

JCA

Trip No 25

USA

2nd June - 27th June 1993

JCA13291 – 13609

2 JUNE, 1993 : NEW MEXICO

13291	<i>Cheilanthes</i>	Lincoln Co., Malpais Lava Beds NW of Carrizozo	1660 m. (5450')	Crevices on lava boulders.	Dormant	H	
292	<i>Yupuntia</i>		"	"	Carmine		
293							
294	<i>Primula ellisiae</i>	Bernalillo Co., Sandia Crest, E of Albuquerque.	3230 m. (10,600')	Shady fissures on summit cliffs - usually W-facing	Deep pink		
295	<i>Polemonium brandegei</i>		"	"	Pale yellow		
296	<i>Lesquerella</i>		"	"	Exposed gravelly areas along summit ridge	Bright yellow	OBS
297	<i>Clematis columbiana</i>		"	"	Summit cliffs and also lower in woodland.	Shell-pink/white	
298	<i>Viola</i>		"	2740 m. (9000')	Mixed, mainly coniferous, woodland.	White	OBS
299							

3 JUNE, 1993 : NEW MEXICO

13300	<i>Calochortus</i> ? ambiguus / ? <i>nuttallii</i>	San Juan Co., SE of Bloomfield (on road to Angel's Peak)	1800 m.	Sandy clay among <i>Artemisia</i>	White	H
301	<i>Delphinium</i> ? <i>nuttallianum</i> complex		"	"	Deep blue	H
302	<i>Penstemon angustifolius</i>		"	"	Pale blue	OBS
303	<i>Wyethia</i> ? <i>scabra</i>		"	"	Yellow	OBS.
304						
305	<i>Gilia</i>	San Juan Co., NW of Aztec (on 574) to La Plata.	1900 m.	Eroded clay hills with sparse <i>Juniperus</i> & <i>Pinus</i>	[on ridgetops] [tinged violet-blue; perianth lilac-pink]	H
306	<i>Cryptantha</i>		"	"	Yellow	H
307	<i>Townsendia incana</i>		"	"	Pale pink/white	H
308	<i>Astragalus</i> ? <i>newberryi</i>		"	"	No seed det.	OBS.
309	<i>Astragalus</i>		"	"	Seed immature	OBS
310						

4 JUNE, 1993 : ARIZONA / UTAH

13311	<i>Calochortus aureus</i>	Arizona, Coconino Co., WSW of Koyenta (on 160 near Anasazi Inn)	1980 m. (6500')	Open areas among <i>Artemisia</i> and occasional <i>Juniperus</i> .	Yellow.	H
13312	<i>Calochortus nuttallii</i> / ambiguus	Utah, Kane Co., ENE of Kanab (30 miles ENE to Glen Canyon)		Openings among <i>Artemisia</i> in gravelly clay	White	H
313	<i>Polygala subspinoso</i>		"	"	Red-purple	H
314	<i>Phlox</i>		"	"	In fruit	S
315	<i>Coryphantha vivipara</i>		"	"	Pink	
316						

4 JUNE, 1993 : UTAH

		Utah, Kane Co., E of Kanab (14 miles E, near Johnson Wash)	1500 m.			
13317	<i>Gilia aggregata</i>		"	Openings among pines in sandy clay	Scarlet	OBS
* 318	<i>Astragalus</i> [?] <i>amphioxys</i> var. <i>vespertinus</i>	"	"	"	Red-purple	S
319	<i>Calochortus</i> ? <i>nuttallii</i>	"	"	"	White	OBS
320	<i>Frasera albomarginata</i>	"	"	"	-	OBS
321						

