



# Not a Lightning Talk

New discovery for California

# Hierarchy of new discoveries.

- 1] a new plant discovered, described and published by one person
- Example: Rob Preston with Atriplex
- 2] a new plant discovered by persons and then described and published by others.
- 3] range extensions

# Nemacladus inyoensis







*Lupinus  
uncialis*

Lilliput  
lupine





You are here

NEVADA

New record here

CALIFORNIA

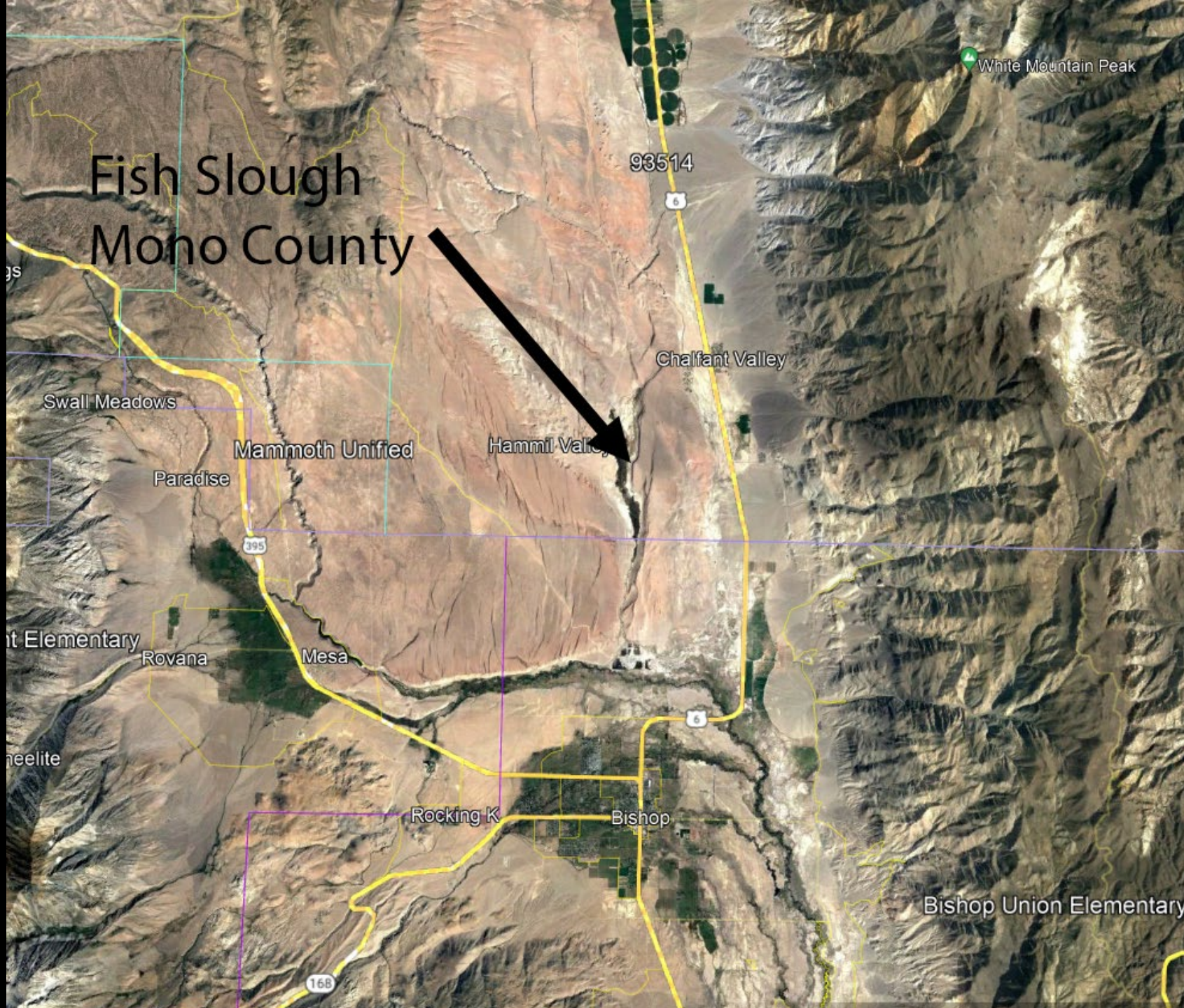
Sacramento

San Francisco

San Jose

Las Vegas

Los Angeles



# Fish Slough Mono County

White Mountain Peak

93514



Chalfant Valley

Swall Meadows

Mammoth Unified

Hammi Valley

Paradise



st Elementary

Rovana

Mesa



