

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDAPI0Z0T0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Eryngium sparganophyllum* Hemsley

COMMON NAME: Arizona Eryngo

SYNONYMS: *Eryngium longifolium* Gray

FAMILY: Apiaceae

AUTHOR, PLACE OF PUBLICATION: *Eryngium sparganophyllum* W. B. Hemsley, Hooker's Icones, Plantarum 6: pl. 2508. 1897. MBG (accessed 2004) reports volume as 26. *Eryngium longifolium* Gray, Pl. Wright 2: 65. 1853, **not** Cav. Ann. 2: 133.

TYPE LOCALITY: Las Playas Springs, near Sierra de las Animas, New Mexico, United States.

TYPE SPECIMEN: HT: NY 405897. Charles Wright #1103, 1851. IT: GH, US.

TAXONOMIC UNIQUENESS: *Eryngium sparganophyllum* is 1 of 34 species in the genus. The common name Arizona eryngo has not only been applied to the correct species *E. sparganophyllum*, but has also be applied in past literature, to *Eryngium lemmonii*. However, the common name of this species is Chiricahua eryngo.

DESCRIPTION: Perennial scapose herb with tall stems, 4-12 dm (16-47 in) high, dichotomously branching. Linear leaves in a basal rosette, 1-9 dm (4-35 in) long, 5-15 mm wide, entire (rarely with 1 or 2 bristle teeth), tapering to a point; strongly involute when dry. Cauline leaves few and reduced. Inflorescence branching, flower heads ovoid or ovoid-oblong, 12-25 mm long, 10-15 mm broad, with 8-12 short ovate-lanceolate bracts and similar bractlets; bractlets 5 mm long, slightly exceeding the fruit. Fruit ovoid, 3-4 mm long, with large scales at the angles, and smaller ones between.

AIDS TO IDENTIFICATION: Species differs from other New Mexico congeners in having linear leaves and parallel venation.

ILLUSTRATIONS: Color photo of type specimen (NY 405897, *in* http://scisun.nybg.org:8890/searchdb/owa/wwwcatalog.detail_list?this_id=4386088)

Color photo of Isotype (US 48594, *in*

<http://ravenel.si.edu/botany/types/fullRecords.cfm?myFamily=>)

Color photo (Restoration News *in*

<http://www.dot.co.pima.az.us/flood/AguaC/nletter/news2.pdf>.

Color photo (Markings in

<http://seinet.asu.edu/collections/TaxaDetails.jsp?wbid=9792&sciName=Eryngium%20spar>)

TOTAL RANGE: New Mexico to southern Arizona, and Sonora, Mexico.

RANGE WITHIN ARIZONA: North and east Tucson, Pima County, along the Agua Caliente and west of Tanque Verde Wash. Recently (Makings 2003, ARIZ 369487) collected in the San Pedro Riparian National Conservation Area on the Upper San Pedro River floodplain, in Cochise County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial forb/herb.

PHENOLOGY: Flowers from March to June.

BIOLOGY:

HABITAT: Occurs in riparian zones and marshes within Pinyon-Juniper Woodland and Madrean Evergreen Woodland (a mild winter-wet summer woodland of oaks and pines such as the Emory Oak and Chihuahua Pine). Recently collected (Makings 2003, ARIZ 369487) in a cienega amid desertscrub.

ELEVATION: 2,720–4,000 feet (830-1220 m) in Arizona, and 4,500-5,000 feet (1373-1525 m) in New Mexico. In Mexico, collected from 4,918-6,885 feet (1500-2100 m).

EXPOSURE:

SUBSTRATE: It has been located in organic muck and silty clay-loam, in marshy areas.

PLANT COMMUNITY: Pinyon-Juniper and Madrean Evergreen Woodlands, and Desertscrub. Associates include: *Anemopsis californica* (yerba mansa), *Arbutus* sp. (madrone), *Asclepias subverticillata* (horsetail milkweed), *Carex praegracilis* (clustered field sedge), *Eleocharis* sp. (spikerush), *Helianthus annuus* (annual sunflower), *Juncus balticus* var. *montanus* (mountain rush), *Juncus* sp. (rush), *Lobelia cardinalis* (Cardinal flower), *Lythrum californicum* (California loosestrife), *Schoenoplectus* (= *Scirpus*) *americanus* (American bulrush), and *Sisyrinchium* sp. (blue-eyed grass). (SEINet, accessed 2004).

POPULATION HISTORY AND TRENDS: According to NatureServe (2004), “the trend appears to be one of decline. The one documented location in Arizona has not been rediscovered since it was reported in 1908. There are no recent reports of this species in New Mexico. The potential habitat (wetlands, marshes, and riparian zones) of this plant has significantly declined

within the last few decades and therefore it is not surprising that the species has also suffered a decline. However, recent surveys have documented a large population of this species within habitats surrounding a spring that is located on private property just a few miles southeast of Agua Caliente Park, Tucson, Arizona.”

Although known from the Agua Caliente Ranch area, this species was recently collected from Pima County Flood Control District property west of Tanque Verde Wash (Titus 2001, ARIZ 360955), and from the San Pedro National Conservation Area in Cochise County (Makings 2003, ARIZ 369487). More extensive surveys may help in understanding the population distribution and trend.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: None
OTHER STATUS:

MANAGEMENT FACTORS: Threats to this species are likely associated with its riparian and marsh habitat. Such habitats are frequently disturbed, suffer invasive weeds, and at least in the southwest U.S., are in serious decline from activities such as livestock grazing and agricultural, and urban development.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Since recent discovery of this species in two new areas in Arizona, extensive surveys are needed to determine full distribution, along with studies on their ecology and biology. Not only should surveys be conducted in the U.S., but should be conducted in Mexico to determine total distribution, which would help in adequately determining this species rarity.

LAND MANAGEMENT/OWNERSHIP: BLM – Tucson Field Office, San Pedro National Conservation Area; Pima County (Flood Control District); Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:

Agua Caliente’s Unique Floral Heritage. Available:
<http://www.dot.co.pima.az.us/flood/AguaC/flora/>

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MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

Revised: 2004-08-20 (AMS)
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