

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDLAM1S0G5

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Salvia dorrii* ssp. *mearnsii*

COMMON NAME: Verde Valley Sage; Mearns Sage

SYNONYMS: *Audibertia mearnsii* Britton; *Salvia carnosia* Douglas ssp. *mearnsii*

FAMILY: Lamiaceae

AUTHOR, PLACE OF PUBLICATION: Britton, N.L. 1889. Transactions of New York Academy of Science. 8:71.

TYPE LOCALITY: Petty cañons in limestone, Fort Verde, Yavapai Co. Arizona.

TYPE SPECIMEN: NY! Mearns 246. 1886.

TAXONOMIC UNIQUENESS: Lamiaceae has a world-wide distribution. Approximately 100 species of *Salvia* in North America. Subgenus *Audibertia* Benth native to western U.S. and northern Baja California. *Salvia dorrii* species complex comprised of two species, *Salvia dorrii* and *S. pachyphylla* found throughout western U.S. (Reichenbacher, Smith and Bainbridge 1994). *Salvia dorrii mearnsii* originally described in 1889 as a species of *Audibertia* but later placed as a subspecies in the more widespread, cuneate-leaved *Salvia dorrii*.

DESCRIPTION: Low, much-branched shrub 10.0 - 50.0 cm (4.0 - 20.0 in.) tall, often spiny. Leaves very narrow to (usually) more rounded, 10.0 - 35.0 mm (0.4 - 1.38 in.) long and 7.0 - 15.0 mm (0.28 - 0.6 in.) wide, covered with silvery hairs on petioles about as long as the blade. Flowers in clusters (verticels) spaced along the upper stems, with conspicuous broad, hairy, greenish purple bracts, these 7.0 - 12.0 mm (0.28 - 0.48 in.) long. Calyx, maroon, 6.0 mm (0.24 in.) long, corolla (united petals) bright blue, about 10.0 mm (0.4 in.) long.

AIDS TO IDENTIFICATION: The more widespread, cuneate-leaved *Salvia dorrii* does not occur in the Verde Valley area. Characteristic sage-like smell when leaves are crushed.

ILLUSTRATIONS:

TOTAL RANGE: Central Arizona.

RANGE WITHIN ARIZONA: Verde Valley and Upper Verde River, Yavapai County; and near Sedona, Coconino County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Woody perennial

PHENOLOGY: Flowers April to May, with lesser flowering during the year as conditions are favorable; seed set May onward.

BIOLOGY: Plants do not grow back in areas where surface disturbance has occurred.

HABITAT: Restricted to open Creosotebush-Shrub community on gypseous limestone. Phillips (1999) reports " Tertiary lakebed deposits in open Sonoran desertscrub, and.... Supai/Hermit Formation in Pinyon-Juniper Woodland."

ELEVATION: 3,120 - 5,120 ft. (952 - 1562 m).

EXPOSURE: Mostly easterly

SUBSTRATE: Grayish powdery calcareous soils and white, powdery gypseous limestone of Tertiary lakebed deposits; and red-brown clay and sandy soil of Supai/Hermit Formation; Redwall Limestone. For thorough discussion of "preferred habitat on specializes soils" see Denham and Fobes, preliminary report, 1994.

PLANT COMMUNITY: Creosotebush Shrub; Sonoran Desertscrub; Pinyon-Juniper Woodland. Associated species include Crucifixion thorn, juniper, barberry and snakeweed.

POPULATION TRENDS: Trends not known. Scattered colonies, sometimes with hundreds of plants, occur in localized habitats (Phillips 1999).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None (USDI, FWS 1996)
[C2 USDI, FWS 1993]

STATE STATUS: Salvage Restricted (ARS, ANPL 1993)

OTHER STATUS: Forest Service Sensitive (USDA, FS Region
3 1990, 1999)

MANAGEMENT FACTORS: Gypsum quarries threaten habitat as well as urban development and off-road vehicles.

CONSERVATION MEASURES TAKEN:

SUGGESTED PROJECTS: Continued surveys; biological evaluations conducted for projects; assessment of cumulative impacts of land exchanges; assessments of effects of ORV impacts.

LAND MANAGEMENT/OWNERSHIP: USFS - Coconino and Prescott National Forests;
Arizona State Parks - Red Rock State Park; State Land Department; Private.

SOURCES OF FURTHER INFORMATION

LITERATURE CITATIONS:

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Arizona. p.134.
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Book, in prep.
- Reichenbacher, F.W., C.M. Smith and S.J. Bainbridge. 1994. Status Report. *Salvia dorrii*
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- Strachan, J.L. 1981. A revision of the *Salvia dorrii* (Kellogg) Abrams Complex (Lamiaceae).
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Species; Notice of Review. Federal Register 58(188):51184.
- USDI, Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants:
Review of Plant and Animal Taxa that are Candidates for Listing as Endangered or
Threatened Species; Notice of Review. Proposed Rule. Federal Register 61(40):7596-
7613.

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Salvia dorrii var. mearnsii

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ADDITIONAL INFORMATION:

Revised: 1992-11-24 (JSP)
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