neelite

Rocking K

Bishop

Bishop Union Elementary





BLM  
Spring



Image Landsat / Copernicus

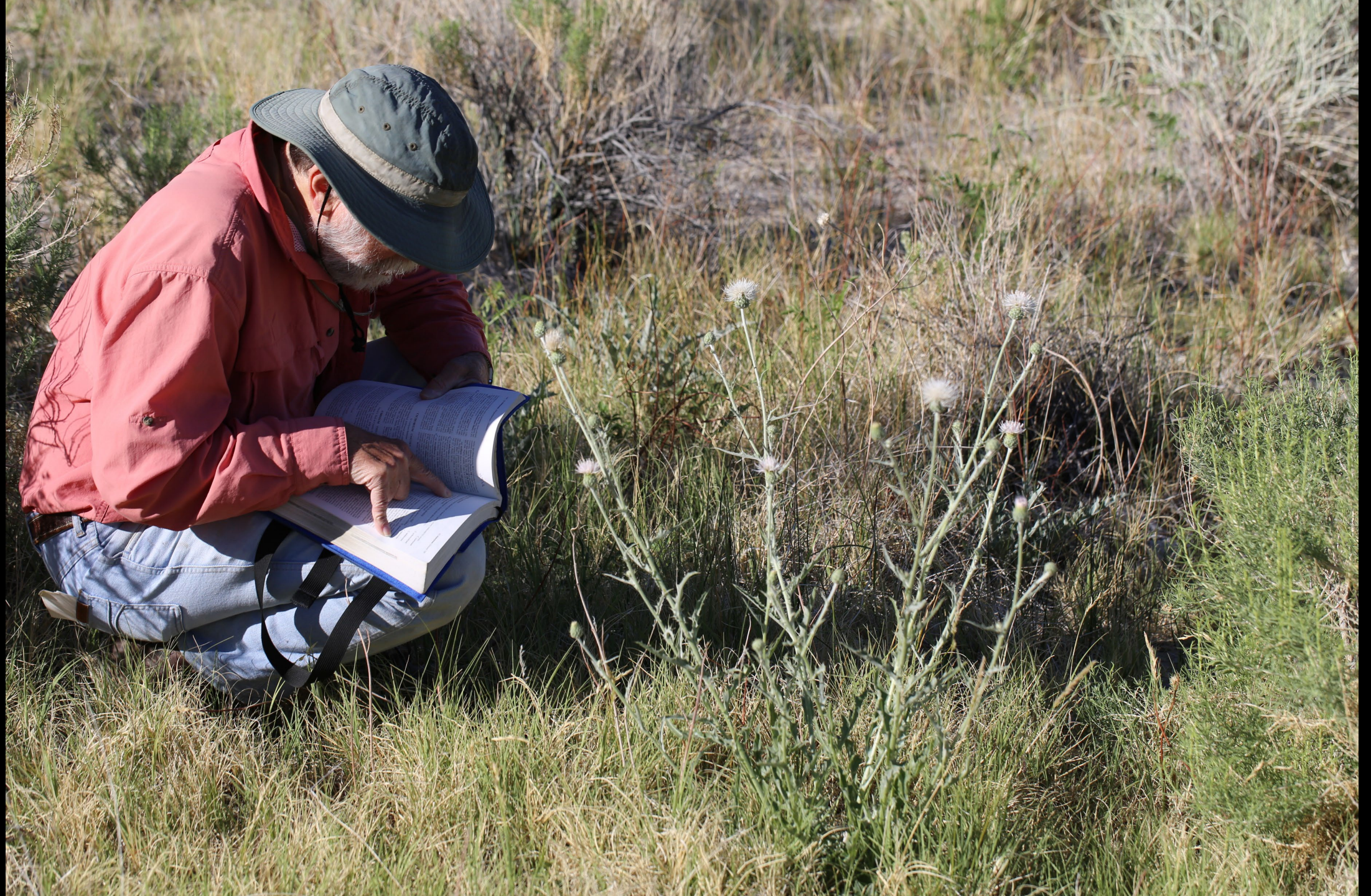


# Fish Slough, Mono County, BLM Spring 2013

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# Astragalus lentiginosus var. piscinensis













matsonburger  
11,313 observations



Observed:  
May 31, 2013 · 5:11 PM PDT

Submitted:  
Feb 10, 2022 · 5:50 PM PST



☆ clifton\_albrecht faved this observation

### Notes

nebrascensis seems like the best fit

### Activity



matsonburger suggested an ID

ID Withdrawn 2y



*Carex nebrascensis*  
Nebraska Sedge



jdmore commented

2y

### Community Taxon

[Reject?](#) • [What's this?](#)

