

Making a Living in the Desert West

Steven R. Simms

Our fifteen-passenger van rolled to a stop on a small rise overlooking a sage-covered plain. This place looked like all the others we had jostled past for the last hour on the seemingly endless dirt roads of northeastern Nevada. We were part of a university course titled “Archaeology and Paleoenvironments Field Trip,” but this was no arrowhead hunting trip. We wanted to see how people lived in the ancient Great Basin. Everyone craned their necks and their eyes searched when I declared, “We’re here! Can you see it?” The students tumbled out of the van as I began walking a line of broken juniper branches made gray by three centuries of cold, dry desert air. The branches lay jumbled upon one another, but together they marched through the sagebrush in a long, gently curving line.

The branches were the remnants of a toppled fence—a pronghorn trap, a place where Shoshones hunted the misnamed antelope by driving them into large enclosures. We walked a third of a mile along the discontinuous alignments of branches forming the length of the trap and traced the quarter mile of its width. From the air, the trap looks like a giant keyhole. It opens below the small knoll where we parked, and the collapsed fence curves around the base of the knoll to create a natural funnel that surely once steered animals to their deaths.

This pronghorn trap is about three hundred years old. Like most others, it takes advantage of the terrain and the natural behavior of the animals, demonstrating that hunters of the past knew their prey well. Pronghorn typically escape their predators by following the lowest ground, sometimes even

appearing to skulk a bit to be less visible. This trap was built around a subtle swale at the bottom of a long, shallow slope down a valley. Hunters drove the animals here from miles away, probably steering them with piles of brush festooned with strips of bark that fluttered in the breeze and an occasional human “beater” to keep them on the right path.

The hunt likely started the day before the actual kill, with people moving the animals naturally but deliberately. A pronghorn headdress worn by a shaman helped charm the animals into proximity by playing on their natural curiosity. As the pronghorn neared the trap, the hunters closed in, causing their prey to accelerate into their characteristic high-speed run. The animals hugged the swale and unknowingly entered the enclosure, only to be surprised by people hiding around its perimeter. The fence of branches was only waist high, but the

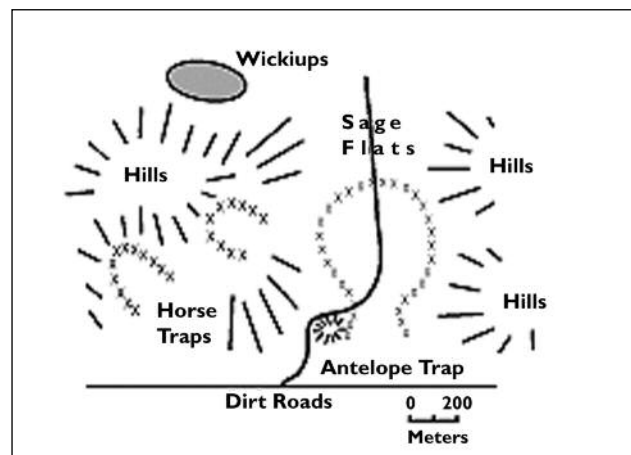


Figure 1.2. Sketch of the antelope trap north of Montello, Nevada.



Figure 1.3. A wickiup, or log and brush shelter, at the Bustos site near Ely, Nevada. This was one of five wickiups at the site, a pine nut–gathering camp used in the fall. Eight circular, rock-lined storage bins were found nearby.

builders knew that instead of leaping the fence, the pronghorn would obligingly turn in order to maintain full tilt. (This response to barriers is one reason pronghorn suffered so much as fences parceled out the American West for cattle.) Once hunters surrounded the animals, they forced them into a small herd on the lowest ground near the middle of the corral. Hunters took several dozen in a hunt like this, picking them off one by one with arrows or forcing them to run until they collapsed from exhaustion and could be clubbed.

The remnants of a small village of log and brush houses, or wickiups, stand about a quarter mile from the pronghorn trap. Easily refurbished whenever hunters wanted to use the trap, the village served as home base during the hunt. For days or even weeks afterward, people remained in the village to process the animals for dried meat, hides, and sinews. They boiled the bones for grease or fashioned them into awls and fishhooks or

pendants and beads. When people departed, they left behind some of the things they had needed for the hunt. They always carried stone from the best quarries, to be flaked into tool blanks and perhaps cached at a village for the next hunting trip. People also cached fiber for ropes and string, extra arrows and tips, and perhaps even snares that could be set and left to work while people hunted the pronghorn.

