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

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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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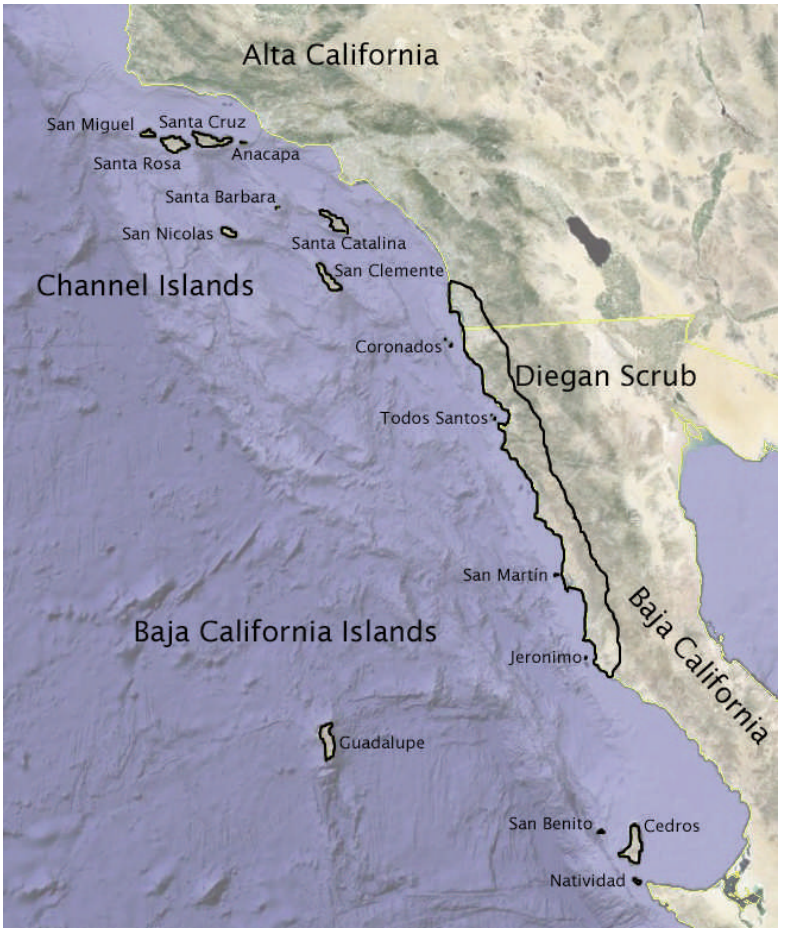

Fig. 1. California Channel and Baja California Pacific Islands with Diegan Scrub as defined by Axelrod (1978). Map by B.T. Wilder, adapted from Google Earth™ imagery.

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

[a]Natividad [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 subpatterns:

(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 paleoendemics 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], Jeronimo [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									
Polystichum munitum (Kaulf.) C. Presl						GUA			
Polypodiaceae									
Polypodium californicum Kaulf.		COR	TOS			GUA			
Polypodium scouleri Hook. & Grev.						GUA			
Pteridaceae									
Adiantum capillus-veneris L.								CED	
Cheilanthes brandegeei D.C. Eaton								CED	
Pteridaceae									
Cheilanthes newberryi Domin						GUA			
Notholaena californica D.C. Eaton	ssp. *californica*					GUA		CED	
Notholaena californica D.C. Eaton	ssp. *leucophylla* Windham							CED	
Pellaea andromedifolia (Kaulf.) Fee		COR						CED	
Pellaea mucronata D.C. Eaton	var. *mucronata*					GUA			
Pentagramma triangularis (Kaulf.) Yatskievych et al.	ssp. *triangularis*	COR				GUA		CED	
Pentagramma triangularis (Kaulf.) Yatskievych et al.	ssp. *maxonii* (Weath.) Yatsk., Windham & E.Wollenw.					GUA		CED?	
Pentagramma triangularis (Kaulf.) Yatskievych et al	ssp. *viscosa* (D.C. Eaton) Yatsk., Windham, & E. Wollenw.					GUA			
Pentagramma triangularis (Kaulf.) Yatskievych et al	ssp. *semipallida* (J.T. Howell) Yatsk., Windham & E. Wollenw.					GUA			
Gymnosperms									
Cupressaceae									
Hesperocyparis guadalupensis (S. Watson) Bartel[1]						GUA			
Juniperus californica Carrière						GUA		CED	
Ephedraceae									
Ephedra aspera S. Watson								CED	
Pinaceae									
Pinus radiata D. Don	var. *binata* (Engelm.) Lemmon					GUA			
Pinus radiata D. Don	var. *cedrosensis* (J.T. Howell) Axelrod							CED	
Monocots									
Arecaceae									
Brahea edulis H. Wendl. ex S. Watson						GUA			

[1]Synonym: *Cupressus guadalupensis* S. Watson

APPENDIX 1. Continued

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

[2]Report confirmed, herbarium specimen @ SD
[3]New record; herbarium specimen @ RSA, SD
[4]New record; herbarium specimen @ RSA, SD
[5]Synonym: *Monanthochloe littoralis* Englem.
[6]Synonym: *Leymus condensatus* (J. Presl) Á. Löve
[7]Synonym: *Vulpia bromoides* (L.) Gray

Appendix 1. Continued

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

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

APPENDIX 1. Continued

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

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

Appendix 1. Continued

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

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

APPENDIX 1. Continued

Family/species	ssp./var. and infraname	COR	TOS	MAR	JER	GUA	BEN	CED	NAT
Isocoma menziesii (Hook. & Arn.) G.L. Nesom	var. *menziesii*		TOS					CED	
Iva hayesiana A. Gray								CED	
Lasthenia coronaria (Nutt.) Ornduff		COR	TOS			GUA			
Lasthenia gracilis (DC.) Greene		COR	TOS			GUA		CED?	
Layia platyglossa (Fisch. & Mey.) A. Gray						GUA			
Leptosyne gigantea Kellogg[26]						GUA			
Leptosyne maritima (Nutt.) A.Gray[27]		COR	TOS	MAR					
Logfia arizonica (A. Gray) Holub[28]						GUA		CED?	
Logfia filaginoides (Hook. & Arn.) Morefield[29]			TOS			GUA		CED	
Malacothrix clevelandii A. Gray						GUA			
Malacothrix foliosa A. Gray		COR							
Malacothrix insularis Greene		COR							
Malacothrix similis Davis & Raven		COR	TOS					CED	
Matricaria occidentalis Greene[30]*						GUA			
Micropus californicus Fisch. & C.A. Mey.						GUA			
Peritylе californica Benth.							BEN		
Peritylе emoryi Torrey		COR	TOS	MAR		GUA	BEN	CED	NAT
Peritylе incana A. Gray						GUA			
Pluchea odorata (L.) Cass.	var. *odorata*							CED	
Porophyllum gracile Benth.								CED	
Pseudognaphalium beneolens Davidson			TOS			GUA[31]			
Pseudognaphalium biolettii Anderberg			TOS	MAR		GUA		CED	
Pseudognaphalium luteoalbum (L.) Hilliard & B.L. Burtt		COR				GUA[32]			
Pseudognaphalium microcephalum Nutt.		COR							
*Pseudognaphalium ramosissimum*Nutt.		COR							
Pseudognaphalium sp. nova[33]						GUA			
Pseudognaphalium stramineum (Kunth) Anderberg						GUA		CED	
Rafinesquia californica Nutt.		COR	TOS	MAR				CED	
Senecio aphanactis Greene								CED	
Senecio cedrosensis Greene							BEN	CED	

