



VALLEY OF THE MOON STATE PARKS INTERPRETIVE NOTES AND EVENTS

Jack London State Historic Park

Bat Box Erected Near the Pig Palace



Sheryl Lawton, Ranger

The most often asked question lately at Jack London State Historic Park is, "What is that wooden structure up on metal posts over near the pig palace?" I've asked people to guess what it is and most folks are able to come up with either a large bird house or bat box. Well, if you thought it was for bats, you're right.

During the planning phase of the Cottage Restoration, specifically the stone kitchen and dining room, it was discovered that three species of bats, including one California Special Concern species, were using the attic and roof structure most likely as a maternity roost. To mitigate the removal of this roosting location through the restoration process, the park established an alternative maternity roost habitat with the placement of the bat box condominium. Bat specialists surveyed the bat population prior to restoration work. They found that approximately twenty Pallid bats (*Antrozous pallidus*), forty California myotis (*Mytois californicus*), and about fifteen Brazilian free-tailed bats (*T. brasiliensis*) were in the work area. Prior to restoration work beginning in January 2004, the bats were evicted from the structure and plastic sheeting was utilized to prevent re-entry into the building. The bat box was erected prior to the maternity cycle of the affected bat population. This new habitat will be a permanent fixture on the Beauty Ranch. It is anticipated that the structure will reduce the potential loss of species with the elimination of the stone structure as a roosting site. I hope this new addition to the park will interest you in learning more about the bats that make Jack London SHP their home. Check out a book from the Betty Hageman Memorial Library and share the new information with park visitors on your next tour of the Beauty Ranch.

Cottage Coast Live Oak Tree Treated

The large Coast Live Oak Tree just outside the Cottage Study has recently received some special treatment. With continuing study and research being performed



throughout the park regarding Sudden Oak Death, park ecologists contacted Bioscape, Inc. to look at and offer recommendations for preventive treatment of the treasured Coast Live Oak at the cottage. Bioscape, Inc. injected "Agri-fos" into the cambium layer of the tree. The active ingredient of Agri-fos is phosphoric acid through Phosphonates, a common fungicide. "Scythe" was also sprayed on the lower bark portion of the tree to kill off the existing moss.

According to Bioscape but yet to be proven scientifically, moss could be an indicator of high acidity in the soil which could be inhibiting the uptake of Phosphonates in the soil. Phosphonates are needed to help with the trees ability to resist disease. Calcium was broadcast on top of the mulch throughout the drip area of the oak to help balance the PH level of the soil.

Photographs were taken prior to treatment. The oak tree will be monitored for any visible changes during the next growing season and subsequent years. New growth on the end of the branches will be documented and photographed. The goal of this treatment is to ensure the health and longevity of this historic Coast Live Oak. Park staff appreciate your continued interpretation and enjoyment of this treasured park feature.

To learn more about Sudden Oak Death refer to <http://ceris.purdue.edu/napis/pests/sod/>

--Sheryl Lawton
State Park Ranger

Sugarloaf Notes

The Hurd Ranch 1914-1930

By Dave Chalk

Bill Myers and I completed our docent training through the Valley of the Moon Natural History Association several years ago and decided we wanted to lead hikes in Sugarloaf Ridge State Park. We chose this park because of the natural beauty it offers in addition to the relatively undisturbed back country.

Many hikers have been to the top of Bald Mountain in Sugarloaf Ridge State Park. However, few people have hiked northwest from this peak along the High Ridge Trail. On Saturday, January 20, 28 of us hiked up to Bald Mountain and then followed the High Ridge trail for about one mile before arriving at the old red barn. This barn is all that remains of the Hurd Ranch. As we enjoyed our lunch on the foundation of the old house, next to the cement steps to heaven, all that remains of the steps leading to the house, many of us wondered about the lives and times of the Hurd Family.

The rangers at Sugarloaf Ridge State Park were very helpful in providing me with a transcribed copy of a taped interview conducted by a former ranger Francis (Fritz) Hurd and Hazel Hurd Harding, two of the Hurd children. I obtained additional information from Shirley Penland who father, Ralph, was one of the Hurd Children. Finally, Fritz Hurd traveled down from Redding to visit with me personally and help provide missing facts and information about the Hurd Ranch.

Ray and Berth Hurd and their ten children homesteaded 160 acres near the headwaters of Bear Creek between 1914 and 1930. Ray Hurd built two cabins, a house, a woodshed and a schoolhouse, in addition to the red barn, all located on their ranch. During that time period there were other families living up in the high country; probably a total of 35 to 40 people. To the north there was and still exists, the McCormick Ranch; to the east was the Cookson homestead; on the south was the Garrett Ranch; to the west lay the Fitzsimmon spread. A homemade phone system was established between some of these ranches. Fritz mentioned that after the Fitzsimmons sold their ranch, a nudist camp was located there!

