Last evening was one day before the full moon of September. My wife and I were just a couple of miles from Gray Lodge Wildlife Area as we waited for the moon to rise. As we waited for the sun to set, I heard them. I looked up and saw the V-formation of a large flock of geese flying south toward the Sutter Buttes. Soon afterwards the sun set – leaving the western sky with an orange glow. We now turned our attention to the eastern horizon, and after a short wait, the almost-full moon arose from behind the Sierras. As the moon continued to rise and the sky darkened, we heard another flock of geese. We watched them fly in the darkening sky and disappear over North Butte.

These sounds and sightings of geese remind me autumn is almost here. Soon it will be cool enough and early rains will dampen the ground so that we can start our hiking season in the Sutter Buttes. It has been a long year...

Middle Mountain Interpretive Hikes usually starts its season in late October, but with this dry year, we are going to wait until mid-November, hoping we get some much-needed rain before we hike. Because of Covid-19, there will be some other changes as well. Our biggest concern is the safety of our guides, our back-up guides (BuGs) and of course, our hikers. We want everyone to come on a hike healthy, and then go home healthy.

It is fairly obvious that we would not have any hikes if we did not have any guides or BuGs. These volunteers are what make our program work. But a lot of these volunteers are over 65 years old. Some volunteers of any age have compromising health issues. Our guides and BuGs have all been vaccinated, and we are going to ask that if anyone wants to come on one of our hikes this fall/winter season, that they be vaccinated too. If you are not vaccinated, we ask that you not sign up for our hikes this season, but instead wait for a safer time. Our reasoning is quite simple. Some of our guides have said they will not lead hikes with unvaccinated hikers. If we do not have any guides, then we do not have any hikes.

We will also have a few other changes which will be listed in detail on our website soon. We will hike with smaller groups. We will ask hikers to keep a respectful distance of six-feet apart when hiking and to wear a mask or face-covering if you cannot. We want to be able to offer hikes in the Sutter Buttes, and we want them to be as safe as we can make them. We know there are differing opinions about the Covid-19 situation, but we must respect our volunteers and do what we can to keep them healthy. So please come hike with us if you can and help us keep everyone safe at the same time. We ask that you please accept and respect the Middle Mountain Interpretive Hikes way of offering hikes. And we ask that you please respect our guides and BuGs. Thank you.

To sign-up for Middle Mountain Interpretive Hikes E-Newsletters, please visit the MMIH website at: www.middlemountainhikes.org.
The Sutter Buttes

The Sutter Buttes form a volcano which erupted between 1.6 and 1.35 million years ago. The volcano is almost perfectly circular, about 10 miles in diameter. The highest point, 2117 feet above sea level, is South Butte, one of many high crags forming the central “castellated core” of the Buttes. Immediately surrounding the core are several large valleys that form a topographic “moat.” The outermost portion of the Buttes is a set of gently outward-sloping hills, known as the “rampart.”

Before the formation of the Sutter Buttes, the land was flat and composed of layers of sandstone, shale, gravel beds and marine deposits. Most of these sedimentary layers were eroded from the rising Sierra Nevada mountains to the east, the Coast Range to the west and the Klamaths to the north. Beneath these layers, melted rock, or magma, pushed its way upward and extruded at several different sites, solidifying into the large lava domes of the castellated core. The first few of these volcanic necks formed a light-colored rock called rhyolite. One hill, directly behind the Fremont monument on Pass Road, named DeWitt’s Quarry, is an example of this rock. Later, more voluminous extrusions cooled into a dark colored rock called andesite. Most of the large, high crags, such as South Butte, North Butte, West Butte and Twin Peaks, are excellent examples of andesite domes. While the magmas intruded, they forcefully uplifted, stretched and cracked the pre-existing sedimentary layers, first arching them into a high dome. Later the sediments were eroded away, leaving only tiny remnants in the castellated core.