[26]Synonym: *Coreopsis gigantea* (Kellogg) H.M. Hall
[27]Synonym: *Coreopsis maritima* (Nutt.) Hook. f.
[28]Synonym: *Filago arizonica* A. Gray
[29]Synonym: *Filago californica* Nutt.
[30]Synonym: *Chamomilla occidentalis* (Greene) Rydb.
[31]New record; herbarium specimen @ RSA, SD
[32]New record; herbarium specimen @ RSA, SD
[33]New record; herbarium specimen @ RSA, SD (description pending)

Appendix 1. Continued

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

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

APPENDIX 1. Continued

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

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

Appendix 1. Continued

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

[39]New record; pers. comm. Jon Rebman, SD (includes *Cylindropuntia cedrosensis* Rebman)
[40]New record; herbarium specimen @ RSA, SD
[41]Re-identification, changed from M. hutchinsonia
[42]New record; herbarium specimen @ RSA
[43]New record; herbarium specimen @ RSA
[44]Synonym: *Celtis douglasii* Planch.
[45]Synonym: *Isomeris arborea* Nutt. ssp. *angustata* Parish
[46]New record; herbarium specimen @ SD Rebman 6230

APPENDIX 1. Continued

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

[47]Synonym: *Lonicera hispidula* (Lindl.) Douglas ex Torr. & A. Gray var. *vacillans* A. Gray
[48]Synonym: *Silene laciniata* Cav. ssp. *major* C.L. Hitch. & Maguire
[49]New record; herbarium specimen @ RSA, SD
[50]New record; herbarium specimen @ RSA, SBBG
[51]Synonym: *Salicornia subterminalis* Parish
[52]New record; herbarium specimen @ RSA, potentially new species

Appendix 1. Continued

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

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

APPENDIX 1. Continued

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

[58]Synonym: *Chamaesyce pondii* (Millsp.) Millsp.
[59]Synonym & per Jon Rebman may be recognized as: *Lotus argophyllus* (A. Gray) Greene ssp. *ornithopus* (Greene) P.H. Raven
[60]Synonym: *Lotus cedrosensis* Greene
[61]Synonym: *Lotus scoparius* (Torr. & A. Gray) Ottley
[62]Synonym: *Lotus grandiflorus* (Benth.) Greene
[63]Synonym: *Lotus salsuginosus* Greene ssp. *brevivexillus* Ottley
[64]Synonym: *Lotus nudatus* (Greene) Greene
[65]Synonym: *Lotus rigidus* (Benth.) Greene
[66]Synonym: *Lotus strigosus* (Nutt.) Greene

Appendix 1. Continued

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

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

APPENDIX 1. Continued

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

[73]Synonym: *Satureja palmeri* (A. Gray) Briq.
[74]Synonym: *Lavatera lindsayi* Moran
[75]Synonym: *Lavatera occidentalis* S. Watson
[76]Synonym: *Lavatera venosa* S. Watson
[77]Synonym: *Lavatera assurgentifolia* Kellogg

Appendix 1. Continued

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

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

APPENDIX 1. Continued

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

[86]Synonym: *Stylomecon heterophylla* (Benth.) G. Taylor
[87]Synonym: *Mimulus aurantiacus* Curtis var. *aurantiacus*
[88]Synonym: *Mimulus latifolius* A. Gray, *Diplacus latifolius* (A. Gray) G.L. Nesom (Douglas ex Benth.) Spach
[89]Synonym: *Mimulus cardinalis* Douglas ex Benth.
[90]Synonym: *Galvezia juncea* (Benth.) Ball
[91]Synonym: *Galvezia speciosa* (Nutt.) A. Gray
[92]Synonyms: *Linaria texana* Scheele and *Linaria canadensis* (L.) Dum. Cours.
[93]Synonym: *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
Linanthus uncialis (Brandegee) Moran								CED?	
Linanthus veatchii (C. Parry) J.M. Porter & L.A. Johnson	*Microsteris gracilis* (Hook.) Greene							CED?	
Polygonaceae									
Eriogonum fasciculatum Benth.		COR	TOS					CED	
Eriogonum grande Greene	var. *testudinum* Reveal		TOS						
Eriogonum intricatum Benth.								CED	
Eriogonum molle Greene								CED	
Eriogonum pondii Greene Torrey ex Benth.								CED	NAT
Eriogonum zapatoense Moran						GUA			
Eriogonum wrightii	var. *taxifolium* (Greene) Parish							CED	
Harfordia macroptera (Benth.) Greene & Parry	var. *fruticosa* (Greene) Reveal							CED	
Lastarriaea coriacea (Goodman) Hoover[94]								CED?	
Pterostegia drymarioides F. & M.		COR	TOS	MAR		GUA		CED	
Portulacaceae									
Portulaca oleracea L.*									NAT
Primulaceae									
Dodecatheon clevelandii Greene	ssp. *insulare* (H.J. Thomps.) Reveal					GUA			
Ranunculaceae									
Clematis pauciflora Nutt.		COR	TOS					CED?	
Delphinium cardinale Hook.								CED?	
Delphinium parryi A. Gray		COR	TOS						
Myosurus minimus L.						GUA			
Ranunculus hebecarpus H. & A.						GUA		CED?	
Resedaceae									
Oligomeris linifolia (Vahl.) Macbr.		COR	TOS			GUA	BEN	CED	NAT
Rhamnaceae									
Ceanothus arboreus Greene						GUA			
Ceanothus crassifolius Torr.						GUA			
Ceanothus cuneatus (Hook.) Nutt.						GUA			
Ceanothus perplexans Trel.[95]						GUA			
Ceanothus verrucosus Nutt.								CED?	
Rhamnus insula Kellogg								CED?	
Rhamnus pirifolia Greene						GUA			
Ziziphus parryi Torr.	ssp. *microphylla*							CED?	
Rosaceae									
Adenostoma fasciculatum Hook. & Arn.	var. *obtusifolium* S. Wats.							CED?	

[94]Synonym: *Chorizanthe coriacea* Goodman

[95]New record; herbarium specimen @ RSA, SD, SBBG; synonym: *Ceanothus greggii* A. Gray var. *perplexans* (Trel.) Jeps.

APPENDIX 1. Continued

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

[96]New record; herbarium specimen @ SD.

Appendix 1. Continued

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

[97]Synonym: *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 nonnative species.

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

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

Appendix 2. Continued

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

[4]NY: T.S. Ross, 6137, 04 13 1992

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Carex pansa L.H. Bailey						ROS			MIG
Carex praegracilis W. Boott				CAT		ROS			MIG
Carex senta Boott							CRU		
Carex subbracteata Mack.						ROS	CRU		
Carex triquetra Boott				CAT					
Carex tumulicola Mack.		CLE				ROS	CRU		
Cyperus eragrostis Lam.				CAT[5]					
Cyperus esculentus L.		CLE		CAT					
Cyperus involucratus Rottb.*							CRU		
Cyperus odoratus L.*				CAT[6]			CRU		
Eleocharis macrostachya Britton		CLE	NIC	CAT		ROS			
Isolepis cernua (Vahl) Roem. & Schult.						ROS			MIG
Schoenoplectus americanus (Pers.) Schinz & R. Keller			NIC	CAT[7]		ROS			
Schoenoplectus californicus (C.A. Mey.) Soják						ROS	CRU		
Schoenoplectus pungens (Vahl) Palla	var. *longispicatus* (Britton) S.G. Sm.					ROS	CRU		
Iridaceae									
Sisyrinchium bellum S. Watson				CAT		ROS	CRU		MIG
Juncaceae									
Juncus acutus L.	ssp. *leopoldii* (Parl.) Snogerup			CAT					
Juncus balticus Willd.	ssp. *ater* (Rydb.) Snogerup			CAT		ROS			MIG
Juncus bufonius L.		CLE	NIC	CAT		ROS	CRU	ANA	MIG
Juncus effusus L.	ssp. *pacificus* (Fernald & Weigand) Piper & Beattie					ROS			
Juncus mexicanus Willd.				CAT		ROS	CRU		MIG
Juncus patens E. Mey.		CLE				ROS	CRU		MIG
Juncus phaeocephalus Engelm.	var. *phaeocephalus*					ROS			
Juncus textilis Buchenau				CAT					
Juncus xiphioides E. Mey.				CAT			CRU		
Luzula subsessilis (S. Watson) Buchenau[8]						ROS	CRU		
Liliaceae									
Calochortus albus (Benth.) Benth.				CAT		ROS	CRU		
Calochortus catalinae S. Watson				CAT		ROS	CRU		
Calochortus luteus Lindl.							CRU		
Calochortus splendens Benth.				CAT					
Lilium humboldtii Duch.	ssp. *ocellatum* (Kellogg) Thorne					ROS	CRU	ANA	

