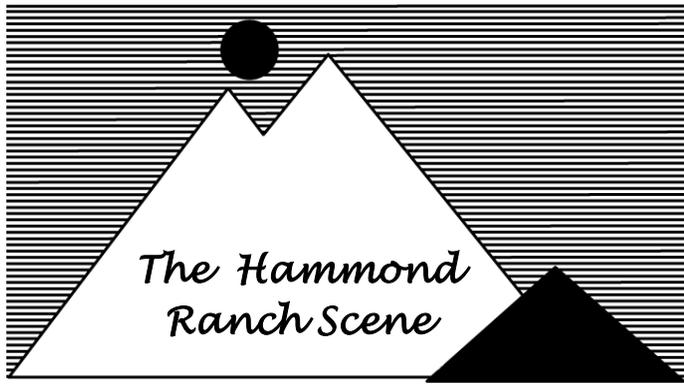


Hammond Landowners Association



www.hammondlandowners.org

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APRIL 2023

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Number 2

Message From the President

Well, this has certainly been a winter to remember, or forget. While the intense moisture has decreased the severity of the drought, we still need to see what summer brings. For many of us, this winter has left us a large cleanup of fallen trees, limbs, and branches. Add to this our desperate need to try to contain the bark beetle infestation on the Ranch. Try to do your cutting and burning early in the spring while it is still cold and damp. Have a burn permit and carefully follow the rules, including checking if it is a burn day. Make sure it is not windy.

The winter has also been hard on our roads, so the HLA Board is expecting many requests for road funds. Remember that requests for reimbursement are due no later than October 1. If not received by then, the request will be rolled over to the next year. In the 20+ years we have been providing this benefit, we have never reached our budget limit. Be aware, there can always be a first time.

I wish everyone a wonderful, sunny summer. We've earned it. Now get out there and start cutting and burning.

Erich Ziller

HLA Annual Picnic

The Hammond Landowners Association annual picnic will be held on Saturday, July 8, this year. Save the date! An announcement and invitation will be sent to members ahead of time.



Run Report

The Hammond Ranch Fire Company responded to 17 calls for assistance during the last quarter: 2 structure fires; 4 other fires; 10 medical calls; 1 public assist.



As usual, many thanks to Cal Fire's Siskiyou Unit and the HR Fire Company for their hard work. It is very much appreciated.

From the Chief

Hammond Ranch Fire Company is still looking for volunteers to ensure we stay open and can provide a response to the people of the community. If you, or someone you know, would like to volunteer, contact Chief Lunsford at 530-859-8550 or stop by the firehouse.

The new water tender should be done and in service by May 1st, provided the DMV and county can finish their part of the process.

We have been working hard on finding new grants to purchase new equipment and gear for the people we protect and serve.

Kyle Lunsford, Chief 4200

Wildfire Readiness

The Yreka Fire Safe Council provides important fire preparedness advice during fire season. They have started weekly posts already to help us get ready. You can find their advice every Friday at readyforwildfire.org as well as on their Facebook page:

<https://www.facebook.com/groups/yrekafiresafety/permalink/6121806734573967/>.

Be sure to take a look at the valuable advice.

Dying Trees and Bark Beetles

More than 36 million trees died across California last year — almost triple the number of trees that perished the year before — according to a report of a survey published by the U.S. Forest Service. Douglas fir trees saw the biggest spike in mortality rates compared with previous years. An estimated 3 million Douglas firs died, across 190,000 acres, in 2022 — a massive increase of 1,650 percent compared with 2021. Also, there were nearly 13 million dead white firs across 1.5 million acres, an increase of 691 percent, and more than 15 million red fir trees died across less than a million acres, an increase of 242 percent.

The primary reason for the increase in tree mortality has been periods of severe and protracted drought combined with high tree densities. High levels of tree mortality will occur if forests are not altered to improve tree health. Thinning the trees during normal precipitation years is one prevention strategy, when the trees are not already stressed.

When trees endure long droughts, it makes it hard for them to fight off beetles, maintain their health or recover from adversity. Wood-boring beetles killed nearly 400,000 trees across 40,000 acres. Pine beetles contributed to 11 percent of tree decay.