People used the village to prepare for the hunt and repair their equipment afterward. One such place near a pronghorn trap in eastern California yielded the broken base of an arrowhead that fit perfectly with a tip archaeologists found inside the trap. The tip must have lodged inside a slaughtered animal, and when the hunter returned to camp, the broken base was removed from the arrow shaft and discarded.

Several years or even a decade might have passed before hunters used this trap again, but it was only one of many traps placed strategically across the

landscape. Archaeologists have records of dozens of pronghorn traps in northeastern Nevada alone. They were common features of the “built environment” of the indigenous peoples of the Great Basin.

A Full and Rich Life

The Great Basin is a land so harsh that many modern people passing through it seem reluctant to get out of their cars. US Highway 50 across central Nevada is billed as “the loneliest road in America” on bumper stickers sold at gas stations and rock shops. In our modern world of comfort and insulation from nature, which extends even to the outdoorsy among us, it is difficult to imagine people living in such a place, let alone living well. But the ancients were no mere survivalists wandering desperately in search of food. Their thirteen thousand-year history, spanning more than four hundred human generations, testifies to their success at living in the Great Basin. The reason they thrived there is that they knew the region intimately. It was a human landscape.

The people had a geographically expansive sense of place. They envisioned the land in terms of homelands rather than of single, fixed homesites. The landscape was socially full, enveloped by a network that cycled people among kin and place. The sizes of their groups pulsed according to circumstances, and broad notions of kinship ensured connections even in a land with some of the lowest population densities ever recorded.

People were nomadic, but their movements were not aimless. Where they lived and moved was structured by the seasonal scheduling of activities, social expectations, religious rules, and an intimate knowledge of nature, all of which formed a seamless whole. For instance, the sequence of ripening plants had to be followed, but an opportunity to harvest a sagebrush flat rich in cottontail rabbits would not be passed up. Much of what people did in the summer was in anticipation of winter, when stored food supplies were essential. They lived in some places for months and in others for only weeks or days. Such decisions depended as much on kin and other social dynamics as they did on where the food was—but then those things, too, were inextricably connected.

Ancient people did not have the same notions of private property as modern Americans, and they defined territoriality largely by use, not by permanent residence. Most resources and property were public goods that people shared. During their lifetime, people might weave many territories into their lived experiences. Relations of kinship and social obligations hovered over the land like a net. Where fences now divide the land into private parcels, the landscape then was a stage on which interactions of cooperation, but also competition and even conflict, shaped who lived where and who decided what would happen. A built environment specialized to fit many places and uses complemented this pliable social fabric and means of making a living.

The Built Environment

The built environment of our modern world is so much a part of life that we give it scarcely any thought. Imagine life without our homes, roads, churches, baseball fields, and schools. Where would we be without sewers, fiber optic cables, electrical generating plants, and factories? We rely on our infrastructure.

The early peoples of the Great Basin also had built environments. They did not have to carry all their worldly possessions on their backs. Instead, they cached gear and supplies in places they knew they would return to. When it was time to hunt in the marshes, they could swing by a cache containing net bags and snares to capture small animals, as well as fishing lines, hooks, and weights. They might have left in storage bone tubes for snorkels and duck decoys like those woven from cattail stalks two thousand years ago and left in Lovelock Cave, Nevada (plate 2).

When it was time for the fall pine nut harvest, the log or pole frames of wickiup houses like those at Bustos Wickiup Village awaited refurbishment. The Bustos site sat in a mature piñon forest but also in an area where a winter village might be nearby so that the stored nuts could easily be retrieved. Besides leaving houses there, people cached long hooked poles for pulling down cone-laden branches and big grinding stones and hullers for cracking open the nut meats. Even the circular rock storage

facilities where people cached the harvested nuts had only to be refurbished and filled once again.