[5]RSA: Mark Hoefs, Steven A. Junak, Janet Takara, M. Gay, 2384, Jul 14 1995
[6]SBBG: M.L. Hoefs, R.F. Thorne, 2458, Jul 26 1995
[7]RSA: Mark Hoefs, R.F. Thorne, Janet Takara Jul 26 1995 2482
[8]Synonym: *Luzula comosa* E. Mey.; taxonomic issues

Appendix 2. Continued

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

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

APPENDIX 2. Continued

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

[16]CAS: Steven A. Junak 9 Nov 1990 SCI-143
[17]Pers. com. E. Howe
[18]RSA: Mark Hoefs, R.F. Thorne, Janet Takara, M. Gay Jul 27 1995 2491
[19]Pers. com. E. Howe
[20]CAS: Peter H. Raven 22 May 1962 17826
[21]UCD: Beecher Crampton 08 10 1968 8322
[22]SSBG: S.A. Junak Jun 13 1998 SCa-743
[23]SBBG: S.A. Junak May 14 1985 SCl-71
[24]SBBG: 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
Hordeum brachyantherum Nevski	ssp. *californicum* (Covas & Stebbins) Bothmer et al.		NIC	CAT[25]		ROS	CRU	ANA	MIG
Hordeum depressum (Scribn. & J.G. Sm.) Rydb.							CRU		
Hordeum intercedens Nevski		CLE[26]	NIC	CAT[27]	BAR	ROS	CRU	ANA	MIG
Hordeum marinum Huds.*	ssp. *gussoneanum* (Parl.) Thell.	CLE[28]	NIC			ROS	CRU		
Hordeum murinum L.*	ssp. *glaucum* (Steud.) Tzvelev	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Hordeum murinum L.*	ssp. *leporinum* (Link) Arcang.	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Hordeum vulgare L.*		CLE	NIC	CAT		ROS	CRU		
Koeleria macrantha (Ledeb.) Schult.						ROS	CRU		
Koeleria gerardii (Vill.) Shinners*							CRU		
Lamarckia aurea (L.) Moench*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Melica imperfecta Trin.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Muhlenbergia appressa C.O. Goodd.		CLE							
Muhlenbergia microsperma (DC.) Kunth		CLE[29]		CAT	BAR	ROS	CRU	ANA	MIG
Parapholis incurva (L.) C.E. Hubb.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Paspalum dilatatum Poir.*		CLE		CAT					
Paspalum distichum L.				CAT			CRU		
Pennisetum clandestinum Chiov.*			NIC			ROS	CRU	ANA	MIG
Pennisetum setaceum (Forssk.) Chiov.*		CLE		CAT[30]					
Phalaris aquatica L.*			NIC	CAT			CRU	ANA	
Phalaris canariensis L.*				CAT					
Phalaris caroliniana Walter*		CLE	NIC	CAT	BAR		CRU		
Phalaris lemmonii Vasey		CLE		CAT		ROS			
Phalaris minor Retz.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
*Phalaris paradoxa** L.		CLE	NIC	CAT[31]			CRU	ANA	
Poa annua L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Poa palustris L.*				CAT					
Poa howellii Vasey & Scribn.							CRU		
Poa douglasii Nees						ROS			MIG
Poa secunda J. Presl	ssp. *secunda*	CLE[32]	NIC	CAT[33]		ROS	CRU	ANA	MIG
Polypogon viridis (Gouan) Breistr.*				CAT	BAR	ROS	CRU	ANA	
Polypogon interruptus Kunth*		CLE		CAT		ROS	CRU		MIG

[25]SBBG: L.W. Nuttall May 12 1920 190
[26]POM: P.A. Munz Apr 8 1923 6613
[27]SBBG: S.A. Junak May 3 2001 SCa-1464
[28]SBBG: P.H. Raven May 10 1962 17738
[29]CAS: E.R. Blakley 7 Dec. 1963 6327
[30]S. Ratay collection
[31]SBBG: S.A. Junak, M.L. Hoeß Jun 5 1997 SCa-427
[32]UC: Peter H. Raven Apr 12 1962 17332
[33]UC: F.R. Fosberg Mar 20 1931 S4310

APPENDIX 2. Continued

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

[34]RSA: E. Kellogg Jun 12 1992 s.n.
[35]SBBG: S.A. Junak Mar 22 1998 SCa-512
[36]SD: Robert F. Thorne Sep 14, 1966 36643
[37]Pers. com. E. Howe
[38]Pers. com. E. Howe
[39]SBBG: P. H. Raven Jul 11 1962 18018
[40]UC: Carl B. Wolf May 12 1932
[41]Pers. com. E. Howe
[42]RSA: 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									
Anemopsis californica (Nutt.) Hook. & Arn.		CLE	NIC	CAT			CRU		
Eudicots									
Adoxaceae									
Sambucus nigra L.	ssp. *caerulea* (Raf.) Bolli	CLE		CAT		ROS	CRU		
Aizoaceae									
Carpobrotus chilensis (Molina) N.E. Br.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
*Carpobrotus edulis** (L.) N.E. Br.		CLE[44]	NIC	CAT[45]		ROS	CRU	ANA	
*Delosperma litorale** (Kensit) L. Bolus			NIC						
*Malephora crocea** (Jacq.) Schwantes		CLE[46]	NIC					ANA	
Mesembryanthemum crystallinum L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Mesembryanthemum nodiflorum L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Sesuvium verrucosum Raf.		CLE							
Tetragonia tetragonioides (Pall.) Kuntze*			NIC			ROS	CRU	ANA	MIG
Amaranthaceae									
Amaranthus albus L.*				CAT		ROS	CRU	ANA	
Amaranthus blitoides S. Watson						ROS	CRU		
Amaranthus deflexus L.*				CAT			CRU		
Amaranthus powellii S. Watson							CRU	ANA	
Malosma laurina (Nutt.) Abrams		CLE		CAT					
Rhus integrifolia (Nutt.) Rothr.		CLE		CAT		ROS	CRU	ANA	MIG
Rhus ovata S. Watson		CLE?[47]		CAT			CRU		
Schinus molle L.*		CLE	NIC	CAT		ROS	CRU		
Toxicodendron diversilobum (Torr. & A. Gray) Greene		CLE	NIC	CAT		ROS	CRU	ANA	MIG
Apiaceae									
Apiastrum angustifolium Nutt.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Apium graveolens L.*		CLE	NIC			ROS	CRU		
Berula erecta (Huds.) Coville			NIC				CRU		MIG
Bowlesia incana Ruiz & Pav.		CLE		CAT		ROS	CRU		
Conium maculatum L.*			NIC	CAT			CRU		
Daucus carota L.*			NIC						
Daucus pusillus Michx.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Foeniculum vulgare Mill.*		CLE	NIC	CAT		ROS	CRU		MIG
Lomatium caruifolium (Hook. & Arn.) J.M. Coult. & Rose						ROS	CRU		MIG