Subgenus Carex (Carex Subg. Carex)

Cumulative IDs: 3 of 3



✓ Agree

⚖ Compare

i About

### Annotations (1)

Attribute	Value	Agree	Disagree



sheriff\_woody\_pct

69,238 observations



Observed:

May 27, 2023 · 5:21 PM PDT

Submitted:

May 31, 2023 · 9:45 PM PDT



☆ Be the first to fave this observation!

## Notes

Appears to be the same species Steve Matson found. Growing in very alkaline meadow. Trigonous achenes.

@jdmore

@sedgequeen

## Activity



sheriff\_woody\_pct suggested an ID

🏆 Improving 5mo



Genus *Carex*  
True Sedges

🔗 Compare

✅ Agree

## Community Taxon

[What's this?](#)

Genus *Carex* (True Sedges)

Cumulative IDs: 2 of 2



0

2/3rds

2

✅ Agree

🔗 Compare

📘 About

## Annotations

Attribute

Value

Agree

Disagree











THE JEPSON MANUAL  
VASCULAR PLANTS *of* CALIFORNIA

*Edited by* BRUCE G. BALDWIN, DOUGLAS H. GOLDMAN, DAVID J. KEIL,  
ROBERT PATTERSON, THOMAS J. ROSATTI, AND DIETER H. WILKEN

SECOND EDITION, THOROUGHLY REVISED AND EXPANDED



FL: bisexual, ...  
ridged or papillate. ± 100 spp.  
*B. capillaris* (L.) C.B. Clarke (p. 1323) THREAD-LEAVED  
BEAKSEED ST: gen > lvs. LF: blade < 0.5 mm wide. INFL: spike-  
lets 1-7, 2-5 mm, 1-1.5 mm wide; fl bracts ovate. FR: 0.5-0.7 mm,  
pale brown, transverse-wavy-ridged, angles sharp, tubercle ± round.  
2n=84. Open damp/dry sandy-gravelly soil; 300-2200 m. CaRH,

### CAREX SEDGE

Peter F. Zika, Andrew L. Hipp & Joy Mastrogiuseppe

Per, cespitose to loosely cespitose to rhizomed with internodes > 1 cm; gen monoecious. ST: gen sharp-3-angled  
LF: 3-ranked, gen glabrous exc gen scabrous on midrib, margin; sheath closed, back (blade side of st) green  
(non-blade side of st) gen thin, translucent, sometimes cross-wrinkled or flat, forming gen U-shaped mouth at top  
extending above blade as a fragile sleeve-like "contraligule" (esp Groups 7, 11), sometimes disintegrating to a  
lace-like network or fringe of veins ("lf sheath fronts fibrous"). INFL: spikelets gen several to many, in spike, raceme  
or head-like arrangement, each 1-many-fl'd, gen unisexual, or bisexual, then staminate fls distal to pistillate ("staminate  
late"), pistillate distal to staminate ("pistillate/staminate"), or otherwise, gen subtended by spikelet bract, lower  
infl bract, occ some additional pistillate spikelets on lateral shoots from basal nodes ("basal spikelets"); fls subtended  
("scale" in other literature, esp for pistillate). FL: unisexual; perianth 0. STAMINATE FL: stamens gen 3. PISTILLATE  
enclosed by sac-like structure (perigynium, abbreviated to "peri" here), occ next to bristle-like axis; style 1, slender  
exserted. FR: 2-3(4)-sided, enclosed in peri, stalked or not, style base gen not persistent; peri body 2-3(4)-sided or  
with marginal ribs, some with additional veins, papillate or not (determined at 20x), abruptly narrowed at base into  
peri beak abaxial flap (suture) prominent or gen inconspicuous or 0, tip open, often notched. (Latin: cutter, from  
edges) ± 2000 spp.: worldwide; important components of peat, forage. [Wilson et al. 2007 J Bot Res Inst Texas  
et al. 1998 Madroño 45:261-270] Difficult because of many spp., morphologic and genetic variation, minute les  
Peri around fully mature fr needed for identification (long-persistent peri often atypical). Many herbarium spec  
immature peri, which lead to misidentification. 2-styled pls with peri ± flat adaxially, curved abaxially are platan  
curved ± equally on both surfaces are biconvex. Peri walls said to be translucent are easily punctured and/or do not  
conceal fr within. Peri beaks gen measured from point of inflection, where peri margin changes from convex to  
its tip, but in a few taxa it is measured from fr top to beak tip ("measured from fr top" for those taxa). Peri (and fr)  
beak; peri (and fr) "body" excludes beak. Mid to late season shoots often atypical in shape, color of infl, bracts  
ber of peri given is per spikelet. Actual hybrids probably less frequent than reports of hybrids. *C. pityophila* Mack  
s Rocky Mtns, reported from SnBr, but collections also suggest *C. globosa* or may be distinct; study needed. In T  
*C. cephalophora* Willd. misappl. to pls belonging instead to *C. mesochorea* Mack. (Group 9), native to e US, collect  
(Los Angeles Co.) in 1929 and in ScV (Butte Co.) in 2010. *C. molesta* Mack. ex Bright (Groups 11A,G), native  
historical urban weed, *C. leavenworthii* Dewey an urban weed.

