

## **Arizona Prehnite: a new find**

Barbara J. Muntyan

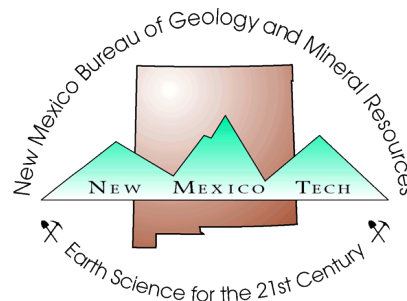
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# Arizona Prehnite: A New Find

—Barbara L. Muntyan

Prehnite, hydrated calcium aluminosilicate, is not a common species in Arizona. Indeed, Mindat (as of August, 2019), lists only six locations, and all but one of these are for massive veinlets of the species. Recently, a newly-reported Arizona find of this mineral has produced attractive, pale green- to cream-color prehnite in well-crystallized specimens up to 15 cm across. The story of the discovery makes an intriguing addition to Arizona collecting history.

I first saw examples of these prehnite specimens at a small gathering of Arizona collectors at our monthly luncheon in Phoenix several years ago. One of the group, Dick Morris (then a Phoenix resident, now living in Pinetop, AZ) had brought in a couple of pieces for “Show-and-Tell.” He had acquired them at the Copper City Rock Shop in Globe, Arizona. While these first specimens were modest, it nevertheless aroused my interest as a specialist in Arizona minerals. Within a short time, I took a trip from Tucson to Globe to find out more.

I have known the proprietor of the Copper Rock Shop for many years, and always have found John Mediz to be knowledgeable and willing to share locality information. When I asked about the prehnite find, he told me it was found by two brothers from Globe, and he put me in touch with them. Their story of the prehnite find is most interesting.

John and Roy Troubaugh, who have the deposit under claim, have lived and worked in Globe for most of their lives. Both love the outdoors and spent many hours in the Tonto National Forest, hiking, picnicking with family and friends, and looking for mineral specimens. They were not avid field collectors, but they had



knowledge of many species, particularly material from the Globe area suitable for slabbing and polishing.

Many years ago, the brothers attended a mineral show in Phoenix and saw so-called “Desert Roses” for sale. These were not typical desert roses, which are normally either gypsum or chalcedony. These specimens came from the Tonto Forest north of Globe, and were eventually identified as being prehnite. The brothers were intrigued, but did not pursue the find for several years.

Eventually, the Troubaugh brothers and two friends decided to go camping and mineral collecting in the area where the prehnite desert roses had been found. They made camp near a huge tree. One cowboy friend, the late Samuel R. Ellison (nicknamed “Slim,” because he was seriously overweight!) was in charge of the cooking, while the other three men reconnoitered the surrounding hills. They found the prehnite seam up on the ridge above the camp and picked up several samples, but did not pursue extensive collecting at that time.

Time passed before the brothers decided to reexamine the prehnite deposit. Roy Troubaugh says that a number of Globe residents also knew about the odd “desert roses” and that it was considered merely an interesting deposit (personal communication, March, 2019). The brothers set out to revisit the area where the prehnite was found, looking for the huge tree where they had camped with the two cowboy friends years earlier. They could not find it, and thus spent the next dozen years periodically revisiting the general area and trying to find the exact spot. It became a



mild obsession. Finally, in 2013, the brothers took yet another foray to seek the prehnite deposit. This time they found the landmark tree and the prehnite at the top of the ridge. And this time, the brothers filed lode claims on the outcrop.

Prehnite is a secondary or hydrothermal mineral, forming in veins and cavities in mafic volcanic rocks and less-commonly in granitic gneiss. The mountains of the Tonto Forest north of Globe are rugged and sparsely populated. Mountain peaks rise above 6,000 ft., with deep canyons between. The area bordering the Salt River to the north is wilderness area; the San Carlos Apache reservation lies east of the area. A few large ranches run cattle on grazing leases in the area and there are a few Forest Service roads. There are no towns between Globe and Show Low.

The prehnite deposit extends approximately 1,200 ft. along a contact between mid-Proterozoic mafic rock and later Proterozoic basaltic rock. On the margins of the intrusion, prehnite formed in veins ranging from 2.5 cm to 30 cm which pinch and swell. The prehnite generally forms pale-green massive material, but in the wider pods, has had enough room to form specimens which are found loose in decomposed vugs. Color ranges from off-white to pale sea-green to a medium sea green. Specimens have formed fan-like groups found in clusters looking like roses or perhaps pale green “brains.” A second habit forms tighter fans looking a bit like rice grains.

While researching prehnite, I came across the sole image on Mindat of a crystallized prehnite from Arizona. It had the famous Rock Currier brass bar at the bottom and, indeed, the specimen was his. The notes said the specimen was from the “Cooledge Dam, Stanley Butte mining district” and that the specimen was obtained from Les Presmyk, noted Phoenix mineral collector and dealer. When I contacted Les for more information, he told me he had two specimens and both were obtained from Fred and Sammy Jones of Globe. They had gotten them from Harold Maryott. Doing some further research, it turned out that the Jones were lifelong residents of Globe. Harold Maryott had been the Chief Mine Engineer at Miami Copper from 1939 to 1946, and also a longtime resident of the Globe-Miami area.

My interest in the Currier prehnite specimen and the people surrounding it was due to the fact that the pale-green prehnite shown on Mindat was identical to the specimens which come from the Tonto Forest north of Globe. Subsequently, I have examined Les



Presmyk’s remaining specimen. And the similarity to my specimens is remarkable. It has been my experience as a field collector that specimens from two different places are almost never identical. Moreover, Mr. Maryott and the Jones were all from Globe, and (according to Roy Trobaugh) the Jones family leases were located next to the lease where the “Desert Roses” occurred. It is quite possible that either Maryott or the Jones suggested the Cooledge Dam locality in an effort to keep other collectors off their neighbors’ land. Perhaps we will never know for certain.



John Alvin Trobaugh, 1941–2015

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