5 JUNE, 1993 : UTAH / NEVADA

* 13322	<i>Arctomecon humilis</i>	{ Utah, Washington Co., Bloomington } Hills, S of St. George	920 m. (±3000')	Eroded clay hills, on tops & sides of ridges.	White	S		
323								
* 324	<i>Calochortus flexuosus</i>	Nev., Clark Co., NNW of Logandale	460 m.	{ Exposed, gravelly ridgetops on clay hills among } desert scrub.	In fruit	S		
* 325	<i>Scleroactus polyonciatus</i>	"	(1500')				"	S
326	<i>Gilia</i>	"	"				Lilac	S: few
* 327	<i>Gymnis grandiflora</i> <i>Palaestrophe cooperi</i>	"	"	"	Yellow	HS		
328								
* 329	<i>Arctomecon californicum</i>	{ Nev., Clark Co., SE of Valley of } Fire (S of Overton; W of Lake Mead)	500 m.	Exposed ridgetops on eroded clay and gravel hills.	Yellow	S		
* 330	<i>Encelopsis argophylla</i>		"	"	Yellow	S		

6 JUNE, 1993 : CALIFORNIA

13331	<i>Hesperocallis undulata</i>	{ San Bernardino Co., ESE of Barstow } National Trails Hwy at Hector Rd.	610 m.	Low hills : in deep sand overlaid with volcanic debris : No growth at all		
3332	<i>Calochortus striatus</i>	Los Angeles Co., N of Lancaster	760 m.	See 12757 : virtually no sign of growth : one flower seen		
* 333	<i>Paeonia californica</i>	{ San Luis Obispo Co., NE of San } Luis Obispo (Reservoir Canyon).	150 m.	Steep slopes above stream : better than in 1992 but much poorer than 1989.		S
* 334	<i>Calochortus simulans</i>	"	"	Heavy clay among grasses on open slope ; poorer than in 1992.		S
335	<i>Silene laciniata</i>	"	"	As 13333 : small colony in chaparral.		S
336	<i>Calochortus clavatus</i>	"	"	" : in bud ; several noted where none previously seen.		O
337	<i>Calochortus obispoensis</i>	"	"	Considerable numbers noted where none previously seen : usually in thin soils over serpentine but among grass & chaparral higher up.		S
* 13338	<i>Fritillaria biflora</i>	{ San Luis Obispo Co., near } Hearst Creek above San Simeon } Bay	10 m.	Coastal grassland ~ in sandy clay.	In fruit	S
339						

7 JUNE, 1993 : CALIFORNIA

* 13340	<i>Calochortus albus rubellus</i>	{ San Luis Obispo Co., W of Templeton (York Mountain Rd.)	400 m.	Steep, stony, shaded banks in deciduous woodland	In fruit	S
13341						
13342	<i>Salvia spathacea</i>	{ San Luis Obispo Co., W of Paso Robles (Adelaida Rd.)	550 m.	"	No seed	0
343	<i>Paeonia californica</i>		"	"	Little seed	0
* 344	<i>Calochortus albus</i>	"	"		Cream, shell pink, deep pink	S
345		"	"			
* 346	<i>Dodecatheon clevelandii</i>	"	"	Open slopes & banks among long grasses.	In fruit	S
* 347	<i>Stitellaria ? biflora</i>	"	"	"	: few	S
* 348	<i>Calochortus venustus</i>	"	"	"	"	S
349						
* 350	<i>Iris munzii</i>	{ Tulare Co., above Coffee Camp (E of Springville)	520 m.	Among boulders in scrub-filled gulleys.	In fruit	S
351						
352						
* 353	<i>Calochortus amoenus</i>	{ Tulare Co., NE of Springville : Camp Wishon Rd. (N Fork of Middle Fork Tule River)	1100 m.	Steep granite slopes among scrub	In fruit	S
354	<i>Penstemon</i>		"	"	Deep blue	0
355	<i>Fremontodendron</i>		"	"	Yellow	0
* 356	<i>Dichelostemma volubile</i>	"	"	"	In fruit	S