- 1. Pls dioec
- 2. Spikelet
- 2' Spikelet
- 1' Pls monoec
- 3. Lf blade
- 4. Perigynium
- 5. Lower infl bract
- 5' Lower infl bract
- 6. Dorsal view
- 6' Dorsal view
- 4' Perigynium
- 7. Pistillate
- 7' Pistillate
- 8.
- 8.
- 3' Lf blade
- 9.
- 10.
- 11.



# The Vegetation and Flora of Fish Slough and Vicinity, Inyo and Mono Counties, California

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and J. R. HALLER  
The Herbarium  
Department of Biological Sciences  
University of California  
Santa Barbara, California 93106

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## Abstract

Fish Slough is a desert wetland ecosystem located at the northern end of the Owens Valley, approximately 8 km north of Bishop, California. The study area encompasses 31 km<sup>2</sup> that are known as Zone 1--Fish Slough Ecological Area, and occur within the Fish Slough Area of Critical Environmental Concern. Three springs feed the Slough and are the only natural springs remaining on the Owens Valley floor. They combine with other geological features to create a unique ecosystem and scenic landscape. There are three types of upland vegetation (Shadscale Scrub, Big Sagebrush Scrub, and Desert Saltbush Scrub), four types of Palustrine Wetlands (Aquatic Bed, Emergent Wetland, Scrub/Shrub Wetland, and Forested Wetland), and one type of Riverine Wetland (Aquatic Bed). The flora includes 271 vascular plant taxa from 52 families. *Astragalus lentiginosus* var. *piscinensis*, which is endemic to the study area, is one of several sensitive plant species.

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## Introduction

Our interest in Fish Slough developed in response to its uniqueness, biological richness, and magnificent setting. Students associated with the Herbarium of the University of California at Santa Barbara (UCSB) have made plant collections at Fish Slough since 1978. The area has also been under consideration for inclusion in the University of California Natural Reserve System (UCNRS).

Fish Slough was declared an Area of Critical Environmental Concern (ACEC) by the United States Bureau of Land Management (BLM) in 1984. Our study site encompasses the 31 km<sup>2</sup> known as Zone 1--Fish Slough Ecological Area. The entire Fish Slough ACEC covers 149 km<sup>2</sup> which are owned by the BLM, the Los Angeles Department of Water and Power (LADWP), and the State of California. Of the three zones, only Zone 1 includes wetland habitats.

