

# Mount Diablo Review



MOUNT DIABLO INTERPRETIVE ASSOCIATION

Spring/Summer 2019 • MDIA, PO Box 346, Walnut Creek, CA 94597-0346 • 925-927-7222 • [www.mdia.org](http://www.mdia.org)

## Walk on the Wild Side • Michael Marchiano, MDIA Board Director

Mount Diablo is a true jewel in the middle of suburbia. Almost 4,000 feet high, a double peak, and a landmark seen from more than a hundred miles, Mount Diablo is the heart of Contra Costa County and home to a fabulous cross section of animal and plant life of the interior California Coast Range. With very wet winters (in most years) and long dry spring, summer, and fall seasons, many plants and animals have adapted to a cross section of habitats including open savannahs, oak woodland, riparian canyons, rocky outcrops, thick chaparral, and numerous micro climate niches in between. When hiking the mountain there is always something new to be seen or discovered.

It just takes an inquisitive eye and an extra minute of time to “stop and smell the roses,” or in this case, the poppies, sage or mint. Hikers can enjoy a wide assortment of wild flowers, butterflies (over 60 species), trees, shrubs, reptiles, birds, amphibians, and invertebrates (thousands of species).



CALIFORNIA POPPIES • MICHAEL MARCHIANO



BOBCAT • DAVID HARPER

Each season has something to offer and something to relish. The green hills of springtime are awash with many wild flowers, trees, shrubs and grass lands that are the home to migrating birds as well as year-round residents. Fields of poppies, lupine, fiddle necks, buttercups, blue dicks, and popcorn flowers cover the slopes, and shaded trails are dotted with larkspur, hounds' tongue, globe lilies, yarrow, mariposa tulips, and paint brush, just to mention a few. In late spring and early summer, white spiral flowers of Buckeye trees attract assorted butterflies such as tiger swallowtails, tortoise shells, checker spots, California sisters and painted ladies. The observant “birder” can see tanagers, varied thrush, orioles, buntings, warblers, hummingbirds, and woodpeckers foraging in the oaks, grey pines, maples, bays, madrones and alders.

In summer as we admire the golden hills and drying creek beds it is best to take an early morning or evening hike. The local birds and other animals are also out and about at this time of day, smart enough to avoid the heat of mid-day, and able to find cool shaded spots for afternoon naps. If you are lucky you may see a coyote or bobcat hunting for a gopher, vole, or an unobservant ground squirrel. Quail will be foraging in thickets and

Mount Diablo is a butterfly magnet. It attracts at least 75 species of these beautiful insects throughout the year. They are drawn to the mountain's abundant vegetation; plants that provide what's needed to complete their butterfly life cycle. Butterflies are fueled by sugar-rich liquid nectar from flowering plants, and they seek other plants on which to lay their eggs—but not just any plant will do. Each butterfly has its own preferred host plant(s) in a unique relationship developed over time. Butterfly eggs hatch into hungry caterpillars that eat the leaves, buds, and flowers of their host. For butterflies, Mount Diablo is like a banquet table filled with everyone's favorite food, but not all dishes are served at once, so guests time their arrival accordingly.



CALIFORNIA SISTER • DIRK MUEHLNER

The California tortoiseshell butterfly (*Nymphalis californica*) shows up early in the year to deposit its eggs on the new winter growth of wild lilac (*Ceanothus*), its host plant. The newly hatched caterpillars feed only on these tender greens. Adults from the winter brood emerge in May or early June, but they don't stick around. They soon leave Mount Diablo for higher grounds (such as the Sierra Nevada or Inner North Coast Range) to breed and lay eggs on fresh buds of high-elevation wild lilacs, which appear after snow melt.

Of the many springtime butterflies, the swallowtail is among the largest. Four species of 'tiger' swallowtails are common to Mount Diablo. This includes the two-tailed swallowtail (*Papilio multicaudatus*), the Bay Area's largest butterfly. The two-tailed swallowtail has the tigers' characteristic black and yellow stripes, but is distinguished by a second tail on its hind wings. Although rare in the Bay Area, it is a familiar flyer on Mount Diablo due to the large number of hop trees, its preferred host, that grow on the mountain's slopes. The two-tailed swallowtail takes nectar from thistles and other large blooms that offer a broad, stable platform for its relatively big butterfly body.

