

USFS makes plans to upgrade Taylor, Tallac creek areas

The U.S. Forest Service is proposing to restore Taylor and Tallac creek ecosystems, and maintain and improve visitor services.

Comments are being taken on the environmental assessment until July 17.

Taylor and Tallac channels were historically connected through a series of four swales, which formed a large wetland complex. The Forest Service proposes to restore this connection by removing culverts that are impeding water flow, replacing them with crossing structures, and recontouring and revegetating swales. The project would include stream restoration in Taylor and Tallac creeks, renovating the fish ladder at the Fallen Leaf Lake Dam, and removing portions of the Lucky Baldwin Dam to restore connectivity to Fallen Leaf Lake.

The project proposes to improve wildlife habitat by eradicating or controlling aquatic invasive species, protecting Tahoe yellow cress through physical barriers, installing nest and perch structures for waterfowl and sensitive raptors, and installing bat boxes.

At Baldwin Beach, the Forest Service proposes to construct a multi-use path from Highway 89 to the east and west parking lots, construct pedestrian pathways, formalize and upgrade the picnic area, provide foot-washing stations at restrooms and install best management practices throughout the site.

Restoration efforts at Taylor Creek Visitor Center would include upgrading the stream profile chamber to meet contemporary building codes and reconfiguring the Rainbow Trail to reduce impacts to the stream environment zone, such

as raising sections of trail or replacing them with boardwalks.

More info is available **online**.

Search crews may add drones to tool box



Photo by Kevin Clifford/Drone America

Wildland Fire crews with Drone America's DAX8 in Lake Tahoe.

Photo/Kevin Clifford/Drone America

By Jessie Marchesseau

If you happen to get lost in the wilderness and need to call search and rescue sometime in the future, it's possible you may spot a drone overhead looking for you.

As unmanned aerial systems, also known as drones, become more commonplace, the various uses for them are quickly

multiplying. From monitoring wildlife populations to taking photos of available real estate, there seems to be no shortage of uses for these lightweight flying devices.

Even in an industry such as search and rescue which relies mainly on manpower to complete its missions, UAS may be able provide useful insights, adding another layer to rescue efforts.

In fact, in July 2015, El Dorado County SAR was able to use a National Guard drone for the first time in a search and rescue mission. The search was for a missing motorcyclist in the northern part of El Dorado County. Deputy Greg Almos, assigned officer to emergency services and search and rescue for El Dorado County, said that while the drone did not locate the subject, it did give them clues regarding where to look.

“In every search and rescue, the use of human beings, equipment or technology is really just a clue-finder that leads to finding an individual,” he told *Lake Tahoe News*.

That search proved to be a unique situation where the UAS was available and there was an urgent need in the particular situation. The opportunity to use a drone for aiding a search in El Dorado County has not come up since. Almos said it would not be ideal for all situations, but he could see a UAS being useful for future searches in areas such as Horsetail Falls and Eagle Falls, both popular hiking areas in the summer months.



Photo by Kevin Clifford/Drone America

Drone America and their Phoebe Mk.III at UNR.

Photo/Kevin Clifford/Drone America

Carol Caman, a rescue member of the Douglas County Search and Rescue, recalled one rescue effort in particular where she believes a drone would have been helpful. When an aircraft went down in Lyon County a few years ago, it took SAR volunteers and helicopters three days to locate the wreckage, partly due to a winter storm moving through. A drone, she said, would have been able to fly lower and slower than the helicopters and do it in the storm with less danger to humans, possibly locating the downed plane much sooner.

In April, Caman attended the first annual UAS Search and Rescue Symposium in Reno hosted by the UNR's Nevada Advanced Autonomous Systems Innovation Center.

Warren Rapp, business development director for NAASIC, said they decided to put on the symposium because the center is constantly being contacted by search and rescue organizations with questions about UAS.

The symposium was free to SAR volunteers and covered a number of topics including FAA regulations.