[43]RSA: M.B. Dunkle Aug 20 1940 7671
[44]RSA: P.H. Raven Jul 12 1962 18045
[45]POM: F.R. Fosberg, 4732, Apr 29 1931
[46]SBBG: S.A. Junak Aug 26 1997 SCI-936
[47]Pers. com. E. Howe

APPENDIX 2. Continued

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

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

Appendix 2. Continued

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

[54]SD: Peter H. Raven May 08, 1962 17629
[55]HSC: James Henrickson Jan 1973 8113
[56]Pers. com. E. Howe
[57]CAS: Steven A. Junak 2 Oct 1996 SCI- 703
[58]SBBG: S.A. Junak, M.L. Hoefs, R.N. Philbrick, SCa-1532, May 18 2001
[59]RSA: R.F. Thorne, 37492, Apr 28 1968, suspected incorrect georeferencing
[60]RSA:Mark Hoefs, 309, Jun 4 1973
[61]SD: Robert F. Thorne, P. Everett Jun 23, 1965 35015
[62]SBBG: T. Ross, O. Mistretta, M. Hammitt May 20 1991 5325
[63]UCR: Steve Boyd, T.S. Ross, Laurel Arnseth Apr 7 1990 4271
[64]UCR: E.R. Fosberg Apr 29 1931 S-4709
[65]SBBG: E.R. Blakley Sep 23 1961 4740
[66]SBBG: S.A. Junak Feb 25 1997 SCl-724
[67]Pers. com. E. Howe
[68]SBBG: 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
Deinandra clementina (Brandegee) B.G. Baldwin		CLE	NIC	CAT	BAR		CRU	ANA	
Deinandra fasciculata (DC.) Greene		CLE		CAT	BAR	ROS	CRU	ANA	
Deinandra increscens (D.D. Keck) B.G. Baldwin	ssp. *increscens*					ROS	CRU		
Delairea odorata Lem.*						ROS		ANA	
Encelia californica Nutt.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	
Ericameria ericoides (Less.) Jeps.							CRU		
Ericameria palmeri (A. Gray) H.M. Hall	var. *pachylepis* (H.M. Hall) G.L. Nesom			CAT					
Erigeron bonariensis L.*		CLE[69]	NIC	CAT[70]	BAR	ROS	CRU	ANA	MIG
Erigeron canadensis L.		CLE[71]	NIC	CAT[72]	BAR	ROS	CRU	ANA	MIG
Erigeron foliosus Nutt.	var. *foliosus*			CAT		ROS	CRU	ANA	MIG
Erigeron glaucus Ker Gawl.						ROS	CRU	ANA	MIG
Erigeron sanctarum S. Watson						ROS	CRU		
Eriophyllum confertiflorum (DC.) A. Gray	var. *confertiflorum*	CLE		CAT[73]		ROS	CRU	ANA	MIG
Eriophyllum staechadifolium Lag.						ROS	CRU	ANA	MIG
Eurybia radulina (A. Gray) G.L. Nesom						ROS	CRU		
Euthamia occidentalis Nutt.								ANA	
Gamochaeta ustulata (Nutt.) Holub				CAT		ROS	CRU	ANA	MIG
Glebionis coronaria (L.) Spach*[74]		CLE	NIC	CAT			CRU		
Gnaphalium palustre Nutt.		CLE	NIC	CAT			CRU		
Grindelia camporum Greene				CAT		ROS	CRU	ANA	
Grindelia hirsutula Hook. & Arn.			NIC[75]			ROS			
Grindelia stricta DC.	var. *platyphylla* (Greene) M.A. Lane					ROS	CRU	ANA	MIG?
Hazardia cana (A. Gray) Greene		CLE							
Hazardia detonsa (Greene) Greene						ROS	CRU	ANA	
Hazardia squarrosa (Hook. & Arn.) Greene	var. *grindelioides* (DC.) W.D. Clark			CAT		ROS	CRU	ANA	MIG
Hedypnois cretica (L.) Dum. Cours.*		CLE[76]			BAR				
Helenium puberulum DC.				CAT[77]					
Helianthus annuus L.*		CLE[78]	NIC	CAT[79]			CRU	ANA	
Helminthotheca echioides (L.) Holub*			NIC	CAT			CRU		
Hesperevax sparsiflora (A. Gray) Greene		CLE[80]				ROS			

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

Appendix 2. Continued

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

[81]Collections of this taxa have been made on Catalina, but there are taxonomic issues
[82]UC: T.S. Brandegee Aug 25 1894
[83]SD: E.R. Blakley Sep 24, 1961 4781
[84]UC: F.R. Fosberg Apr 29 1931 S4707
[85]SBBG: S.A. Junak, K. Kirkland Jul 17 1998 SCa-777
[86]RSA: Steven A. Junak Oct 2 1996 SCI700
[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
Malacothrix saxatilis (Nutt.) Torr. & A. Gray	var. *implicata* (Eastw.) H.M. Hall		NIC			ROS	CRU	ANA	MIG
Malacothrix saxatilis (Nutt.) Torr. & A. Gray*	var. *tenuifolia* (Nutt.) A. Gray	CLE[89]	NIC	CAT					
Malacothrix similis W.S. Davis & P.H. Raven							CRU		MIG
Malacothrix squalida Greene							CRU	ANA	
Matricaria occidentalis Greene				CAT[90]					
Matricaria discoidea DC.*				CAT[91]		ROS	CRU	ANA	
Micropus californicus Fisch. & C.A. Mey.	var. *californicus*			CAT[92]		ROS	CRU		
Microseris douglasii (DC.) Sch. Bip.	ssp. *douglasii*	CLE	NIC						
Microseris douglasii (DC.) Sch. Bip.	ssp. *tenella* (A. Gray) K.L. Chambers		NIC			ROS	CRU		MIG
Microseris douglasii (DC.) Sch. Bip.	ssp. *platycarpha* (A. Gray) K.L. Chambers	CLE		CAT					
Microseris elegans A. Gray		CLE	NIC				CRU		MIG
Munzothamnus blairii (Munz & I.M. Johnst.) P.H. Raven		CLE							
Pentachaeta lyonii A. Gray				CAT					
Perityle emoryi Torr.		CLE		CAT	BAR	ROS	CRU	ANA	
Pluchea odorata (L.) Cass.				CAT			CRU		
Pluchea sericea (Nutt.) Coville				CAT					
Pseudognaphalium biolettii Anderb.		CLE	NIC	CAT	BAR[93]	ROS	CRU	ANA	MIG
Pseudognaphalium californicum (DC.) Anderb.		CLE[94]	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Pseudognaphalium beneolens (Davidson) Anderb.		CLE	NIC	CAT		ROS	CRU		MIG
Pseudognaphalium microcephalum (Nutt.) Anderb.		CLE[95]		CAT	BAR	ROS	CRU	ANA	
Pseudognaphalium luteoalbum (L.) Hilliard & B.L. Burtt*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Pseudognaphalium ramosissimum (Nutt.) Anderb.							CRU		
Pseudognaphalium stramineum (Kunth) Anderb.			NIC	CAT		ROS	CRU	ANA	MIG
Psilocarphus brevissimus Nutt.	var. *brevissimus*	CLE[96]							
Psilocarphus tenellus Nutt.		CLE		CAT		ROS	CRU		
Rafinesquia californica Nutt.		CLE		CAT	BAR	ROS	CRU	ANA	
Senecio glomeratus Poir.*							CRU		MIG
Senecio aphanactis Greene				CAT		ROS	CRU		
Senecio flaccidus Less.	var. *douglasii* (DC.) B.L. Turner & T.M. Barkley	CLE		CAT			CRU		
Senecio lyonii	A. Gray	CLE		CAT					

