

Map sources for the range of Utah Agave (*Agave utahensis*).

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This species seems to be highly restricted to only a few areas, where it grows on steep, rocky slopes; often limestone. The difficulty in pressing *Agave* specimens may have further limited the number of available herbarium samples. Published maps in Benson and Darrow (1981) and Gentry (1982) were very poorly geo-referenced. The list of collection localities from Gentry was useful once the points had been placed within the appropriate areas. All subspecies are lumped here under *Agave utahensis*.

The name of the species, "Utah Agave", seems a bit odd, considering that only a handful of specimens have ever been found within the state of Utah, all in the Beaver Dam Mountains-St. George area, within 40 km or less of Arizona. Most of the extant population of this species actually grows within the Grand Canyon, Arizona. Perhaps it would be more appropriately thought of as the "Grand Canyon Agave".

A network of 1420 plant relevés taken in the eastern half of the Grand Canyon by Warren et al. (1982) recorded Utah Agave in over 40% of the relevés between 1000 and 2000 m elevation (Cole and Cannella, In Press). Because of the high density of these Grand Canyon relevés, the mapping error within the eastern Grand Canyon is probably < 1 km. The map is also detailed in the Sheep Range of southern Nevada. The map is far less accurate in other areas, but hopefully within 5 km. All sources cite the abundance of Utah Agave on limestone substrate. But within the eastern Grand Canyon, these relevé records demonstrate that it is frequent on just about any steep rocky substrate, but especially limestone and sandstone.

This map is consistent with all the observations that could be accurately located from the source documents. If Utah Agave was reported from a small desert mountain range, it was assumed that the population existed throughout that general area at similar elevations, especially on the steep rocky mountain slopes preferred by this species. It is possible that the true range is even more restricted than is depicted on the map, especially in Mohave Co., AZ, where there are few available data.

Source Maps and Data:

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