8 JUNE, 1993 : CALIFORNIA

* 13357	<i>Calochortus superbus</i>	{ Mariposa Co., NNW of Hell Hollow to Coulterville (on 49).	700 m.	Steep, open rocky slopes.	White	S
358	<i>Lellaea ? x glaciogena</i>		"	"	- in gully.	HS
* 359	<i>Delphinium kanserii</i>	"	"	"	Blue	S
360						
361	<i>Calochortus superbus</i>	{ Mariposa Co., Greeley Hill NE of Coulterville	1000 m.	Open grassy slopes with sparse scrub & conifers	Some lilac-pinks - mostly white - very	
362						
363	<i>Calochortus albus</i>	{ Tuolumne Co., Italian Bar Road (NE of Columbia (S Fork Stanislaus R))	750 m.	Steep scrub-covered slope in deciduous woods.	[prolific this season.	
364	<i>Stitellaria micrantha</i>		"	"	In fruit	S
365	<i>Erythronium tuolumnense</i>	"	"	"	"	S
366						
367						

10 JUNE, 1993 : CALIFORNIA

* 13368	<i>Calochortus amabilis</i>	{ Lake Co., Butte Canyon Road, SE } of Middletown	350 m.	Among <i>Arctostaphylos</i> on stony, serpentine slopes	In fruit	S		
369	<i>Fritillaria recurva coccinea</i> (?)				"	"	S: few	
370								
371		{ Lake / Sonoma Co., Western Mine Rd. } S of Middletown (NW slope Mt. St. Helena)	750 m.	Steep serpentine slopes among <i>Pinus</i> & <i>Arctostaphylos</i>	Yellow	S		
372	<i>Calochortus amabilis</i>				"	"		
373	<i>Iris macrosiphon</i>				"	"	Purple to lilac	O
* 374	<i>Erythronium helense</i>	"	700 m.	"	In fruit	S: few.		
375								
376								
377	<i>Fritillaria purdyi</i>	Lake Co., S of Lakeport (off Hwy 29/175)	450 m.	Serpentine talus: few located (habitat mostly removed)	In fruit	S few.		
378								
379								
* 380	<i>Fritillaria pluriflora</i>	Lake Co., Walker Ridge Road	600 m.	Open grassy areas in heavy clay	In fruit	S		
381	<i>Calochortus luteus</i> x <i>superbus</i>				"	"	Cream to yellow - no seed	
* 382	" <i>amabilis</i>	"	"	Among <i>Arctostaphylos</i> on serpentine outcrops	In fruit	S		
383	" <i>splendens</i>	"	"	Steep E-facing slope; among grasses & scrub	Lilac - no seed yet ext.			

11 JUNE, 1993 : CALIFORNIA

13384	<i>Penstemon heterophyllus</i>	{ Shasta Co., Buckhorn Summit, } { WNW of Redding (on 299) }	1350 m.	Steep, loose, gravelly granite slopes.	Lavender/blue			
385	<i>Ceanothus</i>				"	"	Rich blue	
386								
* 387	<i>Erythronium citrinum roderickii</i>	{ Trinity Co., above Scott Mountain } { Creek N of junction with Jangle Blue } Creek	1200 m.	Shaded slopes in mixed coniferous forest	In fruit	S		
388	<i>Chlox</i>				"	"	Bright pink	O
389	<i>Calochortus</i>				"	"	Lavender	H
390	<i>Viola lobata psychodes</i>	"	"	"	Yellow	O		
391	<i>Rhododendron occidentale</i>	"	"	Along stream in coniferous forest	White/pink			
392	<i>Adiantum pedatum</i>	"	"	"	-	O		
393	<i>Cypripedium californicum</i>	"	"	"	White			
394								

11 JUNE, 1993 : CALIFORNIA

* 13395	<i>Aritillaria purdyi</i>	{ Trinity Co., Trinity River Valley, S } of Bear Creek trailhead	960 m.	Open stony slope among sparse scrub.	In fruit	S
396			"	"	"	"
* 397	<i>Dodecatheon</i>	"	"	Steep, stony slopes in coniferous woodland	"	S
398	<i>Viola cuneata</i>	"	"	"	White/purple	O
399	<i>Viola lobata psychodes</i>	"	"	"	Yellow.	O