[89]RSA: Steven A. Junak, Mary C. Hochberg, H.L. Ferguson Jul 28 1981 sci13
[90]SD: Robert F. Thorne Apr 29, 1966 36278
[91]SBBG: R.F Thorne Apr 29 1966 36290
[92]RSA: Tim Ross, Janet Takara, S. Otte Apr 24 1993 6957
[93]NPS Park flora checklist
[94]UC: Tim Ross Apr 16 1992 6207
[95]SDSU: R. M. Beauchamp March 19, 1967 315
[96]RSA: 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
Senecio vulgaris L.*		CLE	NIC	CAT		ROS	CRU	ANA	MIG
Silybum marianum (L.) Gaertn.*			NIC	CAT	BAR[97]	ROS	CRU		
Solidago velutina DC.	ssp. *californica* (Nutt.) Semple			CAT		ROS	CRU		
Sonchus asper (L.) Hill*		CLE	NIC	CAT		ROS	CRU	ANA	MIG
Sonchus oleraceus L.*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Sonchus tenerrimus L.*		CLE	NIC	CAT	BAR				
Stebbinsoseris heterocarpa (Nutt.) K.L. Chambers[98]		CLE	NIC	CAT		ROS	CRU	ANA	
Stephanomeria cichoriacea A. Gray						ROS	CRU		
Stephanomeria diegensis Gottlieb		CLE		CAT		ROS	CRU		
Stephanomeria exigua Benth.	ssp. *coronaria* (Greene) Gottlieb			CAT[99]		ROS	CRU		MIG
Stephanomeria virgata Benth.	ssp. *virgata*	CLE		CAT		ROS	CRU		
Stylocline gnaphaloides Nutt.		CLE[100]		CAT		ROS	CRU		
Symphyotrichum chilense (Nees) G.L. Nesom						ROS	CRU		
Symphyotrichum subulatum (Michx.) G.L. Nesom		CLE				ROS	CRU		
Taraxacum erythrospermum Besser*				CAT[101]			CRU[102]		
Taraxacum officinale F.H. Wigg;*			NIC	CAT[103]		ROS	CRU		
Thelesperma megapotamicum (Spreng.) Kuntze*				CAT					
Tragopogon porrifolius L.*		CLE	NIC				CRU		
Uropappus lindleyi (DC.) Nutt.[104]		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Venegasia carpesioides DC.						ROS	CRU		
Xanthium spinosum L.[105]				CAT	BAR&	ROS	CRU		MIG
Xanthium strumarium L.[106]			NIC	CAT			CRU		
Bataceae									
Batis maritima L.		CLE							
Berberidaceae									
Berberis pinnata Lag.	ssp. *insularis* Munz					ROS	CRU	ANA	
Boraginaceae									
Amsinckia intermedia Fisch. & C.A. Mey.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Amsinckia menziesii (Lehm.) A. Nelson & J.F. Macbr.		CLE[107]		CAT			CRU	ANA	MIG
Amsinckia spectabilis Fisch. & C.A. Mey.	var. *spectabilis*	CLE	NIC		BAR	ROS	CRU	ANA	MIG
Cryptantha intermedia (A. Gray) Greene	var. *intermedia*	CLE		CAT					

[97]SBBG: R.N. Philbrick Mar 18 1968 B68-20
[98]Synonym: *Microseris heterocarpa* (Nutt.) K.L. Chambers
[99]RSA: F.R. Fosberg, 4460, Apr 3 1931
[100]RSA: Orlando Mistretta Apr 5 1992 206
[101]SD: Robert F. Thorne Sep 15, 1966 36698
[102]SD: Robert F. Thorne, P. Everett, 36823, Apr 18, 1967
[103]SBBG: M.L. Hoefs, R.F. Thorne Apr 6 1996 2665
[104]Synonym: *Microseris linearifolia* (DC.) Sch. Bip.
[105]Native status on islands unknown
[106]Native status on islands unknown
[107]UCR: 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
Cryptantha clevelandii Greene		CLE		CAT	BAR	ROS	CRU	ANA	MIG
Cryptantha leiocarpa (Fisch. & C.A. Mey.) Greene						ROS			MIG
Cryptantha maritima (Greene) Greene		CLE	NIC	CAT[108]	BAR				
Cryptantha micromeres (A. Gray) Greene				CAT		ROS	CRU		
Cryptantha microstachys (A. Gray) Greene				CAT					
Cryptantha muricata (Hook. & Arn.) A. Nelson & J.F. Macbr.							CRU		
Cryptantha traskiae I.M. Johnst.		CLE	NIC	CAT[109]					
Cryptantha wigginsii I.M. Johnst.				CAT[110]					
Emmenanthe penduliflora Benth.	var. *penduliflora*	CLE		CAT			CRU		
Eriodictyon traskiae Eastw.	ssp. *traskiae*			CAT					
Eucrypta chrysanthemifolia (Benth.) Greene	var. *chrysanthemifolia*	CLE		CAT	BAR	ROS	CRU	ANA	MIG
Harpagonella palmeri A. Gray				CAT					
Heliotropium curassavicum L.	var. *oculatum* (A. Heller) I.M. Johnst. ex Tidestr.	CLE	NIC	CAT		ROS	CRU	ANA	MIG
Nama stenocarpum A. Gray		CLE[111]							
Nemophila menziesii Hook. & Arn.				CAT					
Nemophila pedunculata Benth.			NIC			ROS	CRU		MIG
Pectocarya linearis (Ruiz & Pav.) DC.	ssp. *ferocula* (I.M. Johnst.) Thorne	CLE[112]	NIC	CAT		ROS	CRU	ANA	
Pectocarya penicillata (Hook. & Arn.) A. DC.				CAT			CRU		
Phacelia cicutaria Greene	var. *hispida* J.T. Howell	CLE		CAT		ROS	CRU	ANA	
Phacelia hubbyi (J.F. Macbr.) L.M. Garrison[113]							CRU		
Phacelia distans Benth.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Phacelia floribunda Greene		CLE							
Phacelia grandiflora (Benth.) A. Gray				CAT		ROS	CRU[114]		
Phacelia insularis Munz	var. *insularis*					ROS			MIG
Phacelia lyonii A. Gray		CLE		CAT					
Phacelia ramosissima Douglas ex Lehm.						ROS	CRU		MIG
Phacelia viscida (Lindl.) Torr.				CAT		ROS	CRU	ANA	MIG
Pholistoma auritum (Lindl.) Lilja	var. *auritum*	CLE?		CAT	BAR		CRU		
Pholistoma racemosum (A. Gray) Constance		CLE		CAT	BAR		CRU		
Plagiobothrys acanthocarpus (Piper) I.M. Johnst.				CAT[115]			CRU		
Plagiobothrys canescens Benth.		CLE		CAT		ROS	CRU	ANA	

[108]UC: T.S. Brandegee May 20 1890
[109]SD: R. Mitchel Beauchamp, M. Douglas Mar 24, 1972 3222
[110]UC: Michael G. Simpson, Lori L. Simpson April 21 2012 3682
[111]RSA: E. Kellogg Jun 28 1992 s.n.
[112]SBBG: S.A. Junak Mar 7 1997 SCl-732
[113]Synonym: *Phacelia cicutaria* Greene var. *hubbyi* (J.F. Macbr.) J.T. Howell
[114]In Wallace 1985 but not NPS list
[115]UCR: T.S. Ross Apr 22 1993 6895