Little can be done to control bark beetles once a tree has been successfully attacked. If beetles are only in the branches or limbs, try pruning and disposing of infested limbs immediately. If done in the warmer months, the cuttings should be promptly removed and/or treated to reduce risk of bark beetles spreading. If the main trunk is attacked by beetles, the entire tree must be removed. If the tree's foliage has already changed color to straw-yellow or red-brown, then it is likely the tree has died and the beetles have already exited the tree. There are no chemical insecticides registered or recommended for killing bark beetles under the bark of infested trees.

Many signs and symptoms of a beetle attack are similar regardless of species of tree. A couple of signs are below.



Unsuccessful Attack



Successful Attack

Dead trees are an extreme fire danger as they allow wildfires to spread more rapidly in these already dry, hot and drought-stricken conditions. It is suggested that removing the decayed timber will reduce wildfire risk. If there are bark beetle-infested trees, they will die. Removing them early may prevent further infestation.

Scatter or store wood from bark beetle-infested trees away from healthy trees. Firewood can harbor insects and diseases that threaten other trees. Transporting firewood can move these pests to the new locations.

The best time to remove live trees is during the late fall through winter months. This is due to bark beetles being dormant, or at least slowed, by the colder weather. As the weather warms, the beetles are attracted to fresh cut wood. So, if you cut trees during warmer weather, it will increase the bark beetle population.

If you must cut live trees in early spring to maintain your defensible space, be extra cautious not to nick nearby trees. After thinning and pruning, make sure to properly and promptly remove and/or treat wood cuttings.

The October 2022 Hammond Landowners Association newsletter included an article about the types of bark beetles we have locally. You can find it on the website:

<https://hammondlandowners.org/newsletters>.

Also, there is a very good article by the USDA about bark beetles and forest management that can be found at:

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5384837.pdf.

CAL FIRE has some helpful information as well at:

<https://plan.readyforwildfire.org/> and https://www.readyforwildfire.org/wp-content/uploads/04123-Bark-Beetle-Campaign_Brochure_web_LINOA.pdf.

Amazingly, there is a California Pest Council. They have a lot of great information about trees and their pests at:

<https://www.caforestpestcouncil.org>.



Welcome Basket

Finally, after several failed attempts due to weather, new resident Barbara Hammer recently received the HLA welcome basket.



Barbara and her partner Mac moved with their dog Momo and cat Tati into the cabin on Dogwood last July and are loving it there in spite of the rigors of a particularly intense first winter. "Trial through snow," Barbara calls it. Thanks to helping hands offered by neighbors throughout, the winter was manageable. Barbara and Mac are impressed with the sense of community they experience and grateful for the friendships formed.

Born in the city of Chicago, Barbara has lived in many different parts of the country but feels she has found her forever home here on the Ranch, where she especially enjoys, in addition to hiking and exploring, the lenticular clouds.

Barbara is an artist who works in pastels. She is also an experienced baker who owned her own bakery in the past and offered, with just a little prompting, to teach Hammond Ranch residents to bake bread and share her sourdough start which she has grown and nourished for 37 years!

Welcome to Barbara and her family.



Illegal Conditions on the Ranch

Hammond Ranch was formed and filed with certain restrictions known as CC&Rs. A portion of those CC&Rs state that:

"A parcel owner shall not suffer or permit any unlawful, improper or offensive use of his premises, or any use or occupancy thereof, **contrary to any local, state or federal laws, or which shall be injurious to any person or property.**"

So, if you see or hear of a business being started on the Ranch or any condition that seems illegal, please let the Board know. They can investigate whether the business is properly permitted and legal in the County, State and country. Any contact will remain confidential.

Wildlife

The Redding Record Searchlight reported that state wildlife officials recently captured, collared and released two gray wolves in Siskiyou County, from the Whaleback Pack: OR85, the 4-year-old wolf that had migrated to California from northeast Oregon and a 97-pound yearling male.

Capturing and collaring wolves enables wildlife officials to monitor wolf populations and minimize conflicts with livestock, according to the California Department of Fish and Wildlife.

