

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

Plant Abstract

Element Code: PDFAB3C092

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Psorothamnus thompsonae* var. *whitingii*
COMMON NAME: Whiting Dalea; Whiting Indigo-bush
SYNONYMS: *Dalea thompsonae*; *Dalea whitingii*; *Parosela thompsonae*
FAMILY: Leguminosae

AUTHOR, PLACE OF PUBLICATION: Barneby, R.C. 1977. Memoirs of the New York Botanical Garden 27: 52-54.

TYPE LOCALITY: Wupatki National Monument, Little Colorado River, Coconino County, Arizona.

TYPE SPECIMEN: US 1732120 Whiting and Jones (916/3277) 1938.

TAXONOMIC UNIQUENESS:

DESCRIPTION: Small rounded shrub, 40.0-90.0 cm (16.0-36.0 in., max 150 cm [60.0 in.]) tall with branchlets often spinescent. Stems covered with dense silky hairs and orange resinous glands. **Leaves short-petioled**, 1.4-3.0 cm (0.56-1.2 in.) long, with 7-17 (rarely 19) pairs of linear leaflets, these emarginate, 2.0-7.0 mm (0.08-0.28 in.) long. Inflorescence a loose raceme. Calyx bears large red-orange glands and is shaggy-hairy; calyx lobes ovate to oval, obtuse to rounded, or the lowermost ovate-acute. Flowers bright pink or violet-purple, banner petal 6.0-8.4 mm (0.24-0.34 in.) long, 4.8-6.0 mm (0.19-0.24 in.) wide. Pod 4.0-4.5 mm (0.16-0.18 in.) long, flattened, short-hairy and dotted with large glands.

AIDS TO IDENTIFICATION: Armed shrub, velvety branches with glandular yellow to orange resinous glands, leaflets linear. Variety *thompsonae* has oblong, oval, or obcordate leaflets and the calyx tube is glabrous.

ILLUSTRATIONS: Line drawing (Barneby 1977:607)
Line drawing (USFWS)

TOTAL RANGE: Utah: San Juan County. Arizona: Coconino, Apache and Navajo counties.

RANGE WITHIN ARIZONA: Northeastern Arizona. Monument Valley, west to Navajo Mountain and Wupatki National Monument, Little Colorado River drainage. Reported from Grand Canyon National Park at Kanab Creek.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Woody Perennial Shrub

PHENOLOGY: Flowering May - August

BIOLOGY: Clonal, but very local

HABITAT: Sandy-clay banks and talus, gravelly or sandy washes.

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Psorothamnus thompsonae var. *whitingii*

ELEVATION: 3,800 - 5,000 ft (1159 - 1525 m).

EXPOSURE: Variable

SUBSTRATE: Sandy soil and sand dunes.

PLANT COMMUNITY: Great Basin Desertscrub. Vanclevea/saltbush/sand sagebrush/Mormon tea/match- brush associations.

POPULATION TRENDS: Populations appear stable.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None (USDI, FWS 1996)
[Category 2 USDI, FWS 1985]

STATE STATUS: None

OTHER STATUS: Not Forest Service Sensitive (USDA, FS Region 3 1999)
[Forest Service Sensitive USDA, FS Region 3 1990]

MANAGEMENT FACTORS: Very little is known about this plant. Plants are palatable and browsed by livestock.

CONSERVATION MEASURES TAKEN: The Navajo Natural Heritage Program is preparing (1992) a status report under contract with the USFWS.

SUGGESTED PROJECTS: Studies on habitat requirements, range and population densities are needed; an analysis of possible threats.

LAND MANAGEMENT/OWNERSHIP: BIA - Navajo Nation; NPS - Wupatki National Monument; Private. Possibly BLM; NPS - Grand Canyon National Park.

SOURCES OF FURTHER INFORMATION

LITERATURE CITATIONS:

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Kearney T.H. and R.H. Peebles. 1939. Arizona plants: New species, varieties and combinations. *Journal of the Washington Academy of Sciences*. 29(11):484.

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Vail, A.M. 1897. *Parosela thompsonae* n.sp. *Bulletin of the Torrey Botanical Club*. 24: p.18.

USDA, Forest Service Region 3. 1990. *Regional Forester's Sensitive Species List*.

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Welsh, S.L. and K.H. Thorne. 1979. *Illustrated manual of proposed endangered and threatened plants of Utah*. Submitted to U.S. Fish and Wildlife Service, Denver, Colorado.

- Welsh, S.L. 1978. Utah Flora: Fabaceae (Leguminosae). The Great Basin Naturalist 38(3): 225-367.
Welsh, S.L. 1979. Status report *Psorothamnus thompsoniae*. Submitted to U.S. Fish and Wildlife Service, Denver, Colorado.
Williams, 1936. Field and herbarium studies. Annals of the Missouri Botanical Garden, Missouri. 23:451. St. Louis.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

- R.C. Barneby - New York Botanical Garden, New York
June Beasley - Flagstaff, Arizona
Bill Hevron - Navajo Natural Heritage Program, Window Rock
S.L. Welsh - Herbarium Brigham Young University, Provo, Utah

ADDITIONAL INFORMATION:

Barneby (1977): an extraordinarily rare shrub... probable that other populations will eventually be discovered, as the mazes of canyons and hills are more fully explored. Locally abundant in type-locality and Copper Canyon.

There is an historic collection from Grand Canyon below Kanab Creek. Potential habitat exists in Kanab Canyon, off the Kaibab National Forest. Not expected on the Kaibab National Forest; could be removed from the Forest Service Sensitive Plant list.

June Beasley (Flagstaff) found the plant "some years ago" a few miles from the historic collection site at the crossing of the Little Colorado River, Wupatki National Monument. She is working on this group for the upcoming text, Flora of Arizona.

Revised: 1991-12-12 (JSP)
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