Appendix 2. Continued

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

[116]POM: P.A. Munz Apr 10 1923 6705
[117]RSA: R.F. Thorne, R.C. Rollins, D. Propst, R. Carolin, 36761, Mar 19 1967
[118]UC: T.S. Brandegee, Apr 1888
[119]Synonym: *Guillenia lasiophylla* (Hook. & Arn.) Greene
[120]No specimens in CCH, extirpated from Catalina? per: http://www.rareplants.cnps.org/detail/571.html
[121]Synonym: *Brassica geniculata* (Desf.) Benth.
[122]Pers. com. E. Howe
[123]SBBG: S.A. Junak, M.L. Hoefs, J. Takara Mar 28 1997 SCa-388
[124]Synonyms: *Lepidium virginicum* var. *pubescens* (Greene) Thell.; *Lepidium virginicum* var. *robinsonii* (Thell.) C.L. Hitchc.
[125]SBBG: S.A. Junak, M.C. Hochberg, H. Ferguson Jul 28 1981 SCl-17
[126]Native status on islands unknown, doubtful

APPENDIX 2. Continued

Family/species	ssp./var. and infraname	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Raphanus raphanistrum L.*		CLE		CAT		ROS	CRU		
Raphanus sativus L.*		CLE	NIC	CAT		ROS	CRU		MIG
Sibara filifolia (Greene) Greene		CLE[127]		CAT			CRU		
Sinapis arvensis L.[128]*		CLE?[129]		CAT			CRU		
Sisymbrium altissimum L.*									
Sisymbrium irio L.*		CLE	NIC	CAT				ANA	
Sisymbrium officinale (L.) Scop.*				CAT			CRU		MIG
Sisymbrium orientale L.*		CLE[130]	NIC	CAT				ANA	
Thysanocarpus conchuliferus Greene							CRU		
Thysanocarpus curvipes Hook.		CLE[131]		CAT			CRU		
Thysanocarpus laciniatus Nutt.		CLE		CAT		ROS	CRU		
Tropidocarpum gracile Hook.		CLE		CAT					
Turritis glabra L.							CRU		
Cactaceae									
Bergerocactus emoryi (Engelm.) Britton & Rose		CLE		CAT					
Cylindropuntia prolifera (Engelm.) FM. Knuth		CLE	NIC	CAT	BAR	ROS	CRU	ANA	
Opuntia ficus-indica (L.) Mill.*		CLE	NIC	CAT			CRU	ANA	
Opuntia littoralis (Engelm.) Cockerell		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Opuntia oricola Philbrick		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Campanulaceae									
Githopsis diffusa A. Gray	ssp. *diffusa*						CRU		
Triodanis biflora (Ruiz & Pav.) Greene				CAT		ROS	CRU		
Caprifoliaceae									
Lonicera hispidula (Lindl.) Torr. & A. Gray		CLE		CAT		ROS	CRU		
Lonicera interrupta Benth.							CRU		
Lonicera subspicata Hook. & Arn.				CAT		ROS	CRU		
Symphoricarpos mollis Nutt.				CAT		ROS	CRU		
Caryophyllaceae									
Cardionema ramosissimum (Weinm.) A. Nelson & J.F. Macbr.						ROS	CRU		MIG
Cerastium glomeratum Thuill.*		CLE		CAT		ROS	CRU	ANA	MIG
Herniaria hirsuta L.*	var. *cinerea* (DC.) Loret & Barrandon	CLE	NIC	CAT[132]	BAR	ROS			MIG
Loeflingia squarrosa Nutt.			NIC						
Minuartia douglasii (Torr. & A. Gray) Mattf.		CLE		CAT		ROS	CRU		
Polycarpon depressum Nutt.		CLE		CAT			CRU		MIG

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

Appendix 2. Continued

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

[133]RSA: Blanche Trask Mar 1901 s.n.

APPENDIX 2. Continued

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

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

Appendix 2. Continued

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

[139]RSA: EH. Elmore Feb 19 1939 422
[140]SBBG: M.B. Dunkle Jul 26 1939 8359
[141]SD: Darley F. Howe Feb 24, 1968 4486
[142]SBBG: M.B. Dunkle Jul 31 1939 8402
[143]RSA: Steven A. Junak Nov 9 1990 SCI144
[144]Pers. com. E. Howe

APPENDIX 2. Continued

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

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

Appendix 2. Continued

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

[154]SD: Steven A. Junak May 19, 1997 SCl877
[155]SBBG: M.R. Benedict Jun 26 1971
[156]JEPS93564 (SN-846) 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
Trifolium variegatum Nutt.	var. *major* Loja.						CRU		
Trifolium willdenovii Spreng.		CLE[157]		CAT[158]	BAR	ROS	CRU	ANA	MIG
Vicia americana Willd.						ROS	CRU		MIG
Vicia benghalensis L.*				CAT[159]			CRU	ANA	
Vicia hassei S. Watson		CLE	NIC	CAT		ROS	CRU	ANA	MIG
Vicia ludoviciana Torr. & A. Gray	ssp. *ludoviciana*	CLE[160]		CAT[161]		ROS	CRU	ANA	
Vicia sativa L.*	ssp. *nigra* (L.) Erhart					ROS			
Vicia sativa L.*	ssp. *sativa*		NIC			ROS	CRU	ANA	
Vicia villosa Roth	(Host) Corb.		NIC	CAT[162]					
Quercus agrifolia Née	var. *agrifolia*					ROS	CRU		
Quercus chrysolepis Liebm.		CLE		CAT		ROS	CRU	ANA	
Quercus douglasii Hook. & Arn.				CAT			CRU		
Quercus engelmannii Greene				CAT		ROS			
Quercus kelloggii Newb.							CRU		
Quercus lobata Née				CAT		ROS	CRU		
Quercus ×*macdonaldii* Greene				CAT		ROS	CRU		
Quercus pacifica Nixon & C.H. Mull.				CAT		ROS	CRU		
Quercus parvula Greene	var. *parvula*						CRU		
Quercus tomentella Engelm.		CLE		CAT		ROS	CRU	ANA	
Frankeniaceae									
Frankenia salina (Molina) I.M. Johnst.		CLE	NIC	CAT		ROS	CRU	ANA	MIG
Garryaceae									
Garrya veatchii Kellogg							CRU		
Gentianaceae									
Zeltnera davyi (Jeps.) G. Mans.		CLE				ROS	CRU		
Zeltnera venusta (A. Gray) G. Mans.			NIC	CAT					
Geraniaceae									
California macrophylla (Hook. & Arn.) J.J. Aldasoroet				CAT[163]					
Erodium botrys (Cav.) Berol.*		CLE	NIC	CAT[164]		ROS	CRU		
Erodium brachycarpum (Godr.) Thell.*		CLE[165]		CAT[166]		ROS			
Erodium cicutarium (L.) Aiton*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Erodium moschatum (L.) Aiton*		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG

[157]RSA: P.H. Raven May 8 1962 17614
[158]UC: E.R. Fosberg Mar 25 1931 s4367
[159]SBBG: P.H. Raven May 20 1962 17789
[160]UCR: Steve Boyd, T.S. Ross, L. Arnseth Apr 7 1990 4260
[161]SBBG: R.F. Thorne Mar 7 1966 35954
[162]SD: Robert F. Thorne, D. Propst May 29, 1968 37691
[163]GH: W.A. Wallace
[164]SBBG: S.A. Junak, K. Kirkland, L. Vorobik May 16 1998 SCa-697
[165]SBBG: T. Ross, O. Mistretta, M. Hammitt May 18 1991 5191
[166]SBBG: S.A. Junak, M.L. Hoefs, K. Kirkland Apr 5 1998 SCa-549