A cave or rocky ledge near a favored mountain hunting ground might shelter caches of arrow shafts made from the giant cane grass that grows in valley wetlands. A farmer in Willard, Utah, once found a storage pit on his land that contained more than six hundred small arrow points ready for use. They had been placed in a bag and buried in a small pit perhaps hundreds of years earlier. Ancient people also kept snare bundles in many places, along with baskets, bags, woven mats, stone axes, and digging sticks—just about anything that allowed them to go to work as soon as they arrived.

Tools for getting food were not the only items people cached. Archaeologists have found shamans' bundles, too, such as those from Humboldt Cave near Lovelock, Nevada. The bundles were little pouches holding pine pitch, ocher (iron oxide pigment), vegetal cakes that might have been medicines or prayer offerings, a stuffed weasel pelt with feathers in its mouth, and a host of other small objects. The so-called Patterson bundle, found in eastern Utah, is a shaman's curing kit with leather pouches containing individual doses of herbs, as well as a ball of pine pitch, pouches of stones, red ocher, a strand of deer dew claws, and much more.

As people used the landscape more and more fully, an inventory of metates and manos, the grinding stones used to mill plant foods, accumulated on the ground. Sometimes people stored them in the crotches of juniper and piñon trees or leaned them against tree trunks so that they could be easily spotted. In other instances, the coveted grinders were buried so that other people could not take them. Demonstrating the value of these tools, Southern Paiute consultants told the anthropologist Isabel Kelly in 1932 that they would make a new grinding stone only if an old one could not be found.

Not all early Great Basin people shared the same built environment. During the earliest times, when Paleoarchaic people first explored and perhaps colonized the land more than thirteen thousand years ago, few structures or caches existed, because people moved much longer distances in those days. But even then they cached valuable things such as the spectacular hoards of stone tool blanks uncovered

in the Fenn cache near the intersection of Utah, Idaho, and Wyoming. This cache held eighteen pounds of superbly flaked blanks made of high-quality stone from quarries in all three states.

During the time archaeologists call the Archaic period, beginning about nine thousand years ago, people spread across the Great Basin and became more tethered to particular landscapes. The redundant use of places, relative to Paleoarchaic practices, stimulated greater use of a built environment. People constructed houses intended to be used again and again and invested in food storage facilities and animal traps. They made caches in caves and crevices and on ledges—places they could easily describe, remember, and locate.

By two thousand years ago, some parts of the Great Basin had literally become land filled with people. Distinctions between territories were strengthened. Where larger villages sprang up in some of the rich wetlands, some places and their resources became more exclusive. In a landscape with more neighbors, people exercised greater control over the built environment and began to hide caches of equipment and food from prying eyes.

What to Eat and How to Get It

The cuisine of the ancient Great Basin was for the most part simple but probably less strange than the grislier stereotypes lead us to believe. On one hand, the Native diet strikes modern Americans as strong and bitter, yet on the other, its lack of fat and sugar makes it seem bland to modern sensibilities. Daily fare came mainly out of the stewpot. For most of antiquity, this pot was not ceramic, but a tightly woven, coiled basket whose contents were heated with hot stones from the campfire. One could boil a basketful of water this way in less than five minutes. Ingredients varied by season, but the stew often began with a base of flour made from seeds such as Indian rice grass, blazing star, saltbush, and native bluegrass, to name just a few. The cook might lace this mush with bits of meat, typically rabbit. Greens and seasonings such as thistle, peppergrass, and tansy mustard added spiciness. In the fall and winter, stews might be based on pine nut meal, one of the delicacies of the year. The basketry stewpot embraced the fruits of a landscape that