12 JUNE, 1993 : CALIFORNIA

* 13400	<i>Aritillaria recurva</i>	{ Trinity Co., Canyon Creek Rd., N of } Junction City	500 m. (1640 ft.)	Steep, stony serpentine slopes with sparse scrub	In fruit	S	
401			"	"	"	"	
* 402	<i>Lewisia cotyledon</i> var. <i>heckneri</i>	"	"	Fissures on vertical, shaded, serpentine cliffs	"	S	
403		"	"	"	"	"	
404	<i>Iris tenuissima</i>	{ Humboldt Co., Friday Ridge SSW } of Willow Creek (off Berry Summit)	1580 m.	Stony areas in openings among conifers	Cream-yellow	P	
405	<i>Erythronium californicum</i>		"	"	"	Cream.	P
406	<i>Aritillaria glauca</i>		"	"	Loose talus on steep, open W-facing slope	Yellow & brown forms in fall flower	PL
407			"	"	"	"	"
408	<i>Dodecatheon hendersonii</i>	"	1420 m.	Stony turf of openings in coniferous forest	Deep pink	PH	
409	<i>Viola hallii</i>	"	"	"	Pale/deep purple	P	
410	<i>Calochortus caeruleus</i>	"	"	"	Lilac.	P	
411		"	"	"	"	"	
412		"	"	"	"	"	
414	<i>Iris tenax klamathensis</i>	{ Humboldt Co., NNE of Orleans to } Somes Bar (Klamath River Valley)	180 m.	Open stony slope at margin of woodland	In fruit	S	
415	<i>Dichelostemma ida-maia</i>		"	"	"	Red & green	PL
416			"	"	"	"	"
417			"	"	"	"	"
418			"	"	"	"	"
419		"	"	"	"	"	

13 JUNE, 1993 : OREGON

13420	<i>Dichelostemma capitatum</i>	Josephine Co., near Rough and Ready Creek, NNE of O'Brien	450 m.	Open stony areas among <i>Artemisia</i>	Blue to violet	
421	<i>Iris bracteata</i>		"	"	In fruit	S
* 422	<i>Allium platycaule</i> / ^{falsifolium} fimbriatum		"	"	Red-purple	S: few
423	<i>Penstemon heterophyllus</i>		"	"	Lavender-blue	O
424	<i>Penstemon</i>		"	"	Dark-blue	O
425						
426						
* 427	<i>Iris bracteata</i>	Josephine Co., Waldo Hill (S of Waldo on Sanger Peak Road)	650 m.	Openings in mixed woodland & among scrub	In fruit	S
* 428	<i>Erythronium howellii</i>		"	"	"	S
429	<i>Aritaleia hendersonii</i>		"	"	Pale yellow	O
* 430	<i>Fritillaria?</i> <i>affinis</i>		"	"	In fruit	S
431						
432	<i>Calochortus tolmiei</i>	Josephine Co., Happy Camp Road, E of Takilma	600 m.	Open stony slope — among scrub	"	S
433	<i>Fritillaria?</i> <i>affinis</i>		"	"	"	S
434	<i>Allium platycaule</i>		"	"	Red-purple	
435						
436						
437	<i>Silene hookeri</i>	Josephine Co., Happy Camp Road, E of Takilma	850 m.	Open, stony, turfey slopes with sparse conifers	Soft salmon-pink	
438	<i>Viola cuneata</i>		"	"	White	O
439	<i>Iris chrysophylla</i>		"	"	Pale cream	
440	<i>Calochortus tolmiei</i>		"	"	Pale lilac	O
* 441	<i>Erythronium howellii</i>		"	"	In fruit	S
442						
443						
* 444	<i>Fritillaria?</i> <i>affinis</i>	Josephine Co., Lone Mountain Road SW of O'Brien — along W fork Illinois River.	550 m.	Open stony 'flat' with sparse scrub	In fruit	S
445	<i>Iris?</i> <i>bracteata</i>		"	"	"	S
446						
447						
448						
449						

13 JUNE, 1993 : OREGON

*13450	<i>Lewisia oppositifolia</i>	{ Josephine Co., Eight Dollar Mt., SW of Selma }	450 m	Open S-facing slope overlaid with volcanic debris	In fruit	S
451	"		"	"	"	"
* 452	<i>Artilaria ? affinis</i>	"	"	"	"	S
* 454	<i>Iris chrysophylla</i>	"	"	"	"	"
* 455	<i>Calochortus tolmiei</i>	"	"	"	"	[<i>C. uniflorus</i> & <i>hyb.</i> present] here acc. to B.K.S.
456	<i>Iris uninominata ?</i>	{ Josephine Co., Fiddler Mt. Rd., SW of Selma, above Mike's Gulch }	820 m.	Stony, N-facing slope at woodland margin	Seed immature	
457	"		"	"	"	"
* 458	<i>Dicentra oregona</i>	"	"	Loose serpentine talus on N-facing slope	Few early fruits	S
459	"	"	"	"	"	
* 460	<i>Allium rivale</i>	{ Josephine Co., Fiddler Mt. Rd., SW of Selma, above Josephine Creek }	550 m.	Steep rocky slopes with sparse conifers	In fruit	S
* 461	<i>Delphinium nuttalianum</i> complex		"	"	"	" [blue]
* 462	<i>Erythronium citrinum</i>	"	"	"	"	S
463	"	"	"	"	"	
464	<i>Cypripedium californicum</i>	"	"	Along stream in steep-sided gulley	White/yellow	O
465	"	"	"	"	"	

14 JUNE, 1993 : OREGON

*13466	<i>Erythronium hendersonii</i>	{ Jackson Co., Siskiyou Mts., SSE of Oakland (on old highway ~ off I 5 at Exit 5 to Exit 1) }	1340 m.	Deciduous oak woodland ~ deep humus over clay	In fruit	S
* 467	<i>Artilaria recurva</i>		(4400')	"	"	"
468	<i>Artelekia hendersonii</i>	"	"	"	Pale yellow	L
469	<i>Phlox speciosa</i> : white forms	"	"	"	White.	
470	"	"	"	"	"	
471	<i>Allium</i>	"	1370 m.	Open meadow on SW facing slope	In bud: pink	L
* 472	<i>Sisyrinchium douglasii</i>	"	(4500')	"	In fruit	S
473	"	"	"	"	"	
474	<i>Calochortus uniflorus</i>	{ Josephine Co., above W Fork Illinois River, SW of O'Brien }	550 m.	Wet depressions among sparse conifers	Silac	O
475	"		"	"	"	"
476	<i>Cypripedium californicum</i>	"	"	Wet areas in coniferous woodland	White	
477	<i>Darlingtonia californica</i>	"	"	"	"	O
478	<i>Allium rivale</i>	"	600 m.	Opening in coniferous woodland.	Seed dispersed	O
479	<i>Epilobium rigidum</i>	"	"	Open stony area.	Not in fl.	O

14 JUNE, 1993 : OREGON

* 13480	<i>Dodecatheon ? hendersonii</i>	{ Josephine Co., above W Fork Illinois River SW of O'Brien (on Lone Mountain ~ Wier Road) }	500 m.	{ In clay on open, level stony areas ~ still wet but drying out }	In fruit	S
481	<i>Viola hallii</i>		"		No seed set	O
482	<i>Ceanothus pumilus</i>		"		In fruit	S
483	<i>Calochortus howellii</i>		"		Not yet in fl.	O
* 484	<i>Lewisia oppositifolia</i>		"		In fruit	S
485						
486						