The FAA has allowed limited use of UAS for public missions such as firefighting, disaster relief and search and rescue since 1990. Recently, drones were used during the Texas and Louisiana floods to locate stranded individuals and to distribute essential supplies such as water to those people.

Rapp suggested that such delivery of supplies is another way drones could aid search and rescue operations. The larger fixed-wing drones would be able to carry much-needed first aid kits, small heaters or water to someone in the wilderness quicker than a team could reach them on foot, in some cases alleviating the need for a rescue party altogether.

However, he and Caman stressed that UAS would not in any way replace the humans of search and rescue operations. Rather, they would act as another tool to help people in need.

"It will save you man hours," Rapp told *Lake Tahoe News*. "If your crew is only seven and you have a thousand acres to search, a drone may help you funnel people to a certain area with clues."

Caman compared it to another recent technological advancement: cell phone forensics. Lost or stranded individuals can now often be located via the GPS in their cell phones. This technology has only been available to SAR teams for a few years, but has become an integral part of their search operations. Many subjects are now located very quickly thanks to this technology.

"I think it's a good idea to get the best tools you can to help people out," Caman told *LTN*.

The Douglas County SAR is currently discussing the possibility of getting a UAS or acquiring one in conjunction with another nearby SAR, however they are still in the early stages of the

process. There are a lot of questions to answer and hurdles to overcome in order to make that happen, Caman said.

One is financing. Drones cost anywhere from a couple hundred dollars to more than a hundred thousand depending on type and what it needs to be equipped with.

This raises the question, which kind is right for the varied terrain of Douglas County? Some have infrared cameras, heat-sensing cameras, or high-def cameras. There are quad-copters and fixed wing. Some are good for flying in tight areas like along cliffs and down ravines. Other fly best low and flat. Once a style and price is in sight, they must decide if the cost is worth the benefit gained from it.

There is also the question of manpower to use it, necessary training, and the issue of FAA rules for UAS being currently up in the air.

While no one interviewed reported having experienced resistance to the use of drones within the search and rescue community, they do still see a lot of unknowns. El Dorado County SAR has discussed the prospect of acquiring a drone, but is not moving forward with anything at the moment, choosing to wait until some of these questions are answered. And though Douglas County is moving forward with their discussions, they are doing so slowly.

"We want to make sure we buy the right equipment for here in Douglas County and that we incorporate it into our team rather than make it the focus of our team," Caman said.

So while you may not see a fleet of search and rescue drones buzzing around Lake Tahoe in the very near future, it is on the horizon.

Climate change damaging national parks

By Darlene Superville, AP

YOSEMITE NATIONAL PARK — President Obama said Saturday that climate change is already damaging America's national parks, with rising temperatures causing Yosemite's meadows to dry out and raising the prospect of a glacier preserve without its glaciers someday.

"Make no mistake. Climate change is no longer just a threat. It's already a reality," Obama said from a podium, with Yosemite Falls, one of the world's tallest at 2,425 feet, as a backdrop.

At the California park, where Obama was spending the weekend with his wife, Michelle, and daughters Malia and Sasha, the president also talked about how a rabbit-like animal known as a pika is being forced farther upslope at Yosemite to escape the heat.

"Rising temperatures could mean no more glaciers at Glacier National Park. No more Joshua trees at Joshua Tree National Park," he said, adding that a changing climate could destroy vital ecosystems in the Everglades and threaten such landmarks as Ellis Island and the Statue of Liberty.

Obama spoke near Yosemite's Sentinel Bridge, where views of Half Dome, a well-known rock formation in the park, and Yosemite Falls created a picturesque background behind him under a sunny, blue sky.

After a night with his family in a rented cabin in the popular

park, Obama stuck to his usual routine by rising early Saturday and heading to a recreation center on the grounds for his daily gym workout.

Obama's weekend in the great outdoors was planned to encourage more people to appreciate and visit many of the nation's parks. The National Park Services manages more than 400 sites around the country and celebrates its centennial in August.

3-day outdoor getaway for women

The REI Outessa Summit give women the chance to participate in more than 200 outdoor activities across three days, as well learn from experts.

Kirkwood Mountain Resort will host the event Aug. 19-21; then it moves to Powder Mountain in Utah, Sept. 9-11. Each location limits participation to 500 people.

Activities range from camping, backpacking, kayaking, outdoor cooking, mountain biking, paddle boarding, climbing, yoga, and hiking. Each class will have about 15 people, with various levels.

Dinners will be family-style. Elite athletes will share their stories in the evenings.

Register **online**.

Northstar golf – more than a walk in the woods



Adam Rahilly of Truckee takes full advantage of his season pass at Northstar's golf course. Photo Copyright 2016 Carolyn E. Wright

By Kathryn Reed

TRUCKEE – Adam Rahilly and his friends don't need anyone to tell them the golf course at Northstar is a bargain.

Still, the 18-hole, par-72 course was rated the best course for value in the Sierra Nevada by *California Golf and Travel* magazine.

"It's nice, cheap and affordable," Rahilly told *Lake Tahoe News* on a recent Thursday as he and four buddies finished up hole 11.

On this hole they had to launch their balls over a wide expanse to get to the green. A few holes have "forced carry" features.

The Truckee residents try to play here three times a week, preferring the back nine because it is more challenging.



Marcie Bradley doesn't let the snow-covered runs at Lookout Mountain distract her. Photo Copyright 2016 Carolyn E. Wright

The back nine is more wooded and closed in. It's a definite

mountain feel, with thick Aspen groves and Martis Creek flowing in some areas.

The views on the front nine captivate Taylor Kramer. His foursome from Michigan is in town for a wedding.

“The scenery is great. And it’s not too crowded,” Kramer told *Lake Tahoe News* as he waited his turn.

The Martis Valley is what dominates the landscape on the front nine. It’s wide-open terrain, with partially snow-covered ski runs still visible.



Rich Aprile in his first year at Northstar is tasked with upgrading the level of instruction. Photo Copyright 2016 Carolyn E. Wright

In many ways Northstar feels like two distinct courses. In part, this is because of the terrain, but it also has to do with the links being built at different times. Robert Muir Graves designed the course.

Northstar is beefing up its offerings this season with the addition of Rich Aprile, who was hired to be director of

instruction. He and head pro Pete Smith are certified by the PGA as instructors.

While Aprile has everyone fill out a questionnaire to gather their past experiences and future goals, ultimately he said it's all about having fun.

"Ninety-five percent of all golf rounds are never going to break 100," he said.

Sometimes it's little tweaks like following through, hitting down on the ball to get lift, or up on the ball when driving off a tee that will improve one's game.

"What golf is really all about is being consistent," Aprile told *Lake Tahoe News*.



Taylor Kramer of Michigan hits out of the rough on his inaugural round at Northstar. Photo Copyright 2016 Carolyn E. Wright

At the recreational level he said it's not that important to have a variety of shots.

Instead of practice swings, he calls them rehearsal swings – as in, a person is rehearsing what they want to do. Ball placement is another key factor.

Putt whenever possible is Aprile's philosophy.

“It’s the most accurate club in the bag,” he said. Chipping can come later.

He’s also a proponent of losing the terms “men’s” and “women’s” tees because there are reasons one gender might prefer to start closer or farther away. Aprile prefers calling them first or second tees.

Notes:

- A variety of season passes are available starting at \$379, with single rounds ranging from \$40 to \$90.
- For more info about Northstar’s golf course, go **online**.

Classic boats to be showcased at Tahoe Keys

The South Tahoe Wooden Boat Classic will take place July 29-30 at the Tahoe Keys Marina in South Lake Tahoe.

This is the ninth year the Northern California-Lake Tahoe Chapter of the Antique & Classic Boat Society will host the boat show for charity. The theme is: Ladies and Gentlemen, You Have a Race.

The show’s cover girl is the 1939 Miss Notre Dame and her 24-cylinder Duesenberg engine.

Master race boat pioneer Fred Wickens built Hurricane IV in 1948 for Morlan Visel. Visel was a limited class driver living in Southern California, but he was also a fixture on Lake

Tahoe. He would become the third partner in ownership of Sierra Boat Company along with Ollie Meek and Stanley Dollar Jr. Hurricane IV was one of the first “prop-riding” unlimited boats built. She is another of the early post war boats to be powered by an Allison V-1710 aircraft V-12 engine. Famed Allison builder, Howard Gidovlenko of Avia Union in Santa Ana was responsible for her racing speed.

Hurricane IV was heavily modified in 1950 and was remembered for her stunning top speed of 163.136 miles per hour in 1954 on the Salton Sea.

She was only topped by another Avia Union Allison engine pushing Slo-mo-shun IV to 178 miles-per-hour. She was raced on Lake Tahoe as well as the majority of the Unlimited circuit. Always a good performer, she was a local favorite as she carried the Tahoe Yacht Club burgee on her tail fin.

More than 60 boats are already signed up for the show this year, with 80 expected to show.

Free backcountry tours of Comstock sites

Nevada State Parks is putting on two ranger-led tours in the backcountry of Lake Tahoe Nevada State Park.

Participants will follow the remnants of the old Virginia Gold Hill Water Company flumes and inverted siphon. Originally built in 1873, the VGHWC brought much needed water from the Sierra to the Comstock.

The tour will start at the west end of Hobart Road where the

pavement ends and the dirt begins, in the Lakeview Estates at 8:45am and will end at Spooner Lake in the afternoon on June 24 and Sept. 18. Four-wheel drive is necessary.

There may also be some moderate hiking. Children 8 years and older are welcome. The tour is free, but any donations to the park will be accepted.

Reservations are necessary by calling 775.831.0494.

Officials: Concerns about pro sports, casinos 'widely overblown'

By J.D. Morris, Las Vegas Sun

The casino industry's chief lobbying voice in Washington, D.C., sees an opportunity in reports this week that the NHL is ready to grant an expansion team to Las Vegas.

For Geoff Freeman, president of the American Gaming Association, a major league hockey franchise in Las Vegas will offer further proof of two things: broad acceptance of gambling and another reason to eliminate the federal ban on sports betting in most states.

Both causes are of great importance to his organization.

Freeman told reporters on a conference call today that the apparently impending arrival of Las Vegas' first major league sports franchise "reflects a rapidly evolving view of gaming as an important, mainstream segment of the broader economy."

Trying to stop spread of non-native species

By Linda Fine Conaboy

INCLINE VILLAGE – There are always chores to take care of before launching boats, kayaks, paddleboards and all the other warm-weather stuff at Lake Tahoe, but there's one more job to take care of that's just as important as tuning up the gear.

Now's the time to have everything inspected for the critters and weeds that may have wintered over—and that includes even the water wings.

Although any invasive varmints or weeds that spent the winter in storage attached to a rudder are probably dead and not capable of harming the lake (but they can survive up to 30 days), this is the time of year to clean up the gear and get it inspected before launching.

Zack Bradford, natural resources manager for the League to Save Lake Tahoe, was one of several speakers at the spring public forum June 14 at the Tahoe Center for Environmental Sciences at Sierra Nevada College, hosted jointly by Tahoe Regional Planning Agency, the League and Tahoe Resource Conservation District.



The Tahoe Keys is home to the bulk of the milfoil at Lake Tahoe. Photo/LTN file

Bradford described the various intruders into the lake's environment, including warm water fish, clams, Eurasian watermilfoil and curly pondweed, all of which have felt the full force of those driven to eradicate them before they can cause more damage.

Eurasian watermilfoil's introduction into U.S. waters happened sometime between the 1880s and the 1940s, possibly through the aquarium trade or the transport of watercraft. It crowds out "good" plants, the native species, sucking oxygen out of the water, and is now spreading from Tahoe's South Shore to other parts of the lake.

Curly pondweed, a lesser-known plant, is able to survive in open, more turbulent water as opposed to milfoil's preferred environment, quiet lagoons such as Tahoe Keys.

Even a small piece of an unwanted plant found floating in open

water is capable of creating another intrusion, said Rick Lind, a consultant for the Tahoe Keys Property Owners Association.

“Ninety percent of the Keys is infested with unwanted plants. The current methods have not been working,” Lind said. However, he listed other techniques that have been implemented that are helping to alleviate the problem.

They include: harvesting, water conservation, banning phosphorus-based fertilizers, turf conversion from grass to natural landscaping, bottom barriers, dog waste stations at convenient locations, homeowner education and labeling and monitoring all storm drains.

“With 1,500 home and 900 docks, a solution must happen,” he said.

To add to the woes, non-native warm water fish such as largemouth bass and bluegill have made their way to Tahoe’s waters.

Why care if these fish are happily integrating into the pristine lake?

According to the UNR’s College of Agriculture, they are breeding close to the shoreline in areas where native hatchlings live and grow. And because of the proliferation of invasive weeds and climate change warming the lake’s waters, they are able to thrive, preying on non-native crayfish among other tasty food sources.

UNR’s website said that warm water fish have been detected at 58 percent of the 16 locations monitored in various sites around the lake, leading to a continuing decline of native fish.

Although these aquatic invasive species are not exactly reeling from the full frontal attack, efforts to control them

are beginning to pay off.

Nicole Cartwright, AIS program coordinator for Tahoe RCD, an organization supporting all aspects of conservation issues, said that although quagga mussels have invaded Southern Nevada's Lake Mead, they have yet to find their way to Tahoe. She credits the diligence of the boat inspection program for keeping quaggas away as well as zebra mussels, also found in Lake Mead and other bodies of water.

In addition to Tahoe, boats launching at Echo and Fallen Leaf lakes are inspected.

"The program is proven; early detection is vital." Cartwright said. "There have been no new detections since it started. The fee charged has caused people to stay clean. Tahoe is helping to change Western boating habits."

Cartwright said since 2008, more than 50,000 watercraft have been inspected and 20,000 have been decontaminated using extremely hot water. She said the fees for inspection and possible decontamination vary according to boat size, although non-motorized craft, if they need inspection, are free.

She added that normally non-motorized craft don't need to be checked, unless they've recently been in suspect waters.

"With clams and weeds, the implementation programs are helping to cure the problem," Cartwright said, adding that slowly they are also getting the jump on warm water fish, with more than 9,000 of them electroshocked last year.

"We have a mechanism for management. We're not exactly winning now, but we're keeping them at bay and staying ahead of the game."

The use of herbicides to eliminate invasive weeds was discussed at the forum, causing an outcry from some members of the audience who wondered why potential poisons need to be a

part of the toolbox.

“Herbicides are a difficult topic for a lot of folks,” Cartwright said. “But we’re still in the analysis phase. We’re evaluating the effectiveness of herbicides as a potential method to kill plants, but it’s not been approved by regulatory agencies. We won’t know for another five years if it will be approved.”

The forum’s speakers all touted the implementation of various programs, which invite public participation, such as Eyes on the Lake, Tahoe Keepers, the Pipe Keepers programs and the Lake Tahoe citizens science app as effective methods to help in the invasion battle.

All of these programs are designed to engage citizens to care for the lake by keeping their eyes and ears open to new plant growths or other egregious encroachments by reporting what they find.

For more information on all of these subjects is available **online**.

Star Guide: Saturn making itself known

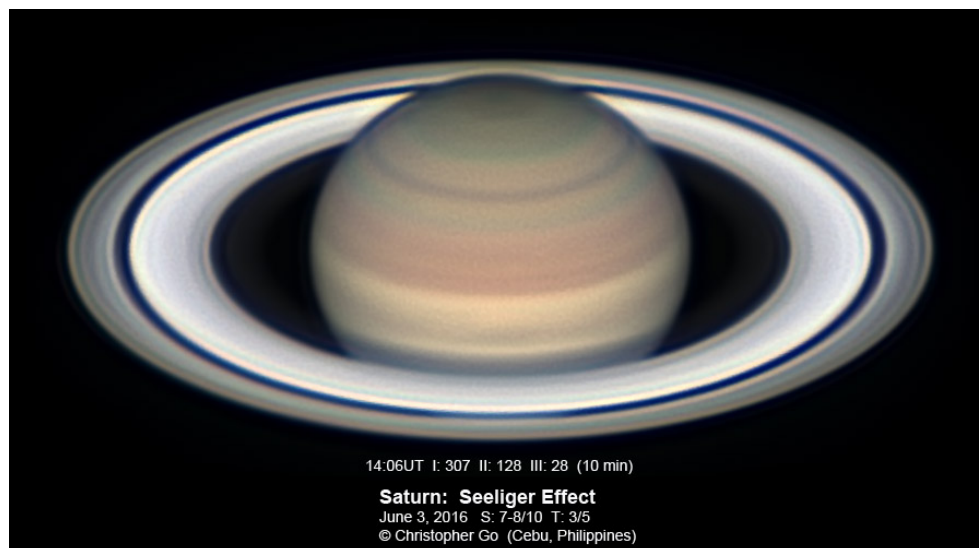
By Tony Berendsen

On the night of June 2, Saturn was at opposition to the Earth. There was no sound or rumbling of the ground to announce the event, but for astronomers there was signal of light.

Opposition happens when one planet is opposite another relative to the sun. It happens to the Earth and every outer,

or superior, planet once a year when Earth swings around its orbit in between them and the sun. Not only is opposition when we are closest to our planetary neighbors, it is the best time to view them.

Since a planet at opposition rises in the east just as the sun sets, it's the easiest time to find them with the unaided eye. To find Saturn in the evening sky shortly after sunset and look to the eastern horizon approximately where the sun rises in the morning. You will have some help from Mars this year because it's just above Saturn to the right.



Saturn will be visible for most of the summer.
Photo/Christopher Go

Planets describe an arcing path across the sky, similar to the sun. The name of the arcing path is the ecliptic. Using ecliptic path as a guide find the brightest red star (Mars) near the eastern horizon, at about 9:15pm, and trace halfway back to the horizon. There you will find a fairly bright yellowish looking star – Saturn. For those who are familiar with the constellations, Saturn is in Scorpio.

Even though Saturn is at its close approach for the year it's not very close at all at 9 AU (astronomical units). That's nine times the distance between the Earth and the sun (837 million miles). Even at light speed it's an hour and a half

travel time.

Opposition is also the best time to view Saturn through binoculars or a telescope. And if you are a planetary imager, like Christopher Go of the Philippines, you might find yourself staying up late to capture Saturn high in the night sky away from the heavy atmospheric distortion near our horizon to catch the Seeliger effect.

Go says, "The Seeliger effect occurs during opposition where the ice particles of the ring reflect sunlight without any shadows. This causes the ring to brighter."

His image, taken on June 3 from his home in the Philippines shows the brightened ring face. The effect is named after Hugo von Seeliger, 1849-1924, as a result of his study of the changing albedo of Saturn.

For casual observers like myself, Saturn is a jewel of a planet to see through the eyepiece of a telescope. Saturn will be up in the evening sky all summer, so there will be plenty of warm weather evenings for viewing. If you don't have a telescope and want to take a peek, the **Fleishmann Planetarium** and the **Astronomical Society of Nevada** will be offering free viewings on selected evenings. I'll be watching all summer long from the **Dark Skies Cosmoarium** at Northstar.

Tony Berendsen runs Tahoe Star Tours. He may be reached at 775.232.0844 or tony@tahoestartours.com.