Park Volunteers Restore Historic Diablo Stoves
Mark Sinclair, Mount Diablo State Park Maintenance Worker/Trails Coordinator

Many visitors to Mount Diablo State Park enjoy grilling a tasty burger or steak on one of the 71 stone “Diablo Stoves” that are scattered throughout the park. Stoves in the campgrounds feature impressive chimneys, while lower-profile stone barbecues are available in the picnic areas. These stoves and barbecues are historic features, and the area in which they are situated is considered a cultural preserve within the state park. Because of their historical significance, efforts are currently underway to repair, restore, and preserve the Diablo Stoves, thanks to a small group of dedicated volunteers.

Diablo Stoves History

Diablo Stoves are found throughout California State Parks, but it is believed the first ones were built at Mount Diablo State Park, hence their name. At least 41 of the stoves and barbecues in the park were built in campgrounds and picnic areas by the Civilian Conservation Corps (CCC) between 1933 and 1942. Masonry used to build the stoves was prepared to resemble naturally occurring rock formations, and most of the stoves were built with stones from the area surrounding each stove. Careful consideration was given to the placement and orientation of the stoves at each site. All of the stoves and barbecues have metal grills; the stoves also have griddles that slide over the grills. Stoves with chimneys have metal flue dampers.

From 1948 to 1953, the recreational features in Mount Diablo State Park were expanded, and at least 23 new stoves and barbecues were built using designs similar to the original CCC stoves. The origin of seven stoves in the park cannot be identified.

As would be expected, these masonry structures have deteriorated over the past six to eight decades.

The Restoration Process

In 2015, park volunteers Paul Cardinet, Conrad Lowry, and Jerry Schweickert completed a monumental two-year effort to build a stone stairway on the Rock City Trail. They asked what they could do next and were offered the opportunity to restore the Diablo Stoves to their original appearance. Joined by Dereck Love and Mike Woodring, a small group of dedicated volunteers worked tirelessly to restore the Diablo Stoves.
Many thanks to all who care for our park.

925.927.7222.

Diablo Interpretive Association, volunteer@mdia.org, silas.ellison@parks.ca.gov, 925.827.6122, or Mount Park Volunteer Field Projects Coordinator Silas Ellison, Diablo State Park and/or with MDIA, please contact all—for the volunteers and for the park.

Volunteering in the park is a way for them to give back enjoying the camaraderie of like-minded individuals. While contributing significantly to the park, many volunteers say they relish being outdoors in a beautiful, peaceful setting, getting exercise in the fresh air, and diverse opportunities for volunteering. Volunteers receive further training based on their areas of interest, such as leading nature hikes; staffing the visitor centers as docents; providing facilities maintenance; roving the trails on foot, bike, or horseback; picking up trash and removing graffiti; maintaining the trails; and a host of other volunteer activities.

Mount Diablo Interpretive Association (MDIA), a volunteer non-profit organization partnering with the park to interpret and preserve Mount Diablo State Park, offers educational programs, interpretive publications, and maps to visitors, and provides many means of support to park volunteers, park staff, and visitors alike.

While contributing significantly to the park, many volunteers say they relish being outdoors in a beautiful, peaceful setting, getting exercise in the fresh air, and enjoying the camaraderie of like-minded individuals. Volunteering in the park is a way for them to give back to the environment. I see it as a win-win experience for all—for the volunteers and for the park.

If you are interested in becoming a volunteer at Mount Diablo State Park and/or with MDIA, please contact Park Volunteer Field Projects Coordinator Silas Ellison, silas.elison@parks.ca.gov, 925.827.6122, or Mount Diablo Interpretive Association, volunteer@mdia.org, 925.927.7222.

Many thanks to all who care for our park.

At 20,000 acres, or over 31 square miles, Mount Diablo State Park is huge! So, as a visitor to the park, you may ask, where should I go, what should I see, what should I do? Luckily there are countless choices; it all depends on what interests you.