The Hurds maintained a home in St. Helena where Ray was employed as a painter during the week and would join his family at Bear Creek on the weekends. St. Helena was seven miles away by foot or horseback following Sulphur Springs Road. Eventually Ray decided to build a road to the south toward Kenwood. He and his sons spent five years building the road with pick and shovel and horse and plow. The Hurd Road followed the Bear Creek until it intersected the present Adobe Canyon Road.

Initially the Hurd children attended school in St. Helena, but later Ray built a schoolhouse at the homestead. The Hurds hired a teacher who lived with the family. The Hurd children along with several neighbor Children, attended a typical 9:00 to 3:00 school day.



Once the children were of high school age, they attended school in St. Helena. As there was no church up in the high country, the schoolhouse doubled as a church. There would be a little church service, complete with a pump organ.

The Hurd children, as is true with all children, had their share of accidents. Bertha had a homemade remedy for stopping bleeding. By pouring sugar onto the wound the blood would coagulate. It was seven miles to town on foot, so families had to improvise.

There was no electricity on the original homestead. However, later owners apparently used a generator as there are still electrical wires hanging from the barn. It has always been too remote for any electrical utility to provide service. Water from an uphill nearby spring flowed by gravity through pipes to the house. Cold spring water in a tub provided refrigeration by wicking its way through gunny sacks. The evaporated cooled air kept milk and other perishables from spoiling.

The Hurds had a limited number of beef and milking cows, two or three horses and some turkeys and chickens. Additionally they maintained a small vegetable garden and a few fruit trees. Bertha enjoyed feeding the many men who, with the Hurd's permission, hunted deer, rabbits and other small game on their property.

In 1930, with the family starting to grow up, Ray and Berth Hurd decided it was time to sell the homestead. They sold to Joe Vassconi and Sam Effington from St. Helena. In turn these men and others used the property as a hunting club for many years. During the 1960's, after the property was owned by the State, different people resided on the ranch. One night, unfortunately, the house burned down due to an accident with a lighted candle.

In 1995 John McCormick's daughter, Babe McCormick and her daughter Sandra learned that part of the 1400 acres of the McCormick Ranch had been sold to the State Parks of California. This land, the southern facing slopes, will allow the State Parks to build a trail from Hood Mountain Regional Park through the newly purchased McCormick Ranch property and onto the former Hurd homestead, now a part of Sugarloaf Ridge State Park.

Naturalist Corner

Chuck Whatford

Gray Fox

One of the mammals common to our local parks is the Gray Fox (*Urocyon cinereoargenteus*). A member of the Family Canidae, along with wolves and coyotes, like other canids, gray foxes have a doglike appearance and, like dogs, tend to be quite social (among themselves). The name “gray fox” is derived from the salt and pepper appearance of its coat, grizzled gray above and reddish below, which helps it blend in with the gray-green tones of the chaparral and woods areas it prefers.



One of the smaller canids, adult gray foxes weigh between 7-13 pounds, stand 14-15” high at the shoulder and tend to be 32”-40” long (head, body and tail). Like its cousins, wolves and coyotes, foxes have a reputation for being carnivores, but actually they’re omnivores. Their diet includes small mammals such as cottontail rabbits, mice and voles, birds, insects as well as fruit (e.g., apples, grapes, berries and nuts).

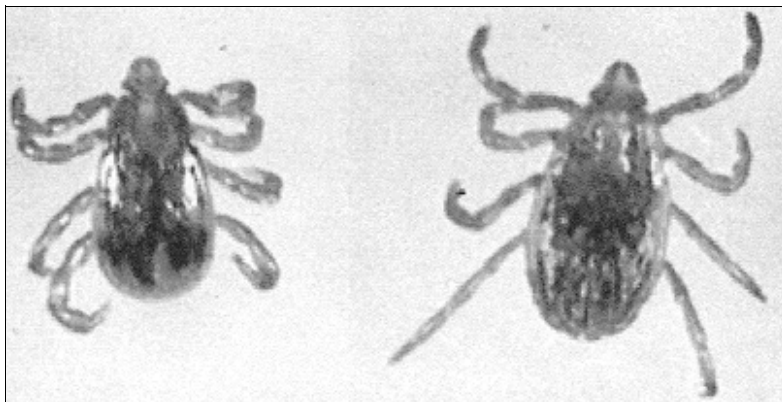
Mating season is February-March and the females give birth to litter of 2-5 young in the late spring. Birth and rearing take place in dens. Favorite places for dens are woodlands and among boulders on slopes with rocky ridges, in small caves, sandy banks, rock piles, slash piles, hollow logs and hollow trees—especially oaks. The mother weans them at 3 months of age. Both parents care for the young by bringing food to them in the den initially, and then by the time they’re weaned, they begin to teach them to hunt. When the youngsters are 4 months old (they weigh about 7 pounds by then), they begin to hunt for themselves and by winter of the same year they were born they are ready to care for themselves.

Gray foxes seem to prefer open country with cover for hunting (such as chaparral areas and wooded, brushy areas.) They do occasionally climb trees to forage for food and to escape danger (their major predators being domestic and wild dogs, Bobcats and humans), and are the only American canid that can truly climb trees. They tend to be nocturnal but sometimes are seen foraging during the day in the brush and undergrowth. Although they don’t vocalize often, gray foxes have been known to growl, bark and yap.

