History of the Reserve

Stebbins Cold Canyon Reserve is one of 33 reserves in the University of California Natural Reserve System. Today's use of Cold Canyon by people as a research area and hiking spot spans only a short fraction of the canyon's entire human history. The dilapidated foundations of the Vlahos homestead in the center of the reserve remind us of the Canyon's relatively recent use as a ranch, but very few signs remain to tell us about the use of Cold Canyon by Native Americans dating back at least 4000 years.

Native Americans

For thousands of years, Cold Canyon and the surrounding foothills and valleys were home to various Native American groups, most recently the Southern Patwin people. Until the first European settlers arrived near Cold Canyon, the Southern Patwin lived in semi-permanent villages and camps constructed of dome-shaped, subterranean thatch and mud houses. Common buildings in a settlement included a dancehouse, a sweatlodge, and an elevated granary to store preserved food. Individual homes were built for families, which consisted of a married couple and their unmarried children, as well as their married daughters and their husbands and children.

The Southern Patwin was a hunter gatherer society and used Cold Canyon to hunt rabbits, black bears, deer, tule elk, geese, ducks, and other game. They did not eat the feared but abundant grizzly bears of the area. Hunting practices were well developed and included setting low fires to encourage fresh plant growth, which, in turn, attracted more animals. In addition, they constructed long stone fences with a single opening to herd game so they could more effectively shoot at it. Although some of these now dilapidated and moss-covered stone walls can still be found in the hills nearby, none have yet been identified in the reserve. Arrowheads, another remnant of their hunting practices, have been found in the vicinity of Cold Canyon along Putah Creek. These arrowheads are important clues to the canyon's history and should not be removed.

The Southern Patwin did not farm but instead relied on the tremendous variety of edible plants found in the region, most of which can be seen from the trail as you hike through the canyon (see Table 1). The acorns from oak trees were the primary community staple. They ground these acorns into flour using mortars that they carved into boulders and using a bone or a rock as a pestle. At least one mortar exists in the bedrock along Cold Creek near the creek crossing, a permanent reminder of the native people that once dominated the area.



A bedrock mortar along Cold Creek is the only remaining evidence that the Patwin once inhabited Cold Canyon.

Table 1. Woody and non-woody plant species used by the Patwin for food, tools, craft supplies, medicine, and spiritual use.

Species	Food	Tools
WOODY PLANTS		
California buckeye (Aesculus californicus)	Seeds leached of poison, then used in soups.	Wood used for starting fires.
Bigleaf maple (<i>Acer macro-phyllum</i>)		Shredded bark made into aprons or skirts.
Foothill pine (<i>Pinus sabin-iana</i>)	Pine nuts gathered and eaten.	•
Interior live oak (<i>Quercus</i> wizlizeni)	Acorns were a staple.	Wood used to build shelters, paddles, and weapons.
Parry manzanita (Arcto- staphylos manzanita)	Berries used for soup meal. Leaf stems brewed.	Wood used for making clubs.
Buck brush (<i>Ceanothus</i> cuneatus)		
Western redbud (<i>Cercis</i> occidentalis)	Pods cooked and eaten.	
Mountain mahogany (Cercocarpus betuloides)		Wood used for drills, arrow shafts, and throwing sticks.
Poison oak (<i>Toxicodendron diverilobum</i>)	Leaves used in lining cooking pits.	
Sandbar willow (Salix exigua)		Twigs used in constructing sweathouses and fish traps.
Blue elderberry (Sambucus mexicana)	Elderberries eaten.	
California bay (<i>Umbellaria</i> californica)		
California wild grape (Vitis californica)	Grapes eaten. Grape leaves used to line oven pits.	Vines used to lash granaries and fish traps.
HERBACEOUS PLANTS		
Maidenhair fern (<i>Adiantum jordanii</i>)		
Paintbrush (Castilleja rose-ana)		
Soap plant (<i>Chlorogalum</i> pomeridianum)	Root eaten.	Extract used to stun fish in still waters.
California golden poppy (Eschscholzia californica)		
Miner's lettuce (<i>Claytonia</i> perfoliata)	Leaves eaten.	
Wild oat (Avena fatua)	Grain gathered and pounded into flour.	

Craft	Medicine	Spiritual
	Pulverized seeds used as a poltice.	Branches protected against werebeasts.
Leaves used to line baskets.		
Soot from burned galls	Pitch used as a bandage on sores and burns.	Pitch and tallow smeared on widows in mourning. Wood used to make drums.
used for tattooing.		wood used to make drums.
	Steeped leaves helped cure poison oak and diarrhea.	Wood produced intense heat for ceremonial fires.
Switches used in basketry.		
Bark and shoots used for pattern work in basketry.		
		Bark warded off thunder.
	Juice from pods used as a cure for warts.	Pods used for rattles in ceremonial dances.
Twigs used as foundations for baskets.	Bark brew used as a relief for poison oak rash.	
Stems made into rattles and flutes.	· · ·	Sticks tied in hair during religious ceremonies.
	Leaves used as cure for headaches and rheumatism.	
Stems used to weave black basketry patterns.		
		Leaves brewed as a love charm.
	Roots used in poultices. Extract used as soap.	
	Fresh root relieved toothaches.	

Records kept by settlers indicate that as recently as 1838, the Patwin still lived along Putah Creek in large numbers. In 1848, with the end of the Mexican American War, California was ceded to the United States. California received statehood in 1850, and in 1852 the area that included Cold Canyon was legally defined as unappropriated unreserved public land. By 1877 the Southern Patwin were gone, forced out by Mexican and Spanish settlers who raised stock on their land-grant ranches.

