU		
Vitaceae									
<i>Vitis girdiana</i> Munson				CAT					
Zygophyllaceae									
<i>Tribulus terrestris</i> L.*				CAT ²¹⁶					
NUMBER OF SPECIES		436	279	633	150	519	662	271	296

²¹⁰Pers. com. E. Howe
²¹¹IRSA: R.E. Thorne, 45759, Mar 22 1975
²¹²UCR: T.S. Ross, 5434, May 22 1991
²¹³BBG: H.L. Ferguson Mar 12 1981 234
²¹⁴BBG: S.A. Junak, R.N. Philbrick, M.C. Hochberg, SC-63, May 9 1979
²¹⁵IRSA: E. Kellogg Jun 28 1992 s.n.
²¹⁶BBG: S.A. Junak, K. Kirkland, M. Bushman Oct 21 1998 SC-815