Their good sense of smell and hearing allows them to be successful hunters of rodents, a characteristic that makes gray foxes beneficial to humans in that they control local populations of rodents. This is especially beneficial in agricultural areas, and it outweighs the occasional damage they do to chickens and other poultry.

Gray foxes range over much of the US in forests, woodlands and chaparral areas, tending to prefer warmer regions than its cousin, the red fox. Gray foxes occur all over the Bay Area as well. Locally, look for them at night at all 3 of our local state parks in woodland and chaparral areas, although you’ve a good chance of seeing them prowling around the garbage bins.

Ticks



Berkeley - After a long hike through some of California's forests, it may be tempting to rest on a log or lean against a tree. Wrong move, say researchers at the University of California, Berkeley, who found that such activities may increase the risk of acquiring ticks harboring the Lyme disease bacterium.

We sat on logs for only five minutes at a time, and in 30 percent of the cases, it resulted in exposure to ticks," said Robert Lane, professor in the Division of Insect Biology at UC Berkeley's College of Natural Resources and lead investigator of the study. "It didn't matter if we sat on moss or the bare surface; the ticks were all over the log surface. The next riskiest behavior was gathering wood, followed by sitting against trees, which resulted in tick exposure 23 and 17 percent of the time, respectively."

The study, published in the current issue of the *Journal of Medical Entomology*, is the first quantitative analysis of human behaviors that may increase the risk of tick exposure in California's hardwood forests. The paper has come just weeks before the start of northwestern California's nymphal tick season, which begins in early spring and continues into summer.

The western black-legged tick, found primarily in the far western United States as well as in British Columbia, is the primary carrier of the corkscrew-shaped spirochete *Borrelia burgdorferi*, a bacterium named after its discoverer, Dr. Willy Burgdorfer. *B. burgdorferi* is responsible for Lyme disease, which can lead to debilitating symptoms in humans. Most human cases of Lyme disease in northwestern California appears to be transmitted by young nymphal ticks, which are notoriously difficult to detect because they are as small as poppy seeds.

Lane and study co-author Denise Steinlein, a UC Berkeley graduate student in insect biology, trekked through a hardwood forest at the UC Hopland Research and Extension Center in southeastern Mendocino County to conduct the field trials. The area, dominated by California black oak, is endemic for Lyme disease.

Jeomhee Mun, a UC Berkeley research specialist in insect biology, is another co-author of the paper.

Lane and Steinlein conducted the experiments on two back-to-back days in three consecutive weeks in 2002 between late May and mid-June. Decked out in white clothing from top to bottom, with pant legs tucked into white socks and seams sealed with duct tape, the researchers set out to learn how people might acquire nymphal ticks. "If we're going to develop effective strategies and educational programs for the prevention of Lyme disease, it is critical that we understand how people are exposed to the ticks that transmit the bacteria in the first place," said Lane. "We intentionally looked at behaviors that people would typically engage in while spending time in the woods."

The researchers sat on logs, sat against trees, gathered wood, walked through leaves, sat still on leaf litter and sat and stirred up leaf litter for set amounts of time. Lane noted that turkey hunters can easily spend up to an hour or longer sitting with their backs against trees while trying to call in toms during the spring hunting season.

After each activity, in scenes strikingly reminiscent of primate grooming behavior, the researchers meticulously picked off and counted the ticks on their clothing and bodies. They also used an adhesive lint roller to pick up ticks that might otherwise have escaped their attention. All told, they found a total of 86 nymphal ticks on their bodies during the field trials.

"Activities that were riskiest involved considerable contact with wood," said Steinlein. "Of the six behaviors we analyzed, sitting still on leaf litter was the least riskiest behavior, resulting in tick exposure only eight percent of the time." Why the difference between wood products and leaf litter? The clue may be in an important animal host for the larvae and nymphs of the western black-legged tick.

Tick infection rates normally are significantly higher in the northeastern and upper midwestern United States, where most cases of Lyme disease occur. Lane cautioned that the findings in this study are not intended to be applicable to forested areas in other regions of the country.

But for people frequenting areas of California where Lyme disease is endemic, the researchers recommend precautions to prevent tick exposure.

"I would avoid prolonged contact with wood as well as with leaf-litter areas, and I would strongly suggest that people inspect themselves carefully after spending time in tick-infested areas," said Lane. "Moreover, I would advise people to continue checking their skin for two to three days after the potential exposure. Nymphal ticks are so hard to see in the beginning - probably less than one in three people bitten by nymphs ever discovers the tick that bit them. But they become easier to detect once they start swelling up a bit after they've had a blood meal.

"Animal studies suggest that it usually takes longer than one day after the tick becomes attached for the bacteria to be transmitted to the host, so the sooner the tick is found and removed, the better," said Lane.

The National Institutes of Health and the U.S. Centers for Disease Control and Prevention helped support this research.