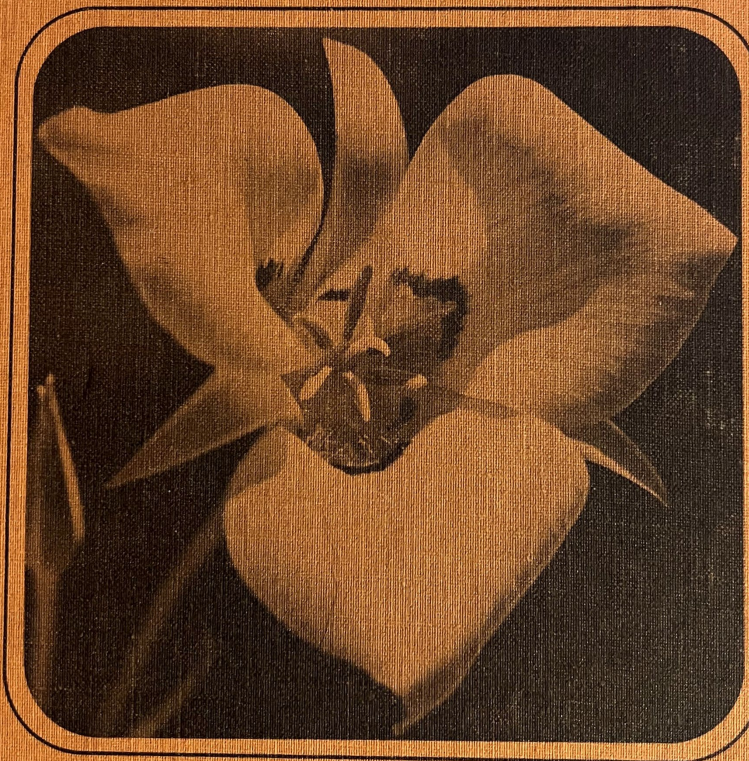
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<sup>1</sup> Current address: Botanical Garden, Centennial Drive, University of California, Berkeley, California 94720. Request reprints from the Herbarium, Department of Biological Sciences, University of California, Santa Barbara, California 93106.

# INTERMOUNTAIN FLORA

Vascular Plants of  
the Intermountain West, U.S.A.

*VOLUME SIX*



*By*

ARTHUR CRONQUIST  
ARTHUR H. HOLMGREN  
NOEL H. HOLMGREN  
JAMES L. REVEAL  
PATRICIA K. HOLMGREN

tracted to the beak, this 0.8–1.5 mm long, including the 0.3–0.9 mm teeth; stigmas 3; achene trigonous, 1.5–2.0 mm long, only loosely filling the perigynium;  $n = 39$ .

Wet meadows and other wet places, sometimes in shallow water, from the lowlands to moderate elev. in the mts.; N.B., and Que. to B.C., s. to Tenn., Ark., Texas, and s. Calif., occurring in appropriate habitats essentially throughout our range.

The species is palatable to livestock.