If this is your first visit into the park for a family outing, the weather is comfortable, and you’ve packed a picnic lunch to enjoy, you’ll find the Summit Visitor Center at the top of the mountain is a great place to start your adventure.

The Summit Visitor Center, open daily from 10 a.m. to 4 p.m., has interesting hands-on displays, historical artifacts, videos, and many sources of information about the park. The observation deck on top of the Summit Visitor Center offers an unforgettable view of the Bay Area and miles beyond. Don’t forget to stop by the visitor center gift shop, where you can purchase maps, books, and memorabilia related to the park.

After leaving the Summit Visitor Center, check out the Mary Bowerman Trail for a scenic, easy 0.7-mile walk circumnavigating the summit. The northern section of the trail is paved, with telescopes, binoculars, and benches inviting you to stop and enjoy the expansive views.

Now, back to that picnic lunch. The nearby Lower Summit Picnic Area offers sheltered picnic tables, grills, restrooms, and another fantastic view, this time in a southerly direction toward Livermore, Mount Hamilton, and beyond. There is plenty of open area to let the kids run around without worrying (too much) about poison oak!

If you still have energy to burn, Rock City invites kids of all ages to explore the “wind caves” and fascinating rock formations along South Gate Road.

You can find all these locations on the park map on pages 4 and 5 of this newsletter. Enjoy your visit!

Brian Holroyd, these volunteers spent several months learning about the stoves and the processes to be used for their restoration. They assembled the needed tools and materials and began their stove restoration work in Live Oak Campground.

Before the work on a Diablo Stove begins, the volunteers carefully document the stove with photographs, labels, reproducible scales, and notes with a view to accurately restoring the stove to its original construction.

The team begins their work by pressure washing the stove to remove years of dirt, soot, and algae buildup, and carefully cleaning the masonry without damaging it. This cleaning may reveal masonry damage that was not initially apparent. If possible, the team removes and replaces the cracked mortar, but, as with most of the stoves that have been previously restored, the damage may be so great that they may need to remove and rebuild whole sections of the stove. It also may be necessary to replace some of the metal parts embedded into the masonry that are used to attach the grills and griddles.

Where the masonry needs to be rebuilt, the original mortar is removed from the stones, and the stones are reset in their original position as documented before the work began. Missing stones are replaced with stones of similar type. The mortaring style differs with each stove, and part of the restoration effort includes matching the mortar with the restored sections.

The Diablo Stove restoration project is picking up steam as techniques become more refined and routine. The volunteers have already restored ten stoves in Live Oak Campground, and work continues on other stoves. If you are interested in volunteering your time to help with this project, please contact Mark Sinclair at Mark.Sinclair@parks.ca.gov.

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A more detailed topographic map is available for purchase at the entrance stations and the Summit and Mitchell Canyon visitor centers.

Mount Diablo State Park

Legend

- Accessible Feature
- Entrance Station
- Ranger Station
- Visitor Center
- Restroom
- Point of Interest
- Horse Staging
- Campground
- Campground (Group)
- Rock
- Peak
- Parking
- Trailhead
- Trail Through Time Path
- Trail Through Time Panel
- One-way Road
- Water Road
- Park Road
- Fire Road
- Outside Fire Rd
- Single-track
- Trail Bikes OK
- Paved Trail
- Perennial Creek
- Seasonal Creek
- Pond
- Administered By EBRPD
- Mount Diablo State Park

Park Fees per Car

- Mitchell Canyon Entrance* $6.00
- Macedo Ranch Entrance* $6.00
- North and South Gate Entrances* $10.00
- Golden Poppy Annual Pass $125.00
- California Explorer Annual Pass $195.00

* MINUS 25% FOR SENIORS 62+

Group Camps

<table>
<thead>
<tr>
<th>SITE</th>
<th>NIGHTLY USE FEE</th>
<th>CAMPERS CAPACITY</th>
<th>VEHICLES</th>
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<tbody>
<tr>
<td>Stagecoach</td>
<td>$65</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>Boundary</td>
<td>$65</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>Buckeye</td>
<td>$100</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Wildcat</td>
<td>$100</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Barbecue Terrace</td>
<td>$165</td>
<td>50</td>
<td>17</td>
</tr>
</tbody>
</table>

Mount Diablo has three designated family camping areas and five group camps:

- **Juniper Campground** (36 sites, elevation 3,000 ft.) Located approximately 2 miles below the summit, on Summit Road. Juniper is known for its fantastic views. Three campsites meet accessibility (Americans with Disabilities Act) standards. Reservations available.