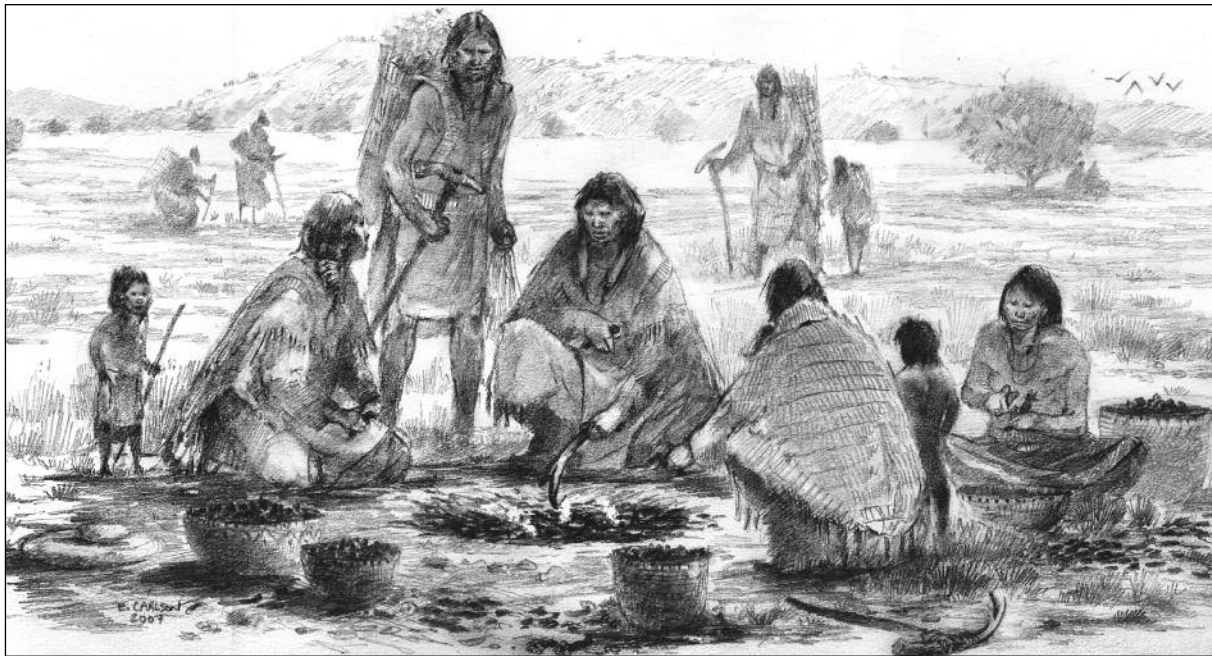


Figure 1.4. Great Basin people preparing roots and bulbs for cooking. Most ancient meals were stews cooked by placing food and water together with hot rocks—here heated in the fire in the center of the group—in watertight baskets.