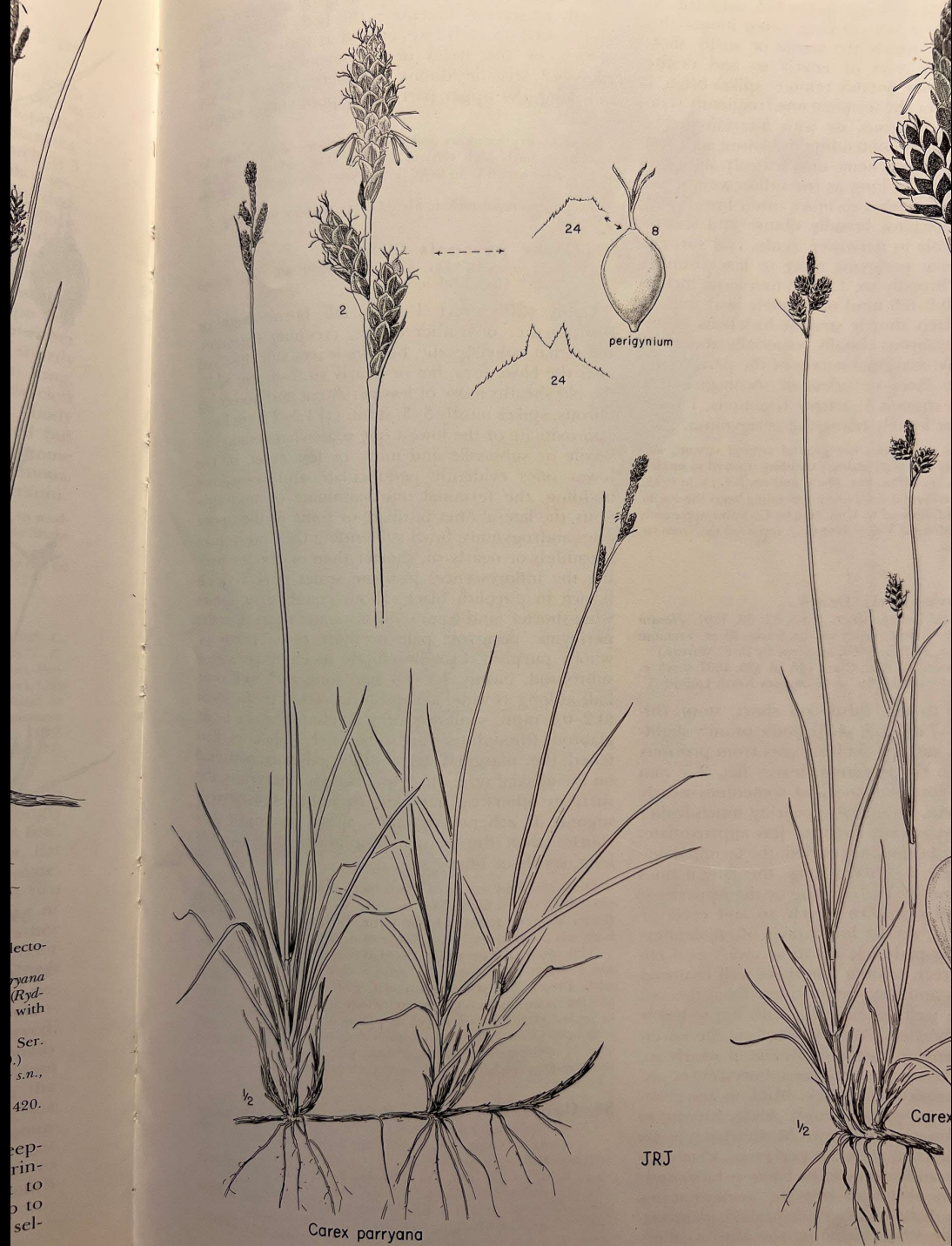
### 35. *Carex parryana* Dewey

*Carex parryana* Dewey, Amer. J. Sci. 27: 239. 1835. (Richardson, Hudson's Bay; in the present province of Manitoba.)

*C. hallii* Olney in F. V. Hayden, Rep. U.S. Geol. Surv. Territories 5: 496. 1872. *C. parryana* var. *unica* L. H. Bailey, Mem. Torrey Bot. Club 1: 54. 1889. *C. parryana* var. *hallii* Kükenthal in Engl. Pflanzenr. IV. 20 (Heft 38): 388. 1909. *C. parryana* subsp. *hallii* D. F. Murray, Brittonia 21:

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A RE-EVALUATION OF *CAREX SPECUICOLA* AND THE  
*CAREX PARRYANA* COMPLEX (CYPERACEAE)

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ABSTRACT

We review the systematics and provide a key for the *Carex parryana* complex (sect. *Racemosae*). *Carex specuicola* is recognized as a hanging gardens endemic, while a similar species, *C. utahensis*, is found in a diversity of wetlands in Utah and westernmost Colorado. We reinstate "*C. aboriginum*" of older literature as a good species with the new name of *C. holmgreniorum*. We confirm the distinctness of *C. hallii*, *C. idaho*, and *C. parryana* and provide additional characters for distinguishing these taxa. The type of *Carex hallii* is reinterpreted to be consistent with the protologue. A lectotype is chosen for *Carex idaho*.

RESUMEN

Se revisa la sistemática y se aporta una clave para el complejo de *Carex parryana* (sect. *Racemosae*). *Carex specuicola* se reconoce como endemismo de jardines colgantes, mientras que una especie similar, *C. utahensis*, se encuentra en varios humedales de Utah y extremo occidental de Colorado. Se reinstaura "*C. aboriginum*" de la bibliografía antigua como una buena especie con el nuevo nombre de *C. holmgreniorum*. Se confirma la diferencia de *C. hallii*, *C. idaho*, y *C. parryana* y se aportan caracteres adicionales para distinguir estos taxa. Se reinterpreta el tipo de *Carex hallii* para que sea consistente con el protólogo. Se elige un lectotipo para *Carex idaho*.