Appendix 2. Continued

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

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

APPENDIX 2. Continued

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

[170]RSA: Mark Hoefs, Steven A. Junak, Janet Takara, M. Gay Jul 14 1995 2401
[171]SD: Steven A. Junak Apr 23, 1997 SCI858
[172]SBBG: S.A. Junak, K. Kirkland Apr 13 2001 SCa-1421
[173]SBBG: Tim Ross, Orlando Mistretta, Mike Hammitt May 19 1991 5286
[174]SBBG: E.R. Blakley Apr 7 1963 5537
[175]SBBG: S.A. Junak May 20 1996
[176]UCR: T.S. Ross Apr 23 1993 6926
[177]UCR: 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
Eucalyptus polyanthemos Schauer*				CAT[178]					
Eucalyptus sideroxylon Woolls*							CRU		
Eucalyptus tereticornis Sm.*						ROS	CRU		
Nyctaginaceae									
Abronia latifolia Eschsch.									MIG
Abronia maritima S. Watson		CLE	NIC	CAT		ROS	CRU	ANA	MIG
Abronia umbellata Lam.		CLE	NIC	CAT		ROS	CRU		MIG
Mirabilis laevis (Benth.) Curran	var. *crassifolia* (Choisy) Spellenb.	CLE		CAT	BAR	ROS	CRU	ANA	
Oleaceae									
Olea europaea L.*					BAR		CRU	ANA	
Onagraceae									
Camissonia strigulosa (Fisch. & C.A. Mey.) P.H. Raven						ROS			
Camissoniopsis cheiranthifolia (Spreng.) W.L. Wagner & Hoch	ssp. *cheiranthifolia*	CLE	NIC		BAR	ROS	CRU		MIG
Camissoniopsis cheiranthifolia (Spreng.) W.L. Wagner & Hoch	ssp. *suffruticosa* (S. Watson) W.L.Wagner & Hoch		NIC						
Camissoniopsis guadalupensis (S. Watson) W.L. Wagner & Hoch	ssp. *clementina* (P.H. Raven) W.L. Wagner & Hoch	CLE							
Camissoniopsis hirtella (Greene) W.L. Wagner & Hoch							CRU		
Camissoniopsis ignota (Jeps.) W.L. Wagner & Hoch						ROS	CRU		
Camissoniopsis intermedia (P.H. Raven) W.L. Wagner & Hoch				CAT			CRU		MIG
Camissoniopsis micrantha (Spreng.) W.L. Wagner & Hoch		CLE		CAT		ROS	CRU	ANA	MIG
Camissoniopsis robusta (P.H. Raven) W.L. Wagner & Hoch		CLE		CAT			CRU		MIG
Clarkia davyi (Jeps.) H. Lewis & M. Lewis						ROS			
Clarkia epilobioides (Torr. & A. Gray) A. Nelson & J.F.		CLE		CAT		ROS	CRU	ANA	
Clarkia prostrata H. Lewis & M. Lewis									
Clarkia purpurea (Curtis) A. Nelson & J.F. Macbr.	ssp. *quadrivulnera* (Lindl.) H. Lewis & M. Lewis			CAT		ROS	CRU		
Clarkia unguiculata Lindl.				CAT			CRU		
Epilobium brachycarpum C. Presl		CLE?[179]					CRU		
Epilobium canum (Greene) P.H. Raven[180]	ssp. *angustifolium*			CAT[181]		ROS	CRU	ANA	MIG
Epilobium canum (Greene) P.H. Raven	ssp. *canum*	CLE		CAT			CRU	ANA	

[178]UCR: T.S. Ross, Janet Takara, Stacey Otte Apr 24 1993 6964
[179]Pers. com. E. Howe
[180]This taxa unresolved
[181]SDSU: R.M. Beauchamp August 8, 1966 54

APPENDIX 2. Continued

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

[182]Pers. com. E. Howe
[183]RSA: Steven A. Junak May 14 1985 SC1-56
[184]RSA: 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									
Mimulus aurantiacus Curtis	var. *aurantiacus*			CAT[185]					
Mimulus aurantiacus Curtis	var. *parviflorus* (Greene) D.M. Thomps.	CLE				ROS	CRU	ANA	
Mimulus aurantiacus Curtis	var. *pubescens* (Torr.) D.M. Thomps.					ROS	CRU		
Mimulus aurantiacus Curtis	var. *puniceus* (Nutt.) D.M. Thomps.			CAT					
Mimulus cardinalis Benth.				CAT			CRU		
Mimulus floribundus Lindl.		CLE[186]		CAT		ROS			
Mimulus guttatus DC.		CLE		CAT		ROS	CRU		
Mimulus latifolius A. Gray				CAT[187]			CRU		
Mimulus traskiae A.L. Grant				CAT					
Pittosporaceae									
Pittosporum undulatum Vent.*				CAT[188]					
Plantaginaceae									
Antirrhinum kelloggii Greene				CAT			CRU		
Antirrhinum multiflorum Pennell							CRU		
Antirrhinum nuttallianum A. DC.	ssp. *subsessile* (A. Gray) D.M. Thomps.	CLE		CAT		ROS	CRU	ANA	MIG
Callitriche marginata Torr.		CLE		CAT					
Collinsia heterophylla Graham		CLE				ROS			
Gambelia speciosa Nutt.		CLE		CAT	BAR				
Keckiella cordifolia (Benth.) Straw		CLE		CAT		ROS	CRU	ANA	
Kickxia elatine (L.) Dumort.*				CAT[189]					
Linaria bipartita (Vent.) Willd.*				CAT					
Nuttallanthus texanus (Scheele) D.A. Sutton		CLE		CAT		ROS	CRU	ANA	MIG
Veronica anagallis-aquatica L.*							CRU		
Plantago coronopus L.*			NIC	CAT				ANA	MIG
Plantago elongata Pursh						ROS	CRU		MIG
Plantago erecta E. Morris		CLE		CAT		ROS	CRU	ANA	
Plantago lanceolata L.*		CLE		CAT[190]			CRU		MIG
Plantago major L.*			NIC	CAT			CRU		
Plantago maritima L.						ROS			
Plantago ovata Forssk.	var. *insularis* (Eastw.) S.C. Meyers & A. Liston	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Plantago subnuda Pilg.*						ROS	CRU		MIG
Plantanaceae									
Platanus racemosa Nutt.				CAT*			CRU		

