

Endangered Species Act 40th Anniversary Success Stories Arizona Cliffrose



Arizona Cliffrose (*Purshia subintegra*) is the only Endangered plant that occurs within the boundaries of the Coconino National Forest. This rare species is limited four disjunct populations spread across an area of approximately 200 miles in central Arizona where it occurs on white Tertiary (Miocene and Pliocene) limestone lakebed deposits that are high in lithium, nitrates, and magnesium. This rare soil type is thought to be a limiting factor in its distribution. Arizona cliffrose was listed as Endangered in 1984 and a recovery Plan was developed for it in 1995. The Coconino National Forest contains the largest of the four known population areas, in the Cottonwood, AZ area. The Forest established the Verde Valley Botanical Area in 1987 with the adoption of its Forest Plan to help protect Arizona cliffrose and the unique plant community associated with it. Since that time, the forest and others have implemented many beneficial actions such as closing the area containing Arizona cliffrose to motorized travel, closing and rehabilitating an illegal shooting range, and fencing the boundary of the Botanical Area to reduce grazing pressures.



Figure 2. Arizona cliffrose flower



Figure 1. Twig of Arizona cliffrose showing leaf lobes and revolute (under turned) leaf edges which are some of the distinguishing characteristics

Arizona Cliffrose is fully sponsored at the [Center for Plant Conservation](#). The primary custodian is the [Arboretum at Flagstaff](#). From 1996-2000, the Arboretum at Flagstaff undertook a mitigation project that entailed learning how to cultivate Arizona cliffrose from cuttings of plants that were threatened by the construction of a road. After a year of work, protocols established for the successful cultivation from cuttings. The next step of the process was determining the methods to successfully reintroduce this desert plant into its native habitat. To do this, The Arboretum at Flagstaff conducted four experimental reintroduction trials, and found that growing the cuttings in native soil, transplanting them to the reintroduction in February, and watering them for over 5 months resulted in the greatest survival. As of 2002, some of the individuals in the reintroduced population were able to survive a second year of drought--the worst in recorded history in the area. Maschinski, J. 2000. Conservation Efforts for *Purshia subintegra*, Arizona Cliffrose. The [Plant Press](#) (The Arizona Native Plant Society). 24, 2: 2-3.



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