INTRODUCTION

Plants referred to *Carex parryana* Dewey have always been a source of taxonomic difficulty. Adding to this difficulty is that, even though some species are widespread, all are uncommon or rare. *Carex parryana* and its close relatives differ from other members of section *Racemosae* in having elongated inflorescences that have relatively narrow (2.4–6.8 mm wide), cylindrical, erect or ascending lateral spikes (if not unispicate), combined with small perigynia 1.7–3.3 mm long (–3.9 in *C. specuicola* and *C. utahensis*). Mackenzie (1935) recognized four species in this complex, *C. aboriginum* M.E. Jones, *C. hallii* Olney, *C. idaho* L.H. Bailey, and *C. parryana*. Murray (1969) recognized *C. parryana* as one variable species consisting of distinct races in the southern Rocky Mountains, and treated them as subspecies: *C. parryana* subsp. *hallii* (Olney) D.F. Murray, *C. parryana* subsp. *idaho* (L.H. Bailey) D.F. Murray and *C. parryana* subsp. *parryana*. He did not treat *C. aboriginum*, realizing that "*Carex aboriginum*" as described in Mackenzie (1935) was close to *C. parryana* and a quite different plant than *C. aboriginum* M.E. Jones, which is a local Idaho endemic with much larger perigynia (4.7–)5–6.6 mm long very similar to *C. serratodens* W. Boott (Murray 2002). Hermann (1970) recognized *C. hallii*, *C. idaho*, *C. parryana*, and *C. aboriginum* M.E. Jones as species, but noted that "*Carex aboriginum*" as described in Mackenzie (1935) is "completely different" from M.E. Jones's type's type. He treated *C. aboriginum* of Mackenzie, not M.E. Jones, as *C. parryana* var. *brevisquama* F.J. Herm. Murray (2002) treated *C. idaho*, *C. hallii*, *C. parryana*, and *C. aboriginum* as species, and also noted that Mackenzie's "*C. aboriginum*" was not *C. aboriginum* of M.E. Jones, but did not recognize *C. parryana* var. *brevisquama*. Finally, Goodrich (in Welsh et al. 2003) concluded that *C. specuicola*, described by Howell (1949) as an endemic of hanging gardens in northern Arizona, also belonged within *C. parryana*, and recognized only *C. parryana* in Utah.

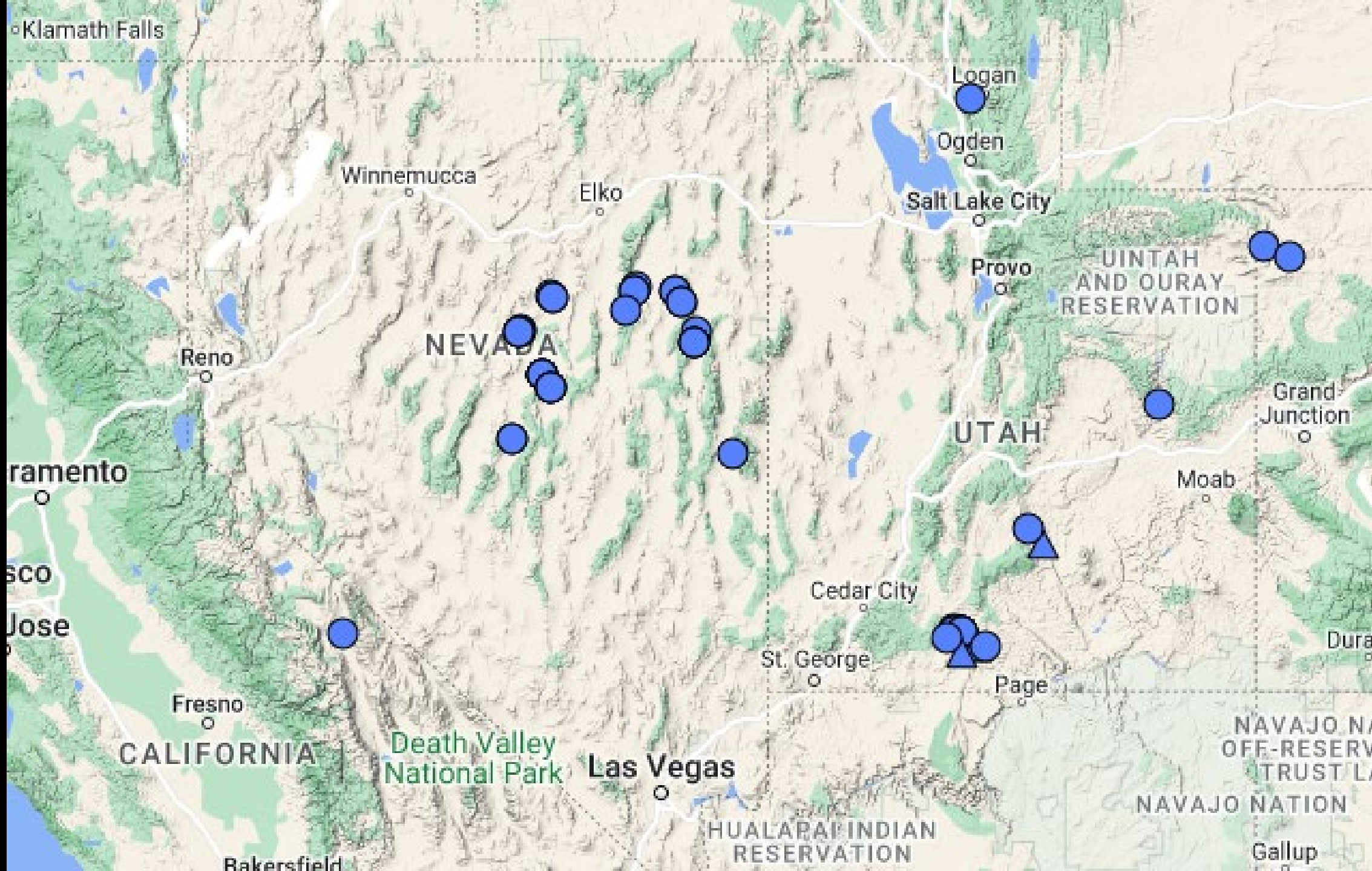
**3. *Carex holmgreniorum*** Reznicek & D.F. Murray, nom. et stat. nov. *Carex parryana* Dewey var. *brevisquama* F.J. Herm., Manual of the Carices of the Rocky Mountains and Colorado Basin 285. 1970. TYPE: UNITED STATES. UTAH: Cache Co.: ¼ mi S of Mendon, 6 Jun 1951, A.H. Holmgren 8251 (HOLOTYPE: US photo!; ISOTYPES: BRY!, CAS!, MICH!, MO!, NY!, UTC!).

*Carex aboriginum* sensu K.K. Mackenzie. N. Amer. Fl. 18:364, 1935 non *Carex aboriginum* M.E. Jones, Bull. Montana Univ., Biol. Ser. 15:69. 1910.

*Illustration*.—Mackenzie, K.K. 1940. N. Amer. Caric. 2, pl. 421, as *C. aboriginum*.

Loosely cespitose from short, ascending rhizomes 2–3.5 mm thick, rhizomes ca. 0.5–2 cm long between shoots, rhizome scales brown, disintegrating into coarse fibers; culms 20–90 cm tall, stiffly erect, bluntly trigonous, very finely papillose, 0.6–1.1 mm wide immediately below the inflorescence; phyllopodic, cataphylls and basal sheaths brown, the youngest usually reddish-purple. Leaves ca. 6–12, essentially basal; blades 3.5–48 cm long, 1.5–4 mm wide, much shorter than culms, ±folded, margins and midrib smooth to finely antrorsely scabrous distally, ±smooth adaxially, papillose abaxially; leaf sheaths 1.5–15 cm long, glabrous, ventrally whitish or pale brown, hyaline, thin, concave at the apex; ligules ca. 0.8–5.5(–7.5) mm long, acute to rounded, slightly shorter than to longer than wide, the free portion whitish to pale brown. Inflorescences 3–9.5 cm long, with 3–5(–6) spikes, terminal staminate or sometimes gynaeandrous, laterals pistillate; upper lateral spikes ±overlapping, lower sometimes separate, lower two spikes 0.7–4.5 cm distant, lowermost ±sessile or on a ±smooth peduncle up to 14.2 mm long; lowest bracts ±bristle-like up to 7.5 cm long and 1.5 mm wide, sheathless, upper bracts abruptly reduced. Terminal spike (6.5–)11.5–27 mm long, pistillate portion (0–)2.5–10 mm long, 4.5–7.2 mm wide, ca. (0–)1–28-flowered, staminate portion 4.5–26.5 mm long, 1.8–3.5 mm wide, ca. 10–65-flowered, peduncle 1.8–38 mm long. Lateral spikes 4–22 mm long, 4–6.8 mm wide, short-cylindric, densely flowered with ca. 5–45 spreading-ascending perigynia. Staminate scales 2.5–4.1 mm long, 1.4–2.4 mm wide, ovate to obovate, reddish-brown with broad hyaline margins, apex obtuse to rounded, with a green









Welcome to California  
*Carex holmgreniorum*!

*Cyprinodon radiosus*

# Owens pupfish





No Field Visit  
Land Management  
Bureau of Land Management  
National Park Service