15 JUNE, 1993 : OREGON

13487	<i>Lupinus breweri</i>	{ Douglas Co., NE of Diamond Lake }	490 m. (1600')	Open, gravelly banks.	Blue.	
488						
489		{ Douglas Co., ESE of Steamboat ~ N of Horseshoe Bend on Umpqua River }	450 m.	Rock fissures on outcrops in dense woodland.		Seed immature
490	<i>Kalmiopsis leachiana</i>					
491						
492	<i>Lilium washingtonianum</i>	{ Douglas Co., W of Tillier on Tillier Trail Hwy at junction with Coffee Creek Rd. }	370 m.	Opening in coniferous woodland.	White to purple	
493						
* 494	<i>Erythronium oregonum</i>	Douglas Co., above Callahan Creek, S of Tillier (E of Canyonville)	460 m.	Steep serpentine slopes in openings among Pinus	In fruit	S
* 495	<i>Silene (hookeri) ingramii</i>	"	"	"	Cherry-pink	S
496	<i>Anteleia hendersonii</i>	"	"	"	Pale yellow	S
* 497	<i>Calochortus tolmiei</i>	"	"	"	In fruit	S
* 498	<i>Comassia</i>	"	"	"	"	S

16 JUNE, 1993 : OREGON / CALIFORNIA

13,499	<i>Fritillaria recurva</i>	{ Oregon, Jackson Co., Siskiyou Mts SSE of Ashland }	1340 m.	Deciduous oak woodland.	In fruit	S.
500	<i>Delphinium nudicaule</i>					
* 501	<i>Erythronium hendersonii</i>	{ Oregon, Jackson Co., Jacksonville (near old cemetery) * }	500 m	Among scrub in deciduous oak woods	In fruit	S: few.
502	<i>Silene hookeri</i>			"	"	Salmon-pink
* 503	<i>Silene (hookeri) bolanderi</i>	{ Cal. Trinity Co., S of Hayfork to Peanut & E of Salt Creek }	750 m.	{ W-facing banks among scrub and openings in coniferous woodland }	White	S
504						

* No trace of *Fritillaria gentryi* seen here, 1993.

17 JUNE, 1993 : CALIFORNIA

* 13505	<i>Dichelostemma capitatum</i>	{ Tehama Co., NE of Red Bluff (on 36), above Pynes Creek.	380 m	Open area : among long grass & volcanic debris	In fruit	S
* 506	(Liliaceae)		"		"	"
507						
508	<i>Stemotodendron californicum</i>	{ Tehama Co., (12 miles) W of Mineral (on 36)	910 m.	Open areas with sparse scrub	Yellow.	0
509						
510						
* 511	<i>Erythronium purpurascens</i>	{ Plumas Co., above Round Valley } Reservoir, S of Greenville	1370 m.	Steep gravelly slopes : among conifers	In fruit	S
* 512	<i>Delphinium nuttallianum</i>		"		"	Blue
* 513	<i>Delphinium nudicaule</i>	"	"	"	Scarlet	S
* 514	<i>Calochortus ? tolmiei</i>	"	"	"	In fruit	S
* 515	<i>Dodecatheon ? hendersonii</i>	"	"	"	"	S
516	<i>Calochortus leichtlinii</i>	"	"	"	White	0
517						
* 518	<i>Erythronium purpurascens</i>	Plumas Co., Greenville	1090 m.	Thin humus layer over clay in coniferous woodland : in fruit		S
519	<i>Viola lobata</i>	"	"		"	"
520						
521						
522						
* 523	<i>Calochortus ? tolmiei</i>	{ Butte Co., Pulga Rd. along North } Fork Feather River	420 m.	{ Steep stony serpentine slopes & screes — } { facing South but often shaded by scrub }	In fruit	S
* 524	<i>Iris tenuissima purdyiformis</i>		"		"	"
* 525	<i>Erythronium multiscapideum</i>	"	"	"	"	S
526						

