

## The Desert's Changing Faces

By Bunny Fontana

This land was not always so dry. Plants found in packrat middens in the Pinacates tell the story. Some 10,000 years ago -- in addition to today's saguaro, brittlebush, and creosotebush -- Mormon tea and even juniper grew along the region's rocky slopes. Summers were cool and winter rainfall was plentiful, an environment more hospitable to human beings. In fact, the vegetation is now as sparse and the climate as hot and dry as at any time during the last 1700 years.

Julian Hayden, an archaeologist who studied the prehistory of the Pinacates from 1958 until his death in 1998, arrived at the controversial conclusion that people had lived, hunted, and gathered here for at least 40,000 years. His intuitive estimate of such antiquity gained support when geographer Robert Dorn dated iron and manganese oxide layers on stones identified by Hayden as human artifacts to these same ancient periods.

Controversy and precise dates aside, it seems clear that for at least 10,000 years men, women, and children have taken advantage of whatever nourishment and shelter this part of the Sonoran Desert could provide. Based on the artifacts, Hayden believed he could discern three different cultures: Malpais, San Dieguito I, and Amargosa, with Malpais the oldest and Amargosa the most recent. In his view, the O'odham encountered by Father Kino and other Spaniards beginning in the late 17th century were heirs of the Amargosans.

By the late 17th and early 18th centuries, when first described by Spaniards, the O'odham who lived at Sonoyta were irrigating their crops of native corn, squash, and tepary beans in addition to Spanish-introduced wheat. They were also raising cattle brought to them by Jesuit missionary Eusebio Kino in 1699. Elsewhere in the vicinity, however, away from the life-giving springs at Sonoyta, life for western O'odham was more difficult. A Spanish soldier with Kino wrote of them:

"The Indians went about naked, covering their bodies with only small pieces of fur hares ... . We gave them a supply of food since they were poor and hungry, living on roots, locusts and shell fish."

These were the "Sand Papagos," the HiaCed O'odham whom 19<sup>th</sup> century Mexicans called the "Areneños." They included the so-called "Pinacateños," people who frequented the Pinacate area. Here was a forbidding land of hundreds of lava flows and cinder cones and at least ten large volcanic craters spread out over some 600 square miles -- nearly all of it without water except for natural rock tanks that store water after infrequent rains.

The genius of these people lay in their ability to raise fast-maturing corn in exceptionally dry places and to take advantage of seafood along the shore of the Sea of Cortez; to gather some five dozen wild plants providing food and beverages; and to hunt more than three dozen edible wild animals -- from insects to mammals. These activities took place within micro-habitats throughout the territory.

All of the HiaCed O'odham who have persevered, and there are perhaps more than a thousand living descendants, have done so by abandoning the heart of their aboriginal homeland. They have also abandoned their native subsistence based on hunting, gathering, and small-scale farming. Rather, they have adapted to our cash economy and reside firmly in the global community -- the technological environment -- of the new millennium.