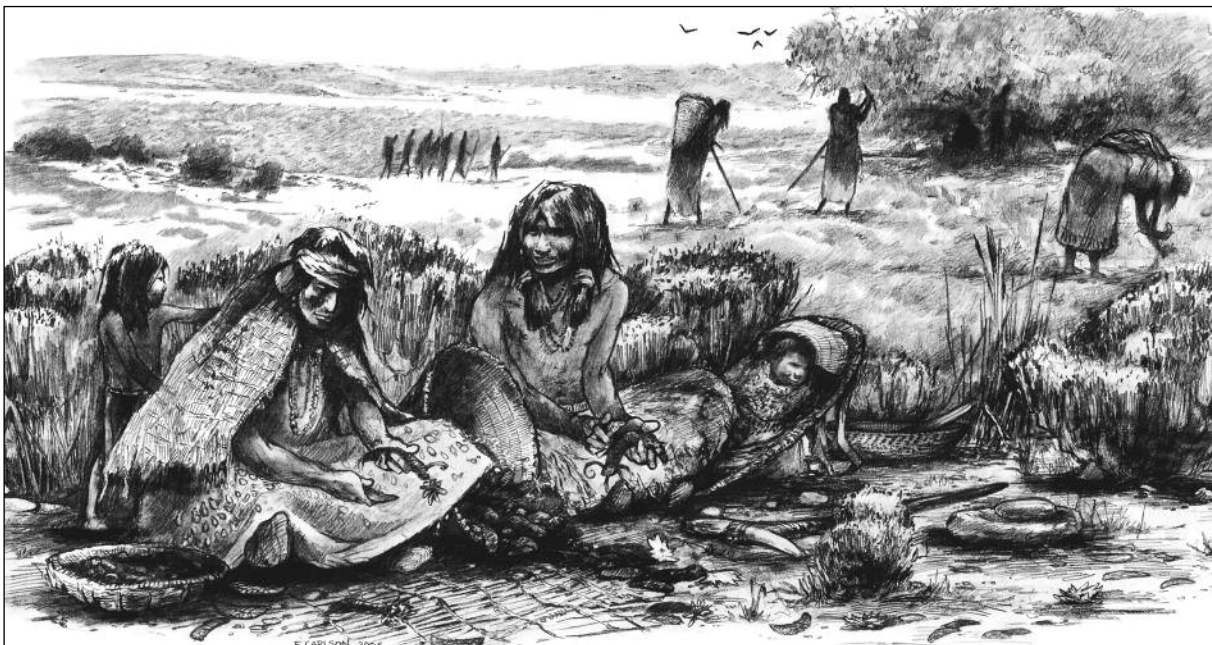


Figure 1.5. A party in the northern Great Basin harvests bitterroot in the early summer. Roots were dug with digging sticks made of hardwoods such as mountain mahogany. Chipped stone tools known as crescents may have served to scrape the skin from the roots.

offered a variety of fresh foods rivaling that found in many modern supermarkets.

People also collected and processed starchy

roots such as biscuit root, bitterroot, bulrush, cattail, and camas, which might be baked in the sand at the bottom of a campfire or in a rock-lined earth oven.



Figure 1.6. Situated at 7,600 feet in the Jarbidge Mountains of northern Nevada, this spectacular mountain sheep corral was used for thousands of years. Blinds were dug into the slope near the top center of the photograph, and a flattened butchering area can be seen inside the corral at the lower left.

Left in their skins or peeled with a stone tool with a concave sharp edge, roots could be wrapped in leaves and steamed. Many foods were best eaten raw, and people ate as they picked, nibbling throughout the day. Travelers might string dozens of bulrush and cattail roots the size of human fingers on a line that could be thrown over the shoulder or wrapped around the waist. This ancient gorp provided sustenance and served as tiny canteens, because starchy water made up three-fourths of the roots' weight.

Bread as we know it did not exist, but we have some evidence that people baked roots to a bread-like consistency. Curly dock seeds were sometimes pounded, soaked, and made into dough, then baked on coals. Cattail pollen was formed into cakes and cooked like tortillas on a stone slab.

Not all cooking was for immediate consumption. Desert fruitcake is a concoction made of whatever dried berries, meat, and seeds were available, mixed with animal fat to form long-lasting loaves. Roasted larvae of the pandora moth or the brine fly could also compose the base of desert fruitcake, preserving the superabundance of a highly nutritious food that was available only a few weeks a year. Desert fruitcake in all its variety provided a portable and concentrated form of energy and protein—an early version of the energy bars of today.

After stewing, roasting was the most common way of preparing meat. Bighorn sheep, mule deer, and of course pronghorn were common sources of roasted meats. Ancient people knew other prey animals as well as they knew the pronghorn for which they designed such clever traps. To attract bighorn

sheep during the rut, hunters bashed two hollow logs together to simulate the sound of the rams' horns slamming together in mating contests.

Hunters also constructed traps. One such trap in the Jarbidge Mountains of northern Nevada was made of wood and stone fences built on a steep talus slope. Bighorn fleeing up rocky slopes easily outpaced their pursuers. But humans positioned above the trap could block the sheeps' escape and force them to descend, where hunters popping up from blinds dug into the rocky slopes promptly shot them. These fences changed over time as hunters acquired new technology, shifting from the dart and atlatl to the bow and arrow. The adoption of guns did not make the trap obsolete; we find nineteenth-century shell casings from Henry rifles in the blinds. In one section of this mountain death trap, hunters even arranged the jagged stones to create a flat area for butchering their kills.

Despite thrilling images of big game hunts, small and medium-size mammals were the staples of the meat larder. Archaeological research shows that even before modern habitat encroachment, the supply of large animals was not endless. During some periods of antiquity, hunting kept their populations low enough that large game alone could not supply people's needs. The most commonly eaten desert meat in all of antiquity was rabbit, from both cottontails and jackrabbits, stewed or roasted on hot coals after the fur had been singed off. At a marmot roast in the summer of 1995 at Fish Lake, Utah, the Kanosh Band of Paiutes cooked the animals this way. The meat was dark and a bit greasy, but it was rich and filling. Ancient cooks gutted smaller animals such as squirrels, voles, and pikas by squeezing them and then made them into kebabs of a kind by inserting a stick into the body. Pieces of meat from larger animals were barbecued much as they are today. People made jerky to preserve meat.