An abundance of oaks ensure a steady population of California sisters (*Adelpha bredowii californica*). This butterfly favors Mount Diablo's live oaks as its host plants. The California sister's flight season is from spring to fall, and it would rather soar than flap. Although it sips nectar from pretty blooms, this sister also sups on bruised fruit, roadkill, and dung. It's a butterfly that appears unmindful of predators, probably due the red patch on its wings, which warns would-be diners that California sisters taste terrible!

These and many other species of butterfly grace Mount Diablo and nearby lands that are rich in vegetation; a banquet of blooms and tender greens, which is exactly what a butterfly needs for all stages of butterfly life.

brush in coveys of adults and youngsters running quickly on their tiny legs. Flocks of turkeys will be hunting acorns and insects.

You will hear the chatter of acorn woodpeckers as they drill holes in dead trees and fill them with acorns. You will recognize these communal birds with a red top notch as they flash black and white wings in flight.

When you hike near any water source, a creek, spring or pond you will see an assortment of "fly catching birds" such as phoebes, little pacific fly catchers, and swallows. Their quick turns and acrobatic movements are reminiscent of "dog fighting pilots" of past years. You will also see dragon flies patrolling the water course as they catch gnats and mosquitoes, too small for us to view. In the early evenings, bats replace these acrobats of the sky and devour up to three thousand insects a night. We should be very thankful that these flying predators consume daily thousands of little biting critters.

On fallen trees and among rock outcroppings you may notice a grayish brown lizard sunning itself. Outside temperature regulates the activity level of these cold-blooded animals who seek sunshine in the morning and shade in the afternoon. You may notice these swift creatures doing "push-ups." If you stop to watch, you will see these male lizards displaying their bright blue undersides, hence the name "blue bellies," trying to attract a mate and to ward off any competitors.

Just remember whatever trail you hike, no matter what season, there is always something new to discover and enjoy. The natural world is filled with wonder and amazing relationships between mammals, plants, birds and insects, much of it yet to be discovered.

Take a hike on the Wild Side and remember to take a few moments to observe this amazing world in our backyard, enjoy it and protect it.