19 JUNE, 1993 : CALIFORNIA

13527						
528						
529						
530						
531						
532	<i>Lupinus heweri</i>	{ Tuolumne Co., S & SW of Tioga } Pass.	c. 3000 m.	Granite crevices & granite grit	Blue	
533	<i>Lesstemon newberryi</i>					Carminio-pink
534						

20 JUNE, 1993 : CALIFORNIA / NEVADA

* 13535	<i>Calochortus excavatus</i>	Inyo Co., Gerkin (S of Bishop)	1350 m.	Among <i>Rosa</i> , <i>Salix</i> & <i>Artemisia</i> scrub, in clay.	In fruit	S	
536							
537							
* 538	<i>Astragalus coccineus</i>	{ Inyo Co., White Mts., Toll House } Springs	1980 m.	Steep, loose slopes : in stony clay.	In fruit	S	
* 539	<i>Verothera caespitosa</i>		"	"	"	S	
540							
541	<i>Calochortus bruneoviridis</i>	Inyo Co., White Mts., Westgard Pass	2200 m.±	Among <i>Artemisia</i> on open 'flats'	White: flo just starting.		
542							
543							
* 544	<i>Calochortus kennedyi</i>	{ Inyo Co., Deep Springs Valley, } SW of Gilbert Summit	1620 m.	Open stony slopes with sparse steppe vegetation	In fruit	S	
* 545	<i>Delphinium parishii</i>		"	"	"	S	
546							
547							
* 548	<i>Haplopappus acaulis</i>	{ Eureka Co., (24 miles) W of } Eureka	2100 m.	{ Eroded clay slopes & 'bare patches' among } sparse <i>Juniperus</i>	In fruit: early	S: few	
* 549	<i>Erigeron compactus</i>		"		"	"	S
* 550	<i>Lepidium nenum</i>		"		"	"	S
* 551	<i>Penstemon jarvisiae</i>		"		"	"	S
* 552	<i>Oxytropis oesophila juniperina</i>		"		"	"	S

21 JUNE, 1993 : NEVADA

13. 553	<i>Delphinium</i>	{ White Pine Co., Pinto Summit - } SE of Eureka	2250 m.	Open, stony, E-facing slope with sparse <i>Artemisia</i> .	Blue	S: few		
554	<i>Alum</i>		"		"	In bud.	O	
* 555	<i>Hydrophyllum capitatum</i> var <i>alpinum</i> (Hydrophyllaceae)	"	"	"	In fruit.	S		
556	<i>Erigeron</i>	"	"	"	Orange & yellow	O		
557	<i>Verothera caespitosa</i>	"	"	"	White:	O		
558					very compact.			
* 559	<i>Penstemon</i> ? <i>confusus</i> / <i>dohii</i>	{ White Pine Co., W side of Pancake } Summit	1980 m.	Open, gravelly areas; among sparse <i>Juniperus</i>	In fruit	S		
* 560	<i>Astragalus calycosus</i>		"		"	"	S	
561								
562								
563								

21 JUNE, 1993 : NEVADA / UTAH

Nevada:

* 13563	<i>Scutellaria nana</i> var. <i>aephiphina</i>	{ White Pine Co., SE of Little Antelope Summit (S of Hamilton Junction)	1980 m.	Open areas among <i>Artemisia</i> ; in calcareous clay	Blue	S: few.
564	<i>Astragalus</i> (<i>Argophylli</i> Sect.)	"	"	"	In fruit	"
565	<i>Leucocnium</i>	"	"	"	"	"
* 566	<i>Phlox tumulosa</i>	{ White Pine Co., (13 miles) ^{NW} of Ely.	2200 m.	Openings among <i>Lupinus</i> ; in gravelly clay.	In fruit: early	S: few
567	<i>Astragalus</i> (<i>Argophylli</i> Sect.)	{ (SE of Robinson Summit)	"	"	"	"
568	<i>Delphinium andersonii</i>	"	"	"	Deep Blue;	"
569						
570						
* 571	<i>Lenothera caespitosa</i> var. <i>crinita</i>	{ Utah, Millard Co., (3.7 miles) SSE of Garrison		Steep, loose, stony slope	In fruit	S
572						
* 573	<i>Penstemon</i> ? <i>nanus</i>	{ Utah, Millard Co., SSE of Garrison	1900 m.	Open slopes in calcareous gravel.	In fruit	S
* 574	<i>Sphaeralcea</i> ? <i>caespitosa</i>	{ - N slope of Needle Range at Junction to Mormon Lake.	"	"	"	S
* 575	<i>Cryptantha compacta</i>		1980 m.	"	"	S
576						