As the lava domes breached the surface, they released great volumes of hot, pressurized volcanic gases and steam with explosive force. These detonations partially fragmented the domes and surrounding rocks and probably produced numerous small craters within the core area. Fragmented lava blocks and ash were washed away from the high domes by active streams. The Sutter Buttes erupted during a Pleistocene glacial period. There were probably no glaciers in the Buttes, but it was a cooler, wetter climate than today. The outwash of the frequently hot fragmental products of the explosive eruptions accumulated as the peripheral rampart deposits. A deep central crater lake also filled in with this detritus to a depth of 1000 feet. At last, the volcano quieted down, and the long process of erosion began to carve away the softer materials of the volcano. Much of the rampart hills have been deeply dissected by streams, and the upturned, older sedimentary rocks surrounding the castellated core have washed away, forming the moat.

Water is scarce in the Sutter Buttes. Springs and producing wells are highly valued by the local ranchers. In the outer hills of the rampart there are several commercial gravel pits. Natural gas wells are found in the southern and western part of the area. There is a small amount of coal in the Buttes, but not nearly enough to mine commercially. The miles and miles of rock fences were built by the early ranchers and their employees to clear the land and manage the livestock. These multi-generational ranches still remain in the Buttes. Thankfully, the landowners provide access for guided/educational hikes through the non-profit organization, Middle Mountain Interpretive Hikes.

Source: Sutter County Museum
Dr. Brian Haasback of CSUS.
Since the Middle Mountain Interpretive Hikes Educational Program has not been able to have schoolchildren hike with us during the past school year, we will instead tell you about a very special animal in the Sutter Buttes that is quite interesting and not that common. Come on a walk with 24-third graders and learn about it with us!

When we leave the school bus, we walk up the road at a steady climb. Quickly the children that come from a very flat Sacramento Valley are winded by walking up this incline. We stop them so they can catch their breath and ask them to look around and tell us what they see. Hands shoot up and often the answers are “trees,” “rocks,” “grass,” and occasionally a child might pick a smaller less noticed item, such as a woodpecker hole in a tree or maybe a bird. At this point in the day, they are not that observant, but this is just at the beginning of their fun-filled experience in nature. By the end of the day, after spending several hours with us in an oak woodland, they start to notice many little details, the differences in the oak trees, the galls on some valley oaks, and sometimes they find something on the trail and wonder “what is that?”

If we are lucky, we might find a pile of little dirt balls on the ground next to a small hole, perhaps, a 1/2 of an inch across. “Who do you think lives in this tiny little home in the ground, and what are these little dirt balls doing here?” we ask. We get lots of suggestions of which none are ever the right answer, because not many people have any idea regarding what we are investigating.

What we do have is the evidence of an active burrow of a female Calistoga Spider, more commonly referred to as the Velveteen False Tarantula. This is quite an interesting spider which, unfortunately, has not yet been sufficiently studied or researched. They are not true tarantulas but have similar lifestyles to the common tarantula often found in the fall, wandering around the coastal area, foothills, or Bay Area while on the hunt for a female. The male spiders live under rocks and logs and mate in the fall with females. Sadly, the males usually do not live much longer after mating.

Industriously, the females burrow a hole into the ground to create a nice, cozy home for each of their individual family broods. But once they have mated, the female sends the male “packing” (he is forced to leave), while she will live for many more years in her burrow, raising baby spiders. Interestingly, to excavate a home, a female scraps the soil with her front legs and spins her webbing around the soil thereby making pea-size balls of dirt. She then hauls the dirt balls out of the hole and piles them up on the ground next to her burrow’s entrance hole. The first clear-cut evidence us guides and children see of the Velveteen False Tarantula are the tidy piles of little dirt balls on the trail, usually in the fall and often throughout the winter months. Just so you know, if you try to pick up a dirt ball, it will simply collapse into a puff of dust in your fingers. Happily, on occasion, we might even find this special spider! When we do, it is a moment of pure glee as 24 students attempt to inspect a spider (that is about one inch across in size) and anxiously trying to scurry away while crawling through the ground’s leafy debris.

Wow! Here we are, in the middle of the Sacramento Valley, and unbeknownst to a huge population of people, we have Velveteen False Tarantulas excavating their homes and creating strange little dirt balls. Very unique!
Detailed “meet and greet” and payment information will be emailed upon hike reservation. Unless otherwise stated in hike description, the cost is $35 per hiker and meet time is by 8:00 a.m. Each hike is limited to 12 registered hikers. Notes: All hikers are to carry food and water and wear hiking boots or sturdy shoes. Hiking/walking sticks are quite helpful to hikers of the Sutter Buttes terrain.

**Summit Ascent – Dean Place/North Butte**
One of our most challenging treks, this route is a steep, 1,000-foot push straight up North Butte. It is off trail and has no easy switchbacks. Hikers must be in very good physical condition and not suffer from vertigo.

Cost = $45. Hike-difficulty Level = Five Boot.
Saturday, November 20; Sunday, December 19; Saturday, January 15

**In a Sacred Manner – Dean Place**
A nature walk with Stan Padilla focuses on the reverence for life and Native American mythology of the Sutter Buttes with active hiking and contemplative free time.

Hike-difficulty Level = One Boot.
Sunday, November 21

**East Ridge at Shaeffer Ranch**
Hikers will explore the beautiful Shaeffer Ranch belonging to the same family since the 1860s. This wondrous hike (on the northside of the Buttes) provides inland views of North Butte and Peace Valley, weather permitting. Amazingly, Mount Lassen and Mount Shasta are often seen in the distant horizon.

Hike-difficulty Level = Three Boot.
Saturday, November 27

**Geology at Dean Place**
Discover the violent origins of the Sutter Buttes, a small mountain range, with Volcanologist, Brian Hausback, who is prepared to reveal clues to 1.5 million years of geological history, uniquely accessible in the Buttes.

Hike-difficulty Level = Three to Four Boot.
Saturday, December 4
**Tres Picos – Dean Place/North Butte**
The Tres Picos hike is for serious hikers who are able and willing to hike, climb, and summit the rugged, challenging, and daunting three peaks: North Butte, Old Man, and Pigeon Peak. Only register if in top physical condition!

Cost = $45. Hike-difficulty Level = Six Boot.
Saturday, December 11, at 7:00 a.m.

**Brockman Canyon Trek – Brockman Ranch**
Travel to the intriguing, fascinating center of the Sutter Buttes. Be prepared for a steady climb on uneven ground. Frequent stops will be provided for the examination of the landscape's natural elements and excellent views.

Hike-difficulty Level = Three Boot.
Sunday, December 12; Saturday, February 19

**Birding at Dean Place**
Witness the multitude of birds in and around the Sutter Buttes! Hikers/birders will search for and study a myriad of habitats. Thankfully, December is “prime time” in the Pacific Flyway!

Hike-difficulty Level = Two Boot.
Saturday, December 18, at 7:30 a.m.

**Moonlight Stroll at Dean Place**
While under the bewitching spell of the moonrise’s lunar glow, we will contemplate, observe, ponder, and reflect on the many mysteries of nature, as we stroll through the illuminated, shadowy oak groves amidst the alluring gentle hillside of the Sutter Buttes.

Hike-difficulty Level = Two Boot.
Saturday, December 18, at 1:00 p.m.

**Ridge Hike at Dean Place**
Hike and climb the rocky, rather steep, hilly ridges of Dean Place, a working cattle ranch, belonging to the same family since the 1890s. This invigorating hike will reward you with unforgettable views of the Sutter Buttes interior as well as providing a wondrous sense of awe upon viewing the woodland’s truly beautiful and mystical landscape.

Hike-difficulty Level = Three Boot.
Saturday, January 22; Sunday, February 6

See the next two pages for the Middle Mountain Interpretive Hike’s 2021/22 Safety Guidelines and Liability Release Form.
We have put procedures and protocols in place for the safety of the public, our volunteers, and our staff during the Coronavirus pandemic. We are only able to offer public hikes and activities if hikers fully comply with these protocols. Thank you for your cooperation.

BEFORE SIGNING UP, ASSESS IF THIS HIKE IS RIGHT FOR YOU:

- If you are at high risk for COVID-19 or with pre-existing health conditions, you should not attend.
- **You must be fully vaccinated for COVID-19.**
- Group size is limited to a total of 12-paid hikers, and you must register in advance to participate.
- Guests are expected to follow safety procedures.