- **Live Oak Campground** (23 sites, elevation 1,450 ft.) Located one mile above the South Gate Entrance Station, off South Gate Road. Live Oak is near Rock City, where one can explore rock formations. Reservations available.

- **Junction Campground** (6 sites, elevation 2,200 ft.) Located where South Gate Road and North Gate Road meet at the Ranger Station. This campground is situated in an open woodland area. Available on a first-come, first-served basis only.

- **Group Camps** are Buckeye, Barbecue Terrace, Wildcat, Stagecoach, and Boundary. Each campground is primitive with running water (subject to availability) and pit toilets. Barbecue Terrace is equipped with horse ties for equestrian use. RVs are not allowed in the group camping areas. Reservations available.

  - All campgrounds are provided with picnic tables, fire pits or stoves, potable water (subject to availability) and restrooms. Showers are available at Juniper and Live Oak campgrounds at no additional charge.

  - The campgrounds are mainly designed for tent camping, but can accommodate RVs up to 20 feet in length. No hookups and dumping stations are provided.

- **Camping Procedures**

  Make reservations 48 hours to 7 months in advance by contacting Reserve America at 800.444.7275 or [www.reserveamerica.com](http://www.reserveamerica.com). Reservations can be made for a specific campground but not a specific site. Campers cannot be registered at Mitchell Canyon.

- **General Rules**

  - **Alcoholic beverages are prohibited in the park.**

  - **8 people and 2 vehicles maximum per campsite.**

  - **Each juvenile (under age of 18) must have written permission from his/her parents (with parent’s phone number) prior to camping without adult supervision. Phone verifications will be attempted.**

  - **Quiet hours are from 10:00 p.m. to 6:00 a.m.**

  - **No electric generators from 8:00 p.m. to 10:00 a.m.**

  - **Firewood gathering is prohibited.**

  - **Fires must be in stoves or fire pits provided. NO GROUND FIRES.**

  - **Campfire restrictions are in effect during the fire season. Check fire conditions for appropriate use (see page 8).**

  - **Campers are locked in the park overnight from sunset to 8:00 a.m. For emergencies dial 911.**

  - **Quiet—noise must not carry beyond your immediate camp or picnic ground.**

- **Group Picnic Reservations:** Call Ranger Daniel Golde at 925.837.6129 x3
Located next to the road heading down to Live Oak Campground, Elephant Rock is composed of sandstone that is about 45 million years old. Not only is the elephant very old, it has come from quite a distance to get here. Our local pachyderm started out as granitic rock in the Sierra Nevada Mountains!

The climate 45 million years ago (the Eocene Epoch) was global warming run wild. The Sierra became a tropical rain forest. As granitic rock weathered and eroded, quartz grains from the rock were carried west by rivers and eventually deposited in deep ocean basins. The quartz grains were buried and then compressed and compacted to form the sandstone we see today, called the Domingene formation.

Things started to “take shape” when Mount Diablo rose in the past couple million years. The Rock City sandstone is porous and permeable, so water passes through easily. During wet periods, slightly acidic rainwater is able to soak into the rock. Calcium carbonate mineral cement holding the quartz grains together dissolves and gets moved around in solution through the rock. By the time the water drains away, some parts of the sandstone have extra cement, while sand grains in other areas have lost all the natural glue holding them together. It doesn’t take long (in geological terms) for the forces of nature to remove the loose sand and create interesting shapes—elephant, whale, butterfly, or anything else a fertile imagination can conjure up.