[185]OBI: John Knapp, Denise Knapp, 7, April 13, 2003
[186]SBBG: S. Boyd, T. Ross, L. Arnseth Apr 8 1990 4291
[187]Dave M. Thompson 2012. *Mimulus*, in Jepson Flora Project (eds.) Jepson eFlora, accessed on May 7 2014
[188]GH: R.F Thorne & A.D. Propst 1974-09-12 45100
[189]SBBG: M.L. Hoefs, R.F. Thorne, J. Takara Jul 25 1995 2438
[190]SBBG: 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									
Armeria maritima (Mill.) Willd.	ssp. *californica* (Boiss.) A.E. Porsild					ROS			
Limonium californicum (Boiss.) A. Heller*		CLE?[191]							
Limonium perezii (Stapf) F.T. Hubb.*		CLE		CAT					
Limonium sinuatum (L.) Mill.*				CAT				ANA&	MIG&
Polemoniaceae									
Allophyllum glutinosum (Benth.) A.D. Grant & V.E. Grant		CLE		CAT					
Eriastrum filifolium (Nutt.) Wooton & Standl.		CLE		CAT			CRU		
Gilia achilleifolia Benth.	ssp. *multicaulis* (Benth.) V.E. Grant & A.D. Grant					ROS			
Gilia angelensis V.E. Grant		CLE		CAT			CRU		
Gilia capitata Sims	ssp. *abrotanifolia* (Greene) V.E. Grant			CAT			CRU		
Gilia clivorum (Jeps.) V.E. Grant				CAT		ROS	CRU	ANA	MIG
Gilia nevinii A. Gray		CLE	NIC	CAT	BAR	ROS	CRU	ANA	
Gilia tenuiflora Benth.	ssp. *hoffmannii* (Eastw.) A.D. Grant & V.E. Grant					ROS			
Leptosiphon bicolor Nutt.		CLE		CAT					
Leptosiphon parviflorus Benth.						ROS	CRU		MIG
Leptosiphon pygmaeus (Brand) J.M. Porter & L.A. Johnson	ssp. *pygmaeus*	CLE							
Linanthus dianthiflorus (Benth.) Greene				CAT			CRU		
Navarretia atractyloides (Benth.) Hook. & Arn.		CLE		CAT		ROS	CRU		
Navarretia hamata Greene	ssp. *leptantha* (Greene) H. Mason	CLE		CAT					
Polygalaceae									
Polygala californica Nutt.							CRU		
Chorizanthe staticoides Benth.				CAT					
Chorizanthe wheeleri S. Watson						ROS	CRU		
Eriogonum arborescens Greene						ROS	CRU	ANA	
Eriogonum cinereum Benth.			NIC[192]*			ROS			
Eriogonum fasciculatum Benth.*	var. *fasciculatum*			CAT[193]					
Eriogonum fasciculatum Benth.*	var. *polifolium* (Benth.) Torr. & A. Gray		NIC						
Eriogonum giganteum S. Watson	var. *compactum* Dunkle				BAR				
Eriogonum giganteum S. Watson	var. *formosum* K. Brandegee	CLE							
Eriogonum giganteum S. Watson	var. *giganteum*			CAT			CRU*		
Eriogonum grande Greene	var. *grande*	CLE		CAT		ROS	CRU	ANA	

[191]Pers. com. E. Howe
[192]SBBG: S.A. Junak, T. Murphey, SN-432, Feb 21 1990
[193]HSC: 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
Eriogonum grande Greene	var. *rubescens* (Greene) Munz					ROS	CRU	ANA	MIG
Eriogonum grande Greene	var. *timorum* Reveal		NIC						
Lastarriaea coriacea (Goodman) Hoover				CAT		ROS	CRU		
Persicaria lapathifolia (L.) Gray							CRU		
Polygonum argyrocoleon Kunze*		CLE	NIC	CAT			CRU		
Polygonum aviculare L.*	ssp. *depressum* (Meisn.) Arcang.	CLE	NIC	CAT		ROS	CRU	ANA	
Pterostegia drymarioides	Fisch. & C.A. Mey.	CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Rumex acetosella L.*						ROS	CRU		
Rumex conglomeratus Murray*		CLE[194]		CAT		ROS	CRU		
Rumex crispus L.*		CLE	NIC	CAT		ROS	CRU	ANA	MIG
Rumex fueginus Phil.				CAT					MIG
Rumex obtusifolius L.*			NIC						
Rumex pulcher L.*							CRU		
Rumex salicifolius Weinm.		CLE	NIC	CAT		ROS	CRU		MIG
Portulacaceae									
Portulaca oleracea L.*				CAT			CRU		
Primulaceae									
Dodecatheon clevelandii Greene	ssp. *insulare* H.J. Thomps.	CLE	NIC	CAT		ROS	CRU	ANA	MIG
Ranunculaceae									
Clematis lasiantha Nutt.							CRU		
Clematis ligusticifolia Nutt.				CAT		ROS	CRU		
Clematis pauciflora Nutt.							CRU		
Delphinium parryi A. Gray	ssp. *maritimum* (Davidson) M.J. Warnock			CAT		ROS	CRU	ANA	MIG
Delphinium parryi A. Gray	ssp. *parryi*			CAT			CRU		
Delphinium variegatum Torr. & A. Gray	ssp. *kinkiense* (Munz) M.J. Warnock	CLE							
Delphinium variegatum Torr. & A. Gray	ssp. *thornei* Munz	CLE							
Ranunculus californicus Benth.				CAT		ROS	CRU		MIG
Ranunculus hebecarpus Hook. & Arn.				CAT					
Resedaceae									
Oligomeris linifolia (Hornem.) J.F. Macbr.		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG
Reseda odorata L.*				CAT					
Rhamnaceae									
Ceanothus arboreus Greene				CAT		ROS	CRU		
Ceanothus megacarpus Nutt.	var. *insularis* (Eastw.) Munz	CLE		CAT		ROS	CRU	ANA	MIG&
Ceanothus megacarpus Nutt.	var. *megacarpus*	CLE		CAT			CRU		
Frangula californica (Eschsch.) A. Gray	ssp. *californica*						CRU		
Rhamnus pirifolia Greene		CLE		CAT		ROS	CRU		MIG&
Rosaceae									
Adenostoma fasciculatum Hook. & Arn.	var. *fasciculatum*	CLE		CAT		ROS	CRU		

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

APPENDIX 2. Continued

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

[195]Synonym: *Potentilla glandulosa* Lindl.
[196]UC: Tim Ross, 6923, Apr 22 1993
[197]SBBG: 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
Salix lasiandra Benth.	var. *lasiandra*						CRU		
Salix lasiolepis Benth.		CLE?[198]	NIC	CAT		ROS	CRU	ANA	MIG
Sapindaceae									
Acer macrophyllum Pursh							CRU		
Saxifragaceae									
Heuchera maxima Greene						ROS	CRU	ANA	
Jepsonia malvifolia (Greene) Small		CLE	NIC	CAT		ROS	CRU		
Lithophragma affine A. Gray				CAT					
Lithophragma cymbalaria Torr. & A. Gray						ROS	CRU		
Lithophragma maximum Bacig.		CLE							
Micranthes californica (Greene) Small[199]		CLE[200]				ROS	CRU		
Scrophulariaceae									
Myoporum laetum G. Forst.*		CLE[201]	NIC				CRU&		
Scrophularia californica Cham. & Schltdl.						ROS			
Scrophularia villosa Pennell		CLE		CAT					
Verbascum thapsus L.*							CRU		
Solanaceae									
Datura wrightii Regel		CLE?[202]*		CAT		ROS	CRU		
Lycium brevipes Benth.		CLE	NIC	CAT&					
Lycium californicum Nutt.		CLE	NIC	CAT	BAR		CRU	ANA	MIG
Lycium fremontii A. Gray						ROS			
Lycium verrucosum Eastw.			NIC&						
Lycopersicum esculentum Mill.*		CLE?[203]	NIC	CAT[204]	BAR&		CRU	ANA&	MIG&
Nicotiana clevelandii A. Gray				CAT[205]	BAR		CRU	ANA	
Nicotiana glauca Graham*		CLE?[206]	NIC	CAT			CRU		
Nicotiana quadrivalvis Pursh				CAT[207]					
Petunia parviflora Juss.						ROS			
Solanum americanum Mill.*		CLE[208]	NIC			ROS[209]		ANA	
Solanum douglasii Dunal		CLE	NIC	CAT	BAR	ROS	CRU	ANA	MIG

[198]Pers. com. E. Howe
[199]Synonym: *Saxifraga californica* Greene
[200]SBBG: S.A. Junak Mar 13 1997 SCl-770
[201]SBBG: S.A. Junak Jul 31 1981 SCl-53
[202]Pers. com. E. Howe
[203]Pers. com. E. Howe
[204]RSA: R.F. Thorne, 47381, Sep 4 1975
[205]RSA: Blanche Trask Mar 1901 s.n.
[206]Pers. com. E. Howe
[207]SD: Robert F. Thorne, P. Everett, 34883, Jun 22, 1965
[208]SBBG: H.L. Ferguson, R.M. Beauchamp Sep 15 1979
[209]SBBG: S.A. Junak Sep 23 1998 SR-896

APPENDIX 2. Continued

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

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