## How to Unmask a Talented Shapeshifter, Poison Oak • Staci Hobbet, MDIA Board Director

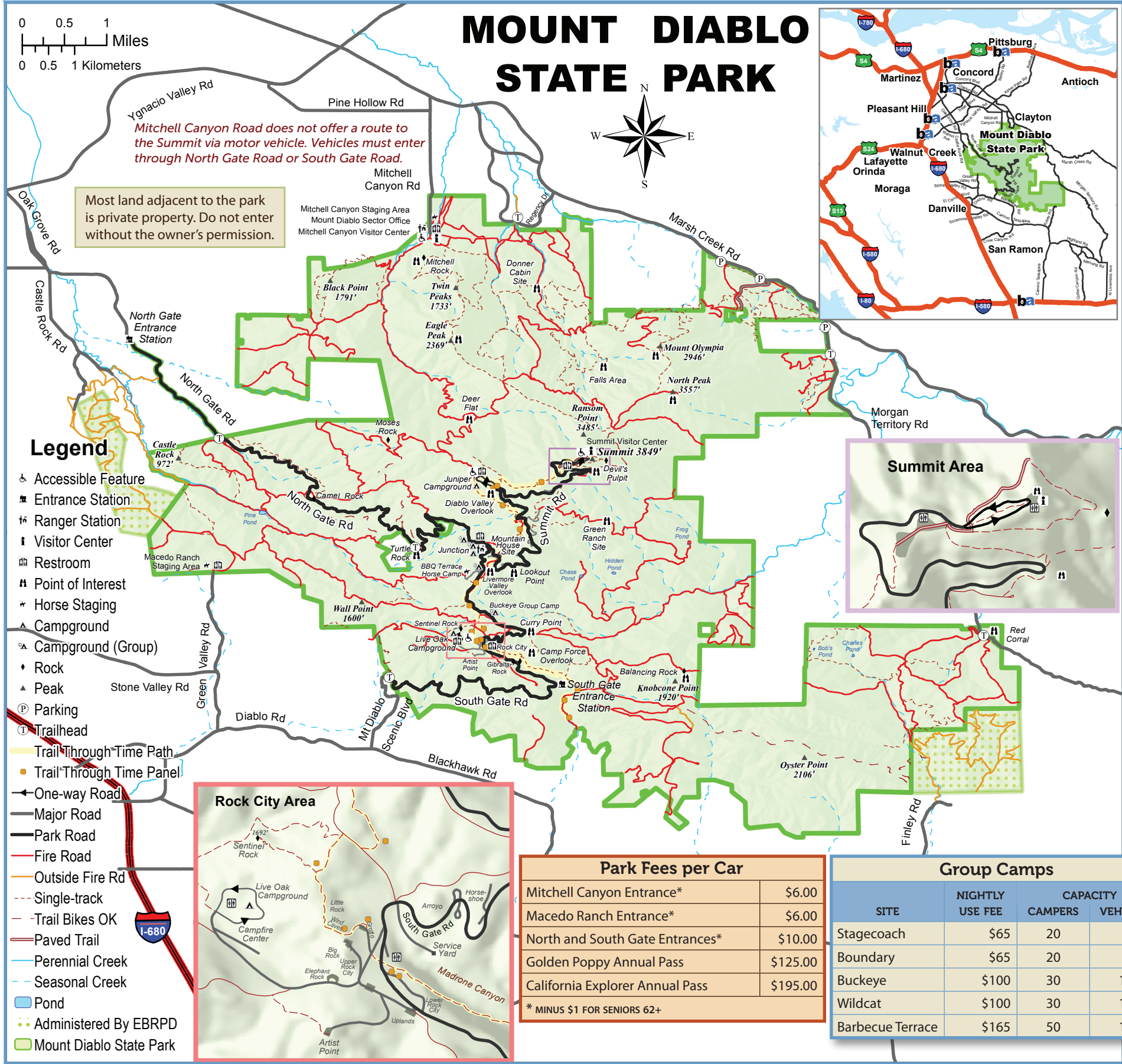
Take a look at the panel of three photographs below. Which one is poison oak? Or are they all poison oak?



POISON OAK  
• STACI HOBGET

Hikers who visit the Mitchell Canyon Visitor Center often ask about poison oak, a plant they are sure to see, whether they know it or not: What *exactly* does it look like? Can you get it without touching it?

Docents show them photos of poison oak, and for the newbies to the area, we show them a thriving example at the Mitchell Canyon trailhead; but answering the question: what *exactly* does it look like, is tough. Its scientific name is *Toxicodendron diversilobum*, meaning "toxic woody plant with leaves of varying shape."



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 up to 6 months in advance using the ReserveCalifornia website at [reservecalifornia.com](https://reservecalifornia.com). To view a map of the campgrounds and for additional info, please visit [mdia.org/camping](https://mdia.org/camping).

Check-in time is 2:00 p.m. Check-out time is 12:00 noon.

During the fire season (generally May to October), the park is subject to closure due to extreme fire danger. Campers must call the park at 925.837.2525 or 925.837.0904 one day prior to their arrival to confirm park status.

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 6).
- 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.

2019 Public Astronomy Programs on Mount Diablo

2019	START	TOPIC
March 9	5:30 p.m.	Our Past and Future Written in the Stars
April 13	7:00 p.m.	Moon: Earth's Lost Rock
May 4	7:30 p.m.	A Universe of Galaxies
June 8	8:00 p.m.	Do Coyotes Use Solar Power?
July 6	8:00 p.m.	We Are Stardust
Aug 3	7:30 p.m.	The Search for Alien Worlds
Sep 14	6:30 p.m.	Sunset to Moonrise
Oct 19	6:00 p.m.	Our Place in Our Galaxy
2020 Mar 28	7:00 p.m.	First public astronomy program of 2020 Mark your calendar!

**Time:** Beginning about an hour before sunset. Enter the park gate at least 45 minutes before the program starts.

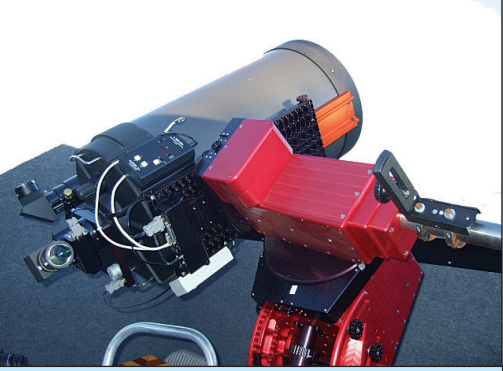
**Where:** Lower summit parking lot of Mount Diablo State Park. PARKING IN THE LOWER SUMMIT LOTS IS LIMITED—FIRST COME FIRST SERVED. If full, you may park ONLY in other designated parking areas or completely off the road. Illegally parked cars are subject to ticketing or towing by Park personnel.

**Cost:** The astronomy program is free; there is a park entry fee.

**Bring:** Kids, binoculars, warm clothes (temperature can drop significantly), snacks, water. If you bring a flashlight, please cover it with red cellophane or red cloth.

**Leaving:** The park gates will be locked and visitors will be able to leave the summit and exit the park only by escorted caravans through the North Gate entrance a few times during the evening. Caravan departures will be announced at various intervals during the program, and visitors should only leave with these escorts.

The Astronomy Program is presented by Mount Diablo State Park, Mount Diablo Astronomical Society (MDAS), and Mount Diablo Observatory Association. The program is cancelled in the event of rain or other inclement weather. For more details, go to Mount Diablo Astronomical Society's website, [www.mdas.net](http://www.mdas.net), and click on Event Calendar, or call Mount Diablo State Park at 925.837.2525.



CELESTRON 14-INCH TELESCOPE • JON WILSON

FIRE DANGER CHART

Fire Danger Reading	Wood fire permitted in stoves & BBQ pits (designated picnic and campsites)	Use of Compressed Logs	Use of Charcoal	Use of Self-contained Stove	Cigarette Smoking <sup>1</sup>	Park Closed <sup>2</sup>
LOW	YES	YES	YES	YES	YES	NO
MEDIUM	NO	YES	YES	YES	YES	NO
HIGH	NO	NO	YES	YES	NO	NO
HIGH WITH RED FLAG	NO	NO	NO	YES	NO	NO
VERY HIGH/EXTREME	NO	NO	NO	NO	NO	YES

<sup>1</sup> THE PROHIBITION OF SMOKING UNDER HIGH FIRE DANGER INCLUDES SMOKING WITHIN A VEHICLE.

<sup>2</sup> PARK CLOSURE APPLIES TO ALL HIKERS, VEHICLES, BICYCLISTS (MOUNTAIN AND ROAD), AND HORSEBACK RIDERS.

**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.

(CONTINUED FROM PAGE 3)


How to Unmask a Talented Shapeshifter, Poison Oak

The whole plant is a shapeshifter: it grows as a groundcover, a vine, a bush, a hedge, and can wind its way into a tree and imitate its branches. As a further ruse, it grows in close association with other similar-looking plants, including other three-leaved plants that look much like it. More on this later.

Can you get poison oak without touching the plant? Yes, by only by direct contact with its oil: on your boots, your sleeve, your pet, your hiking poles, from the skin of your three-year-old who just brushed by poison oak on the trail. You don't want to build a campfire with poison oak branches. The oil will travel with the smoke, and you can get a very bad nasty interior rash by breathing it. But the oil doesn't just blow around willy-nilly in the wind, and the itchy rash it causes is not contagious. Once cleaned of the oil, called urushiol, the rash and blisters on your forearm can't spread, not even via the fluid that oozes from the blisters. That fluid is part of your body's response to the oil, and contains no urushiol.

Despite the hazards of poison oak, it's well worth putting up with. Our wildlife loves the stuff. In fact, it's critical for more than 50 kinds of birds in California, which depend on its fruit and seeds, as well as insect-eating birds, which scour the leaves for prey. It offers dense cover for both birds and mammals, including deer, which also browse the leaves heavily. Lots of birds nest in poison oak; and butterflies, moths, bees, and beetles all go for the pollen and nectar.

You can learn to unmask poison oak by its leaves alone, whatever shape the plant takes on. Take another look at the photograph. Left to right the ID's are: Himalyan blackberry (a common non-native), poison oak; and hopbush (a common native). All three have leaves in triplets, but only the leaves of the poison oak are glossy and free of both thorns and fine hairs. It's also the only one with lobes. Don't rely on seeing lobes, however. Remember that species name, *diversilobum*. It gives you fair warning of this shapeshifter's talents: leaves of many shapes. Look deeply, through its disguises, and you'll come to know this plant.

Article or Photograph Submission

To submit articles or photographs for the next issue of the Mount Diablo Review, email [info@mdia.org](mailto:info@mdia.org) or leave a message at 925.927.7222. Submission deadline for the Fall/Winter issue is **July 15, 2019**.

MDIA Membership Form

IF YOU WOULD LIKE TO SUPPORT MDIA, PLEASE CONSIDER JOINING

Mount Diablo Interpretive Association Membership Application

Membership dues are deductible to the full extent allowed by law. New memberships include a free Mount Diablo trail map.

MEMBERSHIP CATEGORY (CIRCLE ONE)	
Student/Senior (55+)	\$15
Individual	\$25
Family	\$40
Contributing	\$100
Lifetime	\$500

Donation

\$

Name:

Address:

City:

State/Zip:

Telephone: ( )

Email:

Clip and mail check to: MDIA, PO Box 346, Walnut Creek, CA 94597-0346  
MADE PAYABLE TO MDIA

Join MDIA or renew your membership online now. Use your smartphone.

[mdia.org/site/online-store/memberships](http://mdia.org/site/online-store/memberships)





Summit Museum is open 7 days a week 10 a.m. to 4 p.m. 925.837.6119

Event Calendar

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



[www.mdia.org/site/mdia-event-calendar](http://www.mdia.org/site/mdia-event-calendar)

## 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 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.

### Understanding Trail Signs



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.

California State Parks supports equal access. Prior to arrival, visitors with disabilities who need assistance should contact the Contra Solano Sector Office, 925.673.2891. This newsletter is available in alternate formats by contacting 925.673.2891.

PASS  
WITH  
CARE

### Rules of the Road For Motorists and Cyclists



Share the roadway with all Park users.

- Drive at or below the posted Park speed limits.  
CALIFORNIA VEHICLE CODE 22350\*
- Pass with sufficient visual clearance.  
CALIFORNIA VEHICLE CODE 21751\*
- Do not pass on blind curves.  
CALIFORNIA VEHICLE CODE 21752(a)\*
- Give bicyclists 3 feet clearance.  
CALIFORNIA VEHICLE CODE 21760(b)\*
- Yield to equestrians.  
CALIFORNIA VEHICLE CODE 21759\*

\*MINIMUM FINE: \$238.00

Take your time and enjoy  
Mount Diablo's scenic views

### Mount Diablo State Park Phone Numbers

Supervising Ranger .....	925.855.1730
Junction Ranger .....	925.837.6129
Mitchell Canyon Ranger.....	925.672.4266
Summit Museum .....	925.837.6119
South Gate Entrance Station ...	925.837.0904
Maintenance.....	925.837.6122
Sector Office .....	925.673.2891
General Information.....	925.837.2525
TTY Relay Service.....	711



Mount Diablo State Park  
96 Mitchell Canyon Road  
Clayton, CA 94517-1500