PRIOR TO ARRIVING:

- Review the information on your confirmation email advising you of what to bring and how to prepare.
- **If you have had any flu-like or COVID-19 symptoms, fever, or cough in the past 24 hours, or think you have been exposed to someone with the virus, please stay home and join us another time.**
- Before leaving your home, take your temperature (must be less than 100.4º), and thoroughly wash your hands with soap and water.
- **Fill out the Liability Release Form on the next page and bring it with you.**

AT HIKE CHECK IN:

- When you check in, **you must have this completed Liability Release Form with you to continue.**
- All of our Guides and Guests should wear face coverings when within 6 feet of others. Be prepared to cover your nose and mouth and give others space.
- While on the trail, maintain at least a 6-foot distance from anyone not in your immediate household.
- Bring your own face coverings, hand sanitizer, and sufficient water & food for the hike. Please carry them with you at all times and keep them in easy access. No sharing of personal items with people outside of your household.

If you are not comfortable or able to comply with the Safety Guidelines stated above, we respectfully ask that you do NOT sign up to hike with us this season. Thank you.
Liability Release Form
A California Non-Profit Corporation [501 c (3)]

I recognize that there are foreseeable and unforeseeable risks associated with any outdoor activity, including but not limited to travel, plant and animal hazards, accidents, illnesses, acts of nature, man, and God. I understand that there is to be no smoking or vaping at any time during this activity, that I am to stay with the organized group during our activity, and that I will remove nothing from the activity site except by permission of the guide.

In consideration of the right to participate in this activity, I, on behalf of myself, my family, estate, heirs and assigns, release and upon request will indemnify and defend, the Middle Mountain Interpretive Hikes, its officers, employees, agents, volunteers, and guides and any landowner(s) on whose property the activity may take place from and against all claims, damages, and responsibilities, including attorney’s fees, for losses or delays due to any reason whatsoever suffered by me or my property arising out of my participation in the activity and assume all risks and dangers in connection with the activity.

- I have not had any flu-like or COVID-19 symptoms, cough, or fever in the past 24 hours, or been exposed to anyone with COVID-19.
- I agree to wear a face covering when I cannot maintain a 6-foot distance from others.
- I have been fully vaccinated for COVID-19. _______ ← ← (please initial here)

By my signature below I do affirm that I have read, fully understand, and fully concur with all of the above.

Signature:____________________________________

Printed Name:____________________________________

Address:____________________________________

____________________________________

E-Mail Address:____________________________________

Contact Phone #: (______)____________________

(If you come down with COVID-19 [in the next 14 days], please notify us for Contact Tracing.)
Middle Mountain Interpretive Hikes is a group of dedicated individuals who work on a part-time basis, most of us volunteering our time. You can reach us:

- On our website: www.middlemountainhikes.org
- By mail: PO Box 3613, Yuba City, CA 95992-3613
- Kelly Gash, Open Hikes Coordinator, mmsutterbutteshikes@yahoo.com or 530-370-4777
- Margit Sands, Charter Hikes Coordinator/Hike Program Director, sandsmp@comcast.net or 530-846-5142
- Gregory & Kathleen Payne, Education Program Coordinators, gregkathy72@gmail.com or 530-218-1346

Please leave detailed messages or requests for information. We appreciate your patience and understanding and, especially, your interest in the Sutter Buttes.

Contact Us

MMIH Gift Certificates are a great gift idea for hikers and nature enthusiasts!

SUTTER COUNTY MUSEUM

UPCOMING EVENTS

Register for the museum's monthly E-Newsletter at www.suttercountymuseum.org to receive updates about upcoming programs and events.

NOTE: The Sutter Buttes Regional Land Trust “Sutter Buttes 2022-fundraising Calendar” is available for $15 at the museum’s gift shop. Admission to the Sutter County Museum is free. Donations are welcome! Like & Follow the Sutter County Museum on Facebook & Instagram!