

PUNA BONNIEAE

by Sue Haffner



In November 1990, three Americans—David Ferguson, Sean Hogan, and Bonnie Brunkow—were in the mountains of Catamarca Province, Argentina on a plant hunting expedition. During their exploration, Ms. Brunkow found a small plant that looked unfamiliar. Ferguson and Hogan thought it was a tephrocactus, until she found a second plant, this one in bloom. The sight of the flower convinced them that this was something different. The discovery was reported to Roberto Kiesling, an authority on Argentine cacti, who concurred that this was a new species. Kiesling had published the genus *Puna* in 1982, with two known species, *clavarioides* and *subterranea*. He named this one *Puna bonnieae* after its discoverer, Bonnie Brunkow. He and Ferguson published the new plant in the *Cactus and succulent journal* (U.S.) in 1997. (The genus is named for *Puna*, an area of NW Catamarca Province.)

Plants of the genus *Puna* are geophytic, having an enlarged tuberous root situated well below the soil surface. From these arise soft stems in densely stacked segments. The youngest segments are held at or near the soil surface, with older segments pulled deeper underground each season. The plants shrink and contract down from the soil surface during dormant periods, often being hidden from view for much of the year. When David Ferguson revisited the habitat in early 1994 he found only two plants, both buried under about 1 cm of soil. This was a very dry time and the plants were shrunken down and out of sight. In a subsequent visit by Kiesling during the rainy season a number of plants were seen. Ferguson writes: "It is a creature of severe desert conditions, superbly adapted to its environment. The small stems are held level with the soil surface and are remarkably well-camouflaged among the stones of the desert pavement on hilltops. The native habitat is particularly stark with little vegetation other than a few other geophytic cacti and an occasional shrub."

Elton Roberts describes *Puna bonnieae* as "made up of many small roundish heads. The description calls for heads to 2.5 cm in diameter; on my plants 99% of the heads are 1 cm to 1.2 cm in diameter. The surface of the heads is made up of squeezed together tubercles and in the center of that is the areole. The spine clusters grow from the areole in the center of the tubercles; the spines lay against the tubercles so the plant is ok to handle. This plant does not nail you unless you go against the lay of the spines.

"The flowers are to 4 cm across, white with a touch of pink—that is hard to see on some plants—to light pink. Some years the plant opens all flowers at the same time and really puts on a show. Other years the plant opens one to several flowers." In habitat the plants are triggered to flower by spring rains November through February.



Elton goes on: "Since the plant has a taproot you will want to have a pot deep enough to accommodate the roots. With a taproot and deeper pot you have to be careful as to how often you water the plant. If the root stays wet too long it will rot and take the plant with it. Give a fast draining soil; I use a 60% perlite to 40% potting soil. Remember that even if you dig down about an inch in the soil of a deep pot you will not be able to tell how damp the soil at root level is. I keep the plants dry over the winter and that is a very good idea because of the taproot. The plant will take 20 or more degrees of frost. If you live in an area where there is high humidity most of the year you might want to get a grafted plant and keep it grafted. My large plant is on its own roots. It is about 18 cm across and about 9 years old [in 2006]."

References:

Ferguson, D. J. & R. Kiesling. 1997. "*Puna bonnieae* (Cactaceae), a new species from Argentina," *Cactus and succulent journal* (U.S.), 69 (6), 287---293.

Roberts, Elton. 2006. "*Puna bonnieae*", email (July 6)

(Photos: Elton Roberts)