Unlike most of us today, ancient people had to seek fat. Despite the variety of meats and the relatively high fat content of wild seeds and pine nuts, their diet was so low in fat that people actively sought this essential nutrient. Meat from wild game is almost completely lean except for fat under the skin and in the bones. Fat scraped from the skin bound together the ingredients of desert fruitcake.

Fat skimmed from a boiling pot of bones might get a person through the worst days of winter. Left in, it certainly richened the stew.

Few people think that fish and deserts go together, but large wetlands exist in many Great Basin valleys, fed by mountain snowpacks and desert springs. They form mazes of contrasting habitats, from open ponds and spacious meadows to narrow channels lined by walls of rushes. The ponds and lakes offer a variety of sucker-type fish that people caught with nets or drove into schools that could be scooped out onto the banks during the spring spawn. Streams flowing from the mountains offered trout. Archaeology shows that people ate all kinds of fish, and in some places, such as Utah Lake and Pyramid Lake, Nevada, fish were a culinary cornerstone.

Perhaps the epitome of culinary opportunism and thoroughness appears in Lakeside Cave, on the edge of the Bonneville Salt Flats in Utah. For more than four thousand years, the ancient beaches outside the cave became occasional spectacles of superabundance. Whenever it rained, and during particularly wet centuries, water covered the salt flats. In the summer, when the winds were right, untold millions of drowned grasshoppers washed onto the beaches in ankle-deep windrows that could stretch for ten miles. People could collect tens of thousands of calories' worth of grasshoppers in a single hour, and each insect was 60 percent protein. This was a harvest no prudent forager would pass up. People carried the naturally dried and salted grasshoppers from the beaches and processed them in the cave. Coprolites, the dried human feces found in the cave, bristle with grasshopper parts. People must have known when conditions were right for these occasional jackpots and traveled to Lakeside Cave for the event.

Roasting and eating grasshoppers at Lakeside Cave in the early 1980s, my graduate student friends and I found the strip of white meat along their backs reminiscent of shellfish. We dubbed them "desert lobster."

The traditional diet was short on sweets, and one of the few sugars reported was aphid honey, deposited by the insects on plants such as cattails. People scraped it off with a flattened stick and ate



Figure 1.7. Fishers use nets anchored by stone weights to capture fish that will be dried and stored for future use. Fish taken during spawning season were a resource that could firmly tether people to a place. The tule boat on the water was used for harvesting a variety of marsh resources.

it. Although this diet may seem strange to contemporary Americans, people accustomed to it found the food rich and satisfying.

Maude Moon, a Goshiute Shoshone born in the late nineteenth century somewhere south of Wendover, Nevada, reported the change in her people's eating habits in the story "The Pickleweed Winter." Long ago, she said, "Indians had everything they needed. They ate these things which grew on this earth...all kinds of seeds. This pickleweed, and also ones such as sunflower seeds, bunch grass seeds, rye grass, and just any kind, like *keppis-appeh*, like wild onions, like Indian balsam, like carrots, like wild potatoes, like thistle.... During the winter, one ate all he wanted. It was over there at Big Springs, they called it the pickleweed winter. They ate it with pine nuts, they say. They ate it with jackrabbits. Times were good, they say.... But now you modern people, girls, and other modern

Indians—they don't know anything. If they were gathered, they wouldn't eat them. They taste bad, they say. The sweetness has killed their mouths. They eat and drink canned sweet things. Only these taste good [to them today]. Indian food doesn't taste good anymore. It tastes too strong. It just tastes bad. It can't be swallowed. This is how it is."

A Human Wilderness

The ancients lived in the desert West with the nimbleness of long familiarity. They needed no street signs or maps because everything and every place had names and stories. Their languages held no word for "wilderness." The people marked no separation between humanity and nature, nor did they pose humanity against nature. The notion of "making a living" involved no distinction between work and play. There was harmony and balance,

but these things were not static. The ancient people shaped their wilderness. They used it and sometimes even used it up. The balance they achieved was not a final state, but an unsteady relationship between human needs, beliefs, and the tyranny of circumstance.

The deserts and mountains of the Great Basin remain the last large wilderness in the lower forty-

eight of the United States. Many of us can find a wilderness sense of place in the Great Basin, but in the ancient past, it was a human landscape, a human wilderness.

Steven R. Simms is a professor of anthropology at Utah State University.