22 JUNE, 1993 : UTAH / ARIZONA

13577	<i>Sphaeralcea</i>	{ Utah, Beaver Co., NW of Panguitch (on 20 between I 15 & 89)	2070 m.	Open slopes in loose, stony clay.	Orange-red.	H
578						
* 579	<i>Aquilegia scopulorum</i>	{ Utah, Garfield Co., Red Canyon, } above Butch Cassidy Draw.	2600 m.	Loose limestone scree on steep slopes	Blue: seed immature	S: few.
* 580	<i>Penstemon bracteatus</i>	"	"	"	In fruit	S: few
581	<i>Journalsia minima</i>	"	"	"	"	S: few.
582						
583						
584	<i>Lenothera howardii</i>	{ Utah, Garfield Co., Butch Cassidy Draw off Red Canyon.	"	Gravelly areas among sparse <i>Equis</i>	Yellow.	-
* 585	<i>Oxytropis creophila</i> var. <i>jonesii</i>	"	"	"	In fruit.	S
586						
587						
588						
589						
* 590	<i>Gilia caespitosa</i>	{ Wayne Co., SE of Seasdale to Grover	2450 m.	Crevices on sloping sandstone outcrops.	Seed mature on plants in most exposed sites	S: few

23 JUNE, 1993 : UTAH / ARIZONA

- * 13591 *Primula specuicola* { Utah, San Juan Co., Sunbonnet } 1550 m. { Seepage lines below overhangs on shady } In fruit S
- * 592 *Aquilegia micrantha* { Rock above Bluff. } " { sandstone cliffs } " S
- 593 *Mimulus eastwoodiae* " " " " 1/2 seed capsules S: few
- 594 " " " " " " " " " " " "
- * 595 *Penstemon eatonii* " " " " " " Among rocks on steep, sandstone slopes In fruit S
- 596 " " " " " " " " " " " "
- 597 " " " " " " " " " " " "
- 598 *Opuntia* { Arizona, Coconino Co., WSW of } 1980 m. { Open areas among Artemisia with occasional } In fruit S
- * 599 *Calochortus aureus* { Kayenta } " { Juniperus } Green P.

24 JUNE, 1993 : NEW MEXICO

- * 13600 *Gilia formosa* { San Juan Co., NW of Aztec (on } 1900 m. Eroded clay hills with sparse Juniperus & Pinus In fruit S
- 601 { 574) to La Plata } ~ along ridgetops only. (re-collection of 13305-H)
- 602 " " " " " " " " " " " "
- * 603 *Penstemon angustifolius versus* { San Juan Co., SE of Bloomfield } 1800 m. Sandy clay among Artemisia. In fruit S
- 604 { (on road to Angel's Peak) } " " " " " " " " " " " "
- 605 " " " " " " " " " " " "
- 606 *Primula ellisiae* { Bernalillo Co., Sandia Crest, E } 3230 m. Shady fissures on summit cliffs ~ usually In fruit but not quite mature
- 607 { of Albuquerque } W-facing. S.
- 608 " " " " " " " " " " " "

27 JUNE, 1993 : TEXAS

- 13609 *Eustoma exaltatum* Violet purple. P