The Homestead

The Homestead Act of 1862 defined the region as stock raising land in 1916, and in 1938 John Vlahos was granted land in Cold Canyon for goat and cattle grazing. In order to raise collateral for his mortgage of \$2500, he made 2000 pounds of goat cheese and built a cold storage building in a cool grove by the creek to store it. The cold storage building, whose stone foundation still stands and can be found at the terminus of the homestead trail, serves as the origin of the Cold Canyon name. The cold storage, the stone foundation of the Vlahos' house, a well, and some rusted remnants of an old vehicle are all that remain of the homestead.



The remains of the Vlahos' cold storage.

Monticello Dam

Immediately upstream of Cold Creek's outlet to Putah Creek stands the massive wall of Monticello Dam. In the early 1900's, Berryessa Valley (the area now underneath Lake Berryessa) was a flat, fertile valley bisected by Putah Creek. The town of Monticello (population 250) stood in the center of the valley and was surrounded by 12,000 acres of farmland. Like the rest of Napa and Solano counties at the time, Berryessa Valley was farmed without the aid of irrigation. As farmers in many parts of the Central Valley constructed massive irrigation systems for their crops, dry-farmed produce quickly became uncompetitive in the market.

The farming interests in the region began championing dam construction to make local produce competitive. The construction of a dam at the narrow point of the Putah Creek Canyon, known as Devil's Gate, was first proposed in 1916, but several

other dams were proposed on both Putah and Cache creeks in the ensuing decades. A proposal by the Solano Water Council to build a 304-foot dam at Devil's Gate became increasingly populara and the U.S. Bureau of Reclamation took over control of the project in 1945. The purposes for this dam were to (1) store water in Berryessa Reservoir for agricultural, urban, industrial, and military uses, (2) reduce flooding of lands along vide recreational benefits. construction of Monticello Dam



lower Putah Creek, and (3) pro- Devil's Gate before the construction of Monticello Dam. Cold Canyon is near center on the left edge, and Berryessa Valley and Putah Creek can be seen beyond the "gate."

became increasingly likely, the Winters Farm Bureau Center, the Yolo County Chamber of Commerce, the Winters Service Club, and the Yolo County Board of Supervisors each raised opposition to the project. Such opposition might today be phrased in terms of altered water regimes or disrupted plant and animal communities. However, in the mid-1940's, concerns about the dam centered around water prices and fair distribution of water to various groups. Local groups also opposed both the displacement of Monticello residents and the building of a dam in an earthquake zone. At the last minute, opposition by Solano County farmers and state authorities caused the height of the dam to be reduced from 304 to 270 feet, which correspondingly reduced the resevoir capacity from 2.2 to 1.6 million acre feet of water. The Secretary of the Interior approved the Solano Project, as the dam construction was known, in 1948. By 1957, the dam was complete, and by 1963, Lake Berryessa had filled completely.

Construction of the dam has probably affected use of Cold Canyon by animals. A dam and highway across Devil's Gate effectively barred stream-associated animal species from

dispersing between Cold Canyon and regions upstream. No good records of vertebrate populations in the region exist before construction of the dam, but it is possible that construction of the dam, the reservoir, and Route 128 has isolated Cold Canyon from regions to the north and west.

It is also possible that low flows created by limited water releases from the resevoir have eliminated some of the aquatic species that may have seasonally used the creek. Until recently, Putah Creek below Solano Dam (further downstream) was provided with Construction of Monticello Dam.



just a small amount of water during the dry season. As a result, most of the creek dried up in the summer of 1989 (a drought year), killing thousands of fish and withering riparian vegetation. Similar events may have eliminated some species that swam into Cold Creek during the winter.

Creation of the Reserve

John Vlahos sold part of his land to Paul Leiter in 1968. The Leiters sold this portion of the reserve to the University of California in 1979, and Petro and Virginia Vlahos sold the remainder to the University in 1984. Named in honor of Dr. G. Ledyard Stebbins, Professor in the Department of Genetics at U.C. Davis, the reserve was appropriated to preserve the land for teaching and research.

One goal of the Unversity of California Natural Reserve System is to preserve representative sites of each of California's many unique ecosystems. Stebbins Cold Canyon Reserve is an excellent example of Inner Coast Range communities because it retains many of its pre-European characteristics. With the obvious exception of large mammals such as grizzly bears and tule elk, the plant and animal communities of Cold Canyon seem largely the same as they have been since the first Native Americans arrived in this area. And although the trail and the remains of two structures dot the landscape, the canyon remains relatively free of development.



G. Ledyard Stebbins in Cold Canyon.

Still, recent human activity has left a strong mark on the landscape. The hills above the homestead trail are ribbed with the trails created by many years of livestock grazing, most recently the Vlahos goat herd. During this century, natural fires were suppressed in Cold Canyon and the surrounding foothills. Eventually, so much dead wood had accumulated that major fires, such as one that swept through the reserve in 1988, became inevitable. The 1988 fire was actually set by the California Department of Fire (CDF) in an attempt to complete a wildfire that first began south of the reserve, spread south with north winds, and then turned and moved north with southwest winds. CDF decided to drop fire sticks in various locations to finish the burn between Highway 128, Pleasant's Valley, and Highway 80. CDF did a careful and meticulous job; only a few oaks burned and the canyon was unburdened of several tons per acre of fuels. Some of the patches in the hillside vegetation were created by "hot spots" in that fire. A more subtle but nonetheless significant effect of humans is the elimination of the grizzly bear as a major predator and earth mover in the area. In recent years, recreational users have created many unauthorized trails through the reserve and increased erosion of the official trails. The number of visitors to the canyon varies consistently with weather, but the trails are open all year round, and become wellworn after the winter rains. As you walk up the trail, keep these changes in mind and think of the effects of your own presence on plants and wildlife.