The little round “cannonballs” embedded in the rock near the elephant’s rear end are trace fossils—all that’s left of tiny critters that died and settled into the sand 45 million years ago. As the critters decayed, their decomposing bodies changed the pH of the surrounding mineral cement in a spherical pattern and caused the sand grains to be more tightly cemented. Now, 45 million years later, these super-glued cannonball concretions can be seen weathering out of Elephant Rock.

Where in the Park Is This Location? In Rock City—It’s Elephant Rock!

Ken Lavin, Mount Diablo State Park Volunteer

EVENT CALENDAR

Check out all the hikes and other events happening in Mount Diablo State Park.

www.mdia.org/site/mdia-event-calendar

ARTICLE OR PHOTOGRAPH SUBMISSION

To submit articles or photographs for the next issue of the Mount Diablo Review, email info@mdia.org or leave a message at 925.927.7222. Submission deadline for the Spring/Summer issue is January 15, 2017.
Park Rules

You are responsible for obeying these and other Park rules

- **All Features of the Park Are Protected!** Do not remove or disturb plants, animals, or geological features.
- **Park Hours:** Opens at 8 a.m. and closes at sunset. Visitors should be in their vehicles heading out at sunset to avoid being locked in.
- **No Alcohol:** All alcoholic beverages are prohibited in the park.
- **Vehicles/Bicycles Speed Limit:** 15 to 25 mph on park roads, 15 mph in campgrounds and picnic areas. All vehicles must stay on the pavement and are prohibited on trails and fire roads.
- **Bicycles** are allowed only on paved roads, fire roads and designated trails. Check at the Ranger Station for current regulations.
- **Drones or unmanned aircraft systems (UAS) are prohibited.**
- **Skateboards,** rollerblades, rollerskates, and gravity-propelled devices are prohibited.
- **Dogs:** Must be on a leash at all times when out of your car; must be in a tent or a vehicle at night; and must stay in developed areas—they are not allowed on trails or fire roads.
- **Fires:** Restrictions in effect during season. Check with a Ranger. Fires must be in fire stoves or barbecues provided—no ground fires.
- **Emergencies:** Dial 911.
- **Fireworks** are prohibited.
- **Firearms/airguns and hunting are prohibited.**

### Fire Danger: How Will It Affect You?

- Maintain fires at all times in a safe condition that does not threaten any person or natural or structural feature.
- Never leave a fire unattended.
- Extinguish all fires prior to departure.
- Ground fires are not permitted.
- Firewood gathering is prohibited.
- Report all wildfires immediately. Call 911.

### Fire Danger Chart

<table>
<thead>
<tr>
<th>Fire Danger Reading</th>
<th>Wood fire permitted in stoves &amp; BBQ pits (designated picnic and campsites)</th>
<th>Use of Compressed Logs</th>
<th>Use of Charcoal</th>
<th>Use of Self-contained Stove</th>
<th>Cigarette Smoking</th>
<th>Park Closed</th>
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</thead>
<tbody>
<tr>
<td>LOW</td>
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<td>MEDIUM</td>
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<td>HIGH</td>
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<td>YES</td>
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<td>NO</td>
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<tr>
<td>HIGH WITH RED FLAG</td>
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<td>NO</td>
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<tr>
<td>VERY HIGH/EXTREME</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

1. THE PROHIBITION OF SMOKING UNDER HIGH FIRE DANGER INCLUDES SMOKING WITHIN A VEHICLE.
2. PARK CLOSURE APPLIES TO ALL HIKERS, VEHICLES, BICYCLISTS (MOUNTAIN AND ROAD), AND HORSEBACK RIDERS.

**Understanding Trail Signs**

Around 400 trail signposts identify over 160 miles of backcountry hiking trails and fire roads in Mount Diablo State Park’s nearly 20,000 acres.

Trail signs in the park follow California State Parks uniform format. The name of the trail you are on is specified in relatively small horizontal type near the top of the sign. The name that appears vertically in large type (another trail, destination, or park boundary) identifies the termination of that particular trail; note the word “TO” in small letters. The mileage to that end point is specified at the bottom.