These unique hybrids are only found between Grapevine Mesa west to the White Hills and 12 miles south from the southern edge of Lake Mead. This is a rather small area, but extraordinarily rich in cactus diversity (Figs. 1 & 2) and among the commonly occurring cacti are: Corynopuntia parishii (Parish ex Britton & Rose) F.M. Knuth; Cylindropuntia echinocarpa (Engelm. & J.M. Bigelow) F.M. Knuth; Cylindropuntia acanthocarpa (Engelm. & J.M. Bigelow) F.M. Knuth; Cylindropuntia multigeniculata (Clokey) Backeb.; Cylindropuntia ramosissima (Engelm.) F.M. Knuth; Echinocactus xeranthemoides (J.M. Coul.) Engelm. ex Rydb.; Echinocereus engelmannii (Parry ex Engelm.) Lem.; Echinocactus johnsonii (Parry ex Engelm.) E.M. Baxter; Ferocactus acanthodes (Lem.) Britton & Rose; Mammillaria tetrancistra Engelm.; Opuntia basilaris Engelm. & J.M. Bigelow and Opuntia diploursina A.D. Stock, N. Hussey & M.D. Beckstrom.

Of the two Opuntia species present O. basilaris and O. diploursina, one is endemic, and there are also two different hybrids and a few rare back-cross plants involving these two species. The Opuntia hybrids are found in two distinct diploid populations—northern and southern. The northern population is comprised entirely of (O. diploursina × O. basilaris “population 1”), and the southern population, of (O. diploursina × O. basilaris “population 2”). None of the hybrids, or the parent O. basilaris populations, have been described yet, although we are currently working on their descriptions. Of the two hybrids, the southern population has been known for some time, but with little information on its origin. At least one hypothesis has been suggested involving O. aurea E.M. Baxter as a parent, which is incorrect because the range of O. aurea is far to the north and does not cross over to the south side of the Grand Canyon. In addition, O. aurea is an allohexaploid and would not produce diploid hybrids with O. basilaris or O. diploursina.