

Plant Guide

# dwarf bear poppy

## Arctomecon humilis Coville

### Plant Symbol = ARHU3

#### Contributed by: USDA NRCS Idaho Plant Materials Program



Figure . Dwarf bearpoppy. Jane Villa-Lobos @ USDA-NRCS PLANTS Database.

#### **Alternate Names**

Coville bear-claw poppy

Common bear poppy

Low bear-claw poppy

#### **Uses**

There are no known human or wildlife associated uses of dwarf bear poppy.

#### **Status**

Dwarf bear poppy was listed by the USDI Fish and Wildife Service as an endangered species in 1979 (USDI FWS 1979). At the time of the listing in 1979 this species was known to exist in only 5 small disjunct populations on very specialized and localized soils. Several factors place dwarf bear poppy in danger of extinction throughout its range. The greatest threat to dwarf bear poppy comes from housing and industrial development. The area currently occupied by the city of Bloomington, Utah covers approximately one third of dwarf bear poppy’s historically known habitat. Strip mining of gypsum deposits in dwarf bear poppy communities also poses a threat to the species. Additional threats come from private collectors taking plants for ornamental and home cultivation. However, the unique soil requirements of the species preclude it from surviving outside of its native range.

Consult the PLANTS Web site and your State Department of Natural Resources for this plant’s current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

#### **Description**

*General*: Poppy family (Papaveraceae). Dwarf bear poppy is a mound forming perennial forb arising from an underground woody caudex and long taproot. The leaves are 0.5 to 8 cm (0.2 to 3 in) long and 4 to 16 mm (0.16 to 0.63 in) wide with 3 or 4 lobes or teeth at the tip. Flowers sit atop a 2 to 9 cm (0.8 to 3.5 in) stalk. The petals (4 to 6) are white and 2 to 4 cm (0.8 to 1.5 in) long. The fruit is an egg-shaped capsule filled with shiny black, 2.5 to 3 mm (0.10 to 0.12 in) long seeds (Welsh et al. 2003).

*Distribution*:

Dwarf bear poppy is limited in distribution to the St. George area in extreme Southwestern Utah. There are approximately 12 populations within 10 miles of St. George with larger populations near Red Bluff, Webb Hill, White Dome, Punchbowl Dome and Atkinville.

For current distribution, consult the Plant Profile page for this species on the PLANTS Web site.

*Habitat*:

Dwarf bear poppy is found in mixed warm desert shrub communities from 750 to 1050 m (2,500 to 3,400 ft) elevations (Nelson and Harper 1991). The dominant plant species associated with dwarf bear poppy habitat are Fremont indigo bush (*Psorothamnus fremontii*), cheesebush (*Hymenoclea salsola*), Mormon tea (*Ephedra torreyana*), shadscale (*Atriplex confertifolia*), shrubby buckwheat (*Eriogonum corymbosum*) and Fremont pepperweed (*Lepidium fremontii*).

#### **Adaptation**

#### The area in which dwarf bear poppy is found is known as the Dixie Corridor, where the Mohave Desert floristic province meets the Colorado Plateau. The non-alkaline, gypsiferous soils form cryptogamic soil crusts, which exclude most plant species. The result is a region of “badlands” with low rolling hills and sparse vegetation (USDI FWS 1985). Dwarf bear poppy is restricted in range to areas with gypsum surbstrates derived from the Shnabkaib Member of the Moenkopi Formation (Nelson and Harper 1991).

#### **Establishment**

Due to the restricted range and specific habitat requirements of dwarf bear poppy, it has proven difficult to transplant and establish (USDI-FWS 1985).

No known propagation protocols are available.

#### **Management**

#### Management for dwarf bear poppy is focused on habitat preservation. The expansion and development of St. George and surrounding communities poses the greatest threat to the species. Existing populations should be protected against further development and other land use that disturbs the sensitive soil surface.

#### Direct effects of off road vehicle use to individual plants may be limited to severe; however destruction of the cryptogamic crusts and the resulting soil erosion significantly impacts the limited suitable habitat available for dwarf bear poppy (Nelson and Harper 1991). Moreover, soil erosion also has an adverse affect on the seed bank from which dwarf bear poppy can reestablish populations.

#### Collection for landscape use has been noted as a threat to dwarf bear poppy (USDI-FWS 1979), but little evidence of collecting has been seen at the known populations (USDI-FWS 1985).

#### **Pests and Potential Problems**

There are no known pests or potential problems associated with dwarf bear poppy.

#### **Environmental Concerns**

There are no known environmental concerns associated with dwarf bear poppy.

#### **References**

Nelson, D.R., Harper, K.T. 1991. Site characteristics and habitat requirements of the endangered dwarf bear-claw poppy (*Arctomecon humilis* Coville, Papaveraceae). Great Basin Naturalist 51(2): 167-175.

USDA, NRCS. 2010. The PLANTS Database (http://plants.usda.gov, 13 April 2010). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

USDI Fish and Wildlife Service. 1979. Endangered and threatened wildlife and plants: rule to determine *Arctomecon humilis* is an endangered species. Federal Register. 44 (216): 64250-64252.

USDI Fish and Wildlife Service. 1985. Dwarf bear-poppy (*Arctomecon humilis* Coville) recovery plan. U.S. Fish and Wildlife Service, Denver, CO. 36 pp.

Welsh, S.L., N.D. Atwood, S. Goodrich, and L.C. Higgins. 2003. A Utah Flora. Third Edition, revised. Brigham Young University, Provo, UT.

#### **Prepared By**

*Derek Tilley*; USDA NRCS Plant Materials Center, Aberdeen, Idaho.

Loren St. John, USDA NRCS Plant Materials Center, Aberdeen, Idaho.

Dan Ogle, USDA NRCS State Office, Boise, Idaho.

#### **Citation**

Tilley, D., St. John, L. and D. Ogle. 2010. Plant guide for Dwarf bearpoppy (*Arctomecon humilis*). USDA-Natural Resources Conservation Service, Idaho Plant Materials Center. Aberdeen, ID.

Published January 2011

Edited: 14Apr2010djt; 15Apr10dgo;25Aug10lsj

For more information about this and other plants, please contact your local NRCS field office or Conservation District at <http://www.nrcs.usda.gov/> and visit the PLANTS Web site at <http://plants.usda.gov/> or the Plant Materials Program Web site <http://plant-materials.nrcs.usda.gov>.

PLANTS is not responsible for the content or availability of other Web sites.

**USDA IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER**