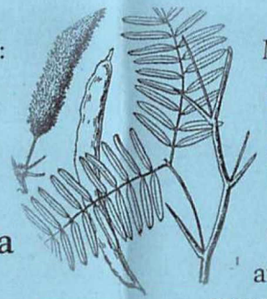
made with readily available resources: mesquite timbers, ocotillo sticks, and mud. This ki was built in 1997 by O'odham from the San Xavier community using traditional tools.



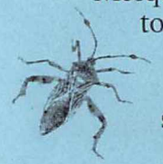
Acequia and Compuerta

The O'odham are descended from a society known as the Hohokam. The Hohokam built permanent villages across the Phoenix and Tucson basins; each village could be occupied by several hundred people. These agrarian people are known for building large and sophisticated irrigation canals that transformed the desert landscape into lush fields of corn, beans, squash, and cotton. From A.D. 1 up until the 1400s the Hohokam civilization persisted, and then, for reasons that are still debated, they abandoned their settlements. Leading theories suggest prolonged drought, salt accumulation in their fields, overpopulation, or warfare as likely contributors to the collapse of the Hohokam culture.

O'odham villages continued to farm and use the irrigation systems of their ancestors where water was available. Spanish missionaries introduced new varieties of crops and European irrigation practices. The structure before you is part of the *acequia madre*, the main channel used to divert water from the river upstream to the mission fields.

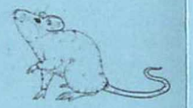
Mesquite Bosque

Mesquite bosques (forests) were once the most abundant habitat in the Southwest. Mesquite trees help other plant species to grow, because their nitrogen-fixing roots enrich the soil and their large, dense canopy provides shelter from the harsh sun.



Mesquite bosques are highly productive habitats bearing abundant flowers, fruits, and seeds that support a variety of insects, reptiles, birds, and mammals.

Today, development, agriculture, and wood harvesting has reduced mesquite bosques to small, fragmented patches of habitat. As recently as 2002, prior to the park expanding its boundaries, the land to the north and south of where you are standing supported privately cultivated agricultural fields. It now illustrates different stages of forest succession. As the hardy mesquites reclaim fallow land, new species will move in as conditions become suitable. A one-mile stretch of mesquite bosque and cottonwood-willow riparian habitat is protected within the park.



Anza Trail

The Juan Bautista de Anza National Historic Trail, or Anza Trail, meanders through the mesquite bosque. This habitat and trail system provide unique wildlife viewing opportunities. Notable birds include the yellow-billed cuckoo, wild turkey, rose-throated becard, vermillion flycatcher, and rufous-backed robin. The dense, multilayered habitat also serves as a critical migration corridor for a variety of wildlife species, including birds, mule deer, mountain lions, black bears, javelinas, coatimundi, and possibly even the occasional jaguar.

The Anza Trail commemorates the 1775 expedition in which approximately 240 people and nearly a thousand head of livestock travelled through this valley on their way to establishing the first European settlement on the San Francisco Bay. This, too, is an example of species migration.

The Spanish introduced cattle, which consume mesquite bean pods in great abundance. The hard mesquite seeds are deposited in their droppings, spreading mesquite shrub habitat into open rangeland – an example of how a single species can influence the landscape.



Santa Cruz River

Plant and animals that are restricted to areas along waterways or rivers are known as riparian communities. The cottonwood-willow riparian forest that you see here was once the most common riparian ecosystem found along low elevation rivers throughout the southwestern U.S. and northern Mexico.

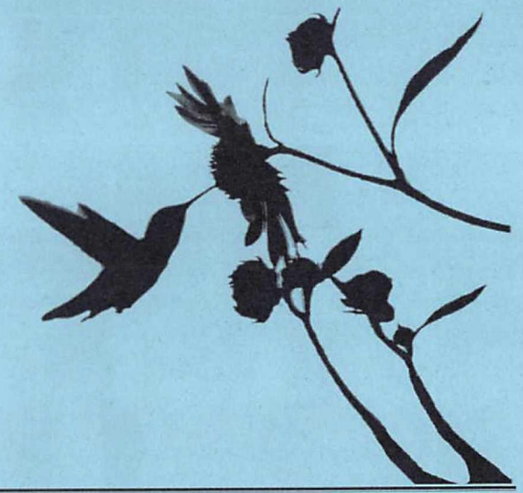
The Santa Cruz River was historically an intermittent stream. Water flowed above ground in areas where underlying bedrock forced it up, then vanished below ground in areas with thick layers of sedimentary fill. Today, the Santa Cruz river is dry along most of its course, with water flowing on the surface only after major rain events.

The cottonwood-willow forest, which is dependent on flowing rivers, is currently one of the most threatened forest types in the U.S. Just upstream from Tumacácori, the International Wastewater Treatment plant in Rio Rico releases its treated effluent back into the river corridor. This effluent sustains the cottonwood-willow ecosystem and recharges underground aquifers. The supplemental water source has supported the return of this critically endangered riparian environment and endangered species such as the Gila topminnow (*Poeciliopsis occidentalis*) – however, it is not safe for human consumption. Avoid contact.

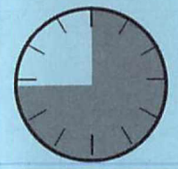
Tumacácori National Historical Park

Explore Tumacácori

Natural History



Duration | Distance | Accessibility



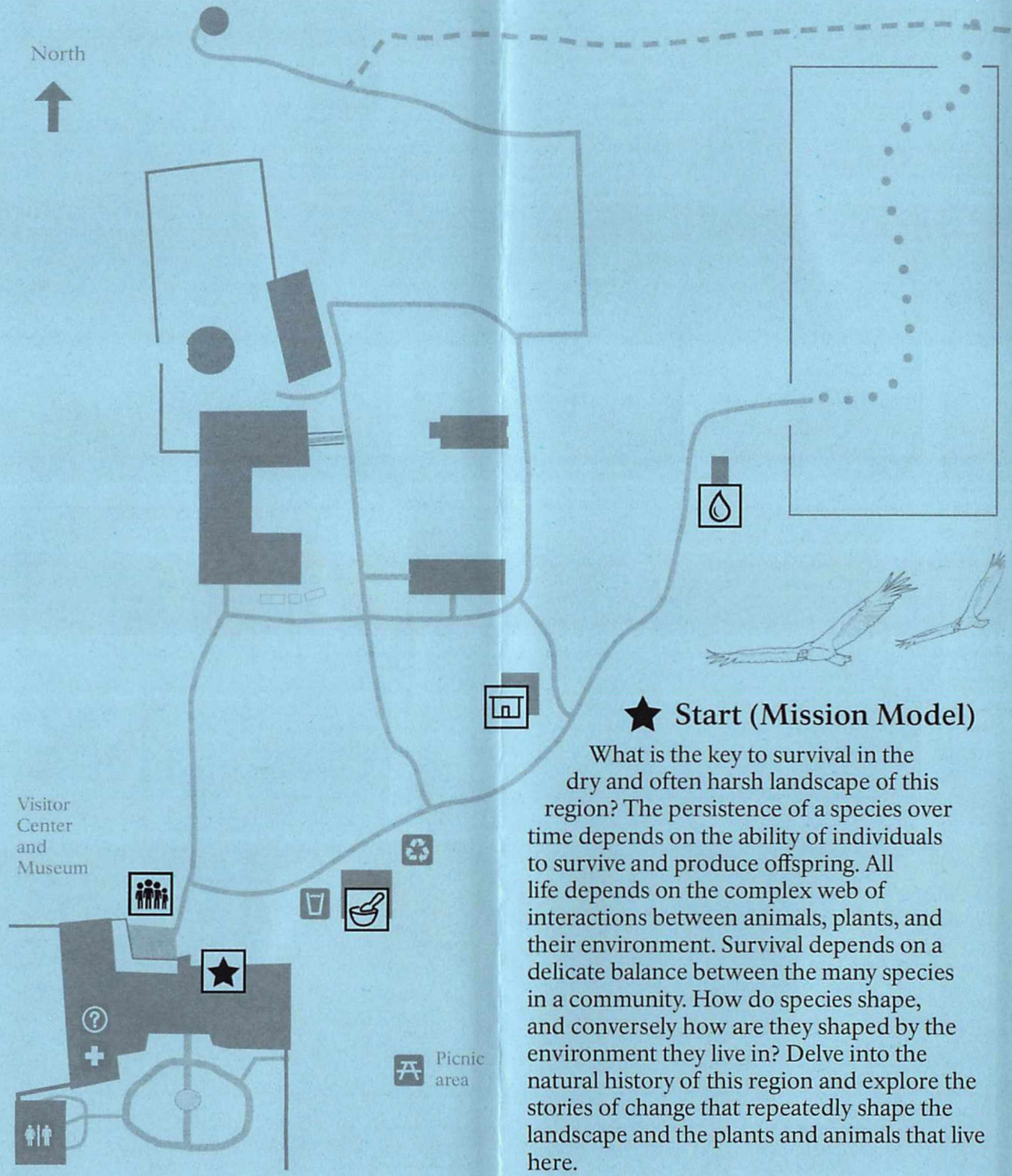




1/2 mile

Tips for a Safe and Responsible Visit

1. Stay on trails
2. Protect historic structures
3. Respect wildlife
4. Dispose of trash properly



★ Start (Mission Model)

What is the key to survival in the dry and often harsh landscape of this region? The persistence of a species over time depends on the ability of individuals to survive and produce offspring. All life depends on the complex web of interactions between animals, plants, and their environment. Survival depends on a delicate balance between the many species in a community. How do species shape, and conversely how are they shaped by the environment they live in? Delve into the natural history of this region and explore the stories of change that repeatedly shape the landscape and the plants and animals that live here.

Community Plaza

To the right of the mission church, notice the distant Santa Rita mountains towering above the valley. The basin and range topography of this region features high-elevation montane islands that rise more than 6,000 feet above the valleys below. A river began to flow through this valley an estimated half a million years ago, during the Pleistocene era. This range of elevation, along with the dry climate, creates zones of high biological diversity.

Notice the absence of saguaro cactus, typical of the Sonoran Desert ecological region. At an elevation of 3,200 feet above sea level, Tumacácori National Historical Park occupies a different ecological region, known as the Madrean Archipelago. The Madrean Archipelago is characterized by distinct wet and dry seasons, hot summers and mild winters, and vegetation composed primarily of small trees including velvet and honey mesquite (*Prosopis velutina, and P. glandulosa*), shrubs such as catclaw acacia (*Acacia greggii*), prickly pear and cholla cacti, and grasses.

Cooking Ramada

Archeological findings from the nearby San Pedro Valley suggest that nomadic hunter-gatherer tribes occupied this region at the end of the Pleistocene era, at least 13,000 years ago. Known as the Clovis people, they hunted herds of large animals such as mammoth, bison, and great ground sloth. These animals provided not only food but also skins for clothing and bone for tools. The landscape of Arizona in the late Pleistocene was quite different. Abundant rain, around 40 inches per year, supported a lush environment with ample wildlife, some of which is now extinct.



Agam A, Barkai R. (2018). Quaternary. 1. 10.3390/quat1010003.

The Clovis people, and mission residents who came later, spent a great deal of time and energy collecting, growing, processing, and cooking food. Cultural food demonstrations provide opportunities to experience this diverse border region's distinctive food traditions. The structure before you is an outdoor kitchen, complete with the shade ramada and hornilla (griddle).

Melhok Ki (moo-ro kee)

Semi-arid conditions began to take hold by the middle of the Holocene era, approximately 6 - 8,000 years ago. Physical and environmental changes forced plant, animal, and human residents to adapt. The Hia Ced [HEE-uh sed] and Tohono O'odham lived in areas with little or no permanent water. These groups relied on what nature provided. They grew a few crops in the summer when rainwater from natural drainages could be directed into their fields. Akimel and Sobaípuri O'odham villages were located near rivers. They grew crops along the floodplain using small irrigation channels, while supplementing their diet by hunting and gathering.

The enclosed structure before you is a modern construction of a traditional O'odham home, called a ki ("kee"). Shelters like this one and the open shade ramada were