"The capture of these wolves is fantastic, since we lost the only functioning satellite collar last summer, and ground capture efforts since then have been unsuccessful," said Kent Laudon, a senior environmental scientist and the department's wolf specialist.

OR85 arrived in California in 2020 and paired with a female that came from southwestern Oregon. They later formed the Whaleback Pack in Siskiyou County. The pair produced a litter of seven pups in 2021 and eight pups in 2022, state officials said.

Since the two wolves were collared, they have been transmitting signals that indicate their location, officials said. Wildlife officials can alert ranchers and others in the area of the packs to install flagging and other tools to ward off the animals.

In the Siskiyou County area, where the Whaleback pack lives, there were 13 confirmed and probable livestock kills from October to the end of December 2022, according to the state. "We're already seeing interesting movements on agriculture lands and sharing that information with local folks to install fladry* and other deterrent measures around cattle pastures," Laudon said.

The state plans to try to capture and collar additional wolves later this spring, officials said.

*Fladry is a line of brightly colored flags evenly spaced and hung on a wire around a pasture or other area where livestock gather.

Handsome animals!



OR85

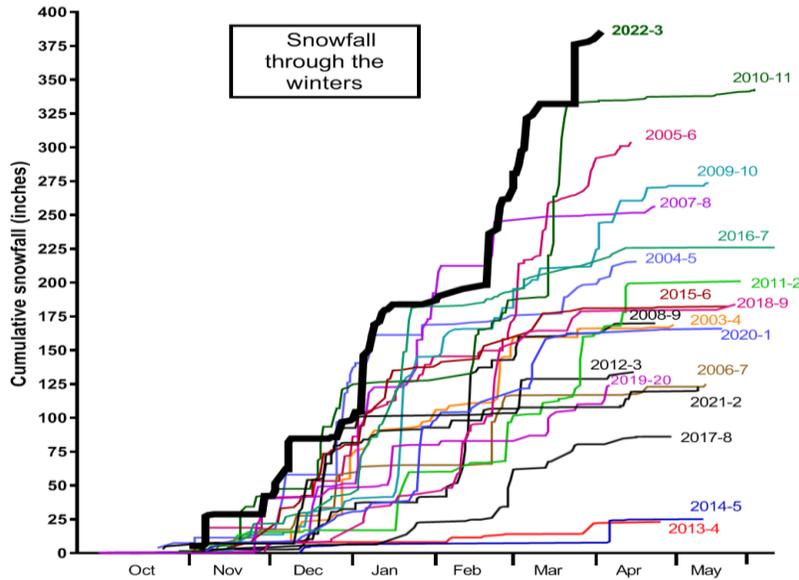


Yearling

Dan's Weather Article, Spring, 2023

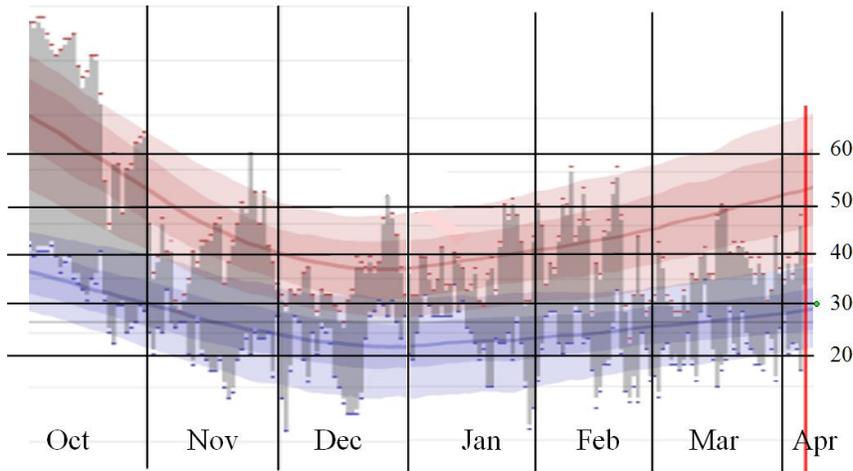
by Dan Axelrod

This past winter has been "one for the record books," for much of California (frequently making national news), including here at Hammond Ranch. At the 4200' elevation in the SE part of the Ranch on the Klamath/Sacramento Divide, we have received a larger total accumulation of snow (385") than any other winter in at least 20 years! Here is a graph of the cumulative snow totals for each year, plotted against the date:



Each year's trace is assigned its own color in the graph, with this past winter in heavy black. The snow season got an early start, November 1. Then, roughly around the turn of the months November/December, December/January, February/March and March/April, we received particularly persistent and repeated rounds of heavy snow. As can be seen by comparison with previous years, some additional inches of accumulation might still occur through the end of April, adding to the 385" total.

Accompanying and enabling this parade of snowstorms, the temperature during the latter half of this late winter has been unusually cold. On average over the last many decades, the daily temperature here bottoms out in the last week of December and first week of January. But this year, the temperature never really warmed up since then, staying just as cold all the way through the first week of April. Below is a graph of daily temperature (in °F) versus date. The gray is the actual temperature, the solid red and solid blue lines are the "normal" highs and lows for each date and the shading shows the historically expected 25-75% (darker) and 10-90% (lighter) range variations around those "normals."

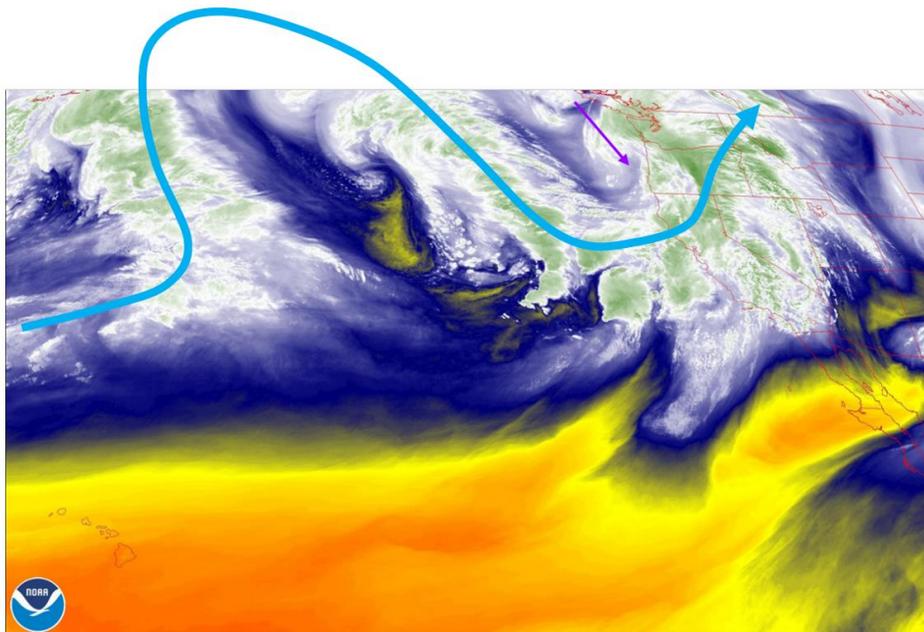


Because of some local weather station hardware problems (now corrected going forward), this graph was actually modified from official NOAA Weather Service data for Mt. Shasta City at 3500' elevation. But because the Hammond Ranch elevation ranges from about 3900' to 4500', temperatures here are cooler by about 3 °F (calculated by figuring 3 to 5 °F for every 1000 feet of elevation). The vertical scale (in °F) is thereby already pre-corrected for this cooler shift.

So the big question is: what caused this past winter to be so extreme in snow and cold? In the northern hemisphere temperate zone (around 30 to 60 degree latitude), snowstorms are generated by "eddys" (counterclockwise spinning vortices) in the generally west-to-east flowing high altitude jet stream, continuously forming on the jet stream's north side. These vortices can travel quickly, carried by the jet stream itself, or they can become detached and meander more slowly. This can be visualized as like the "swirlies" that form at the edge of a canoe paddle in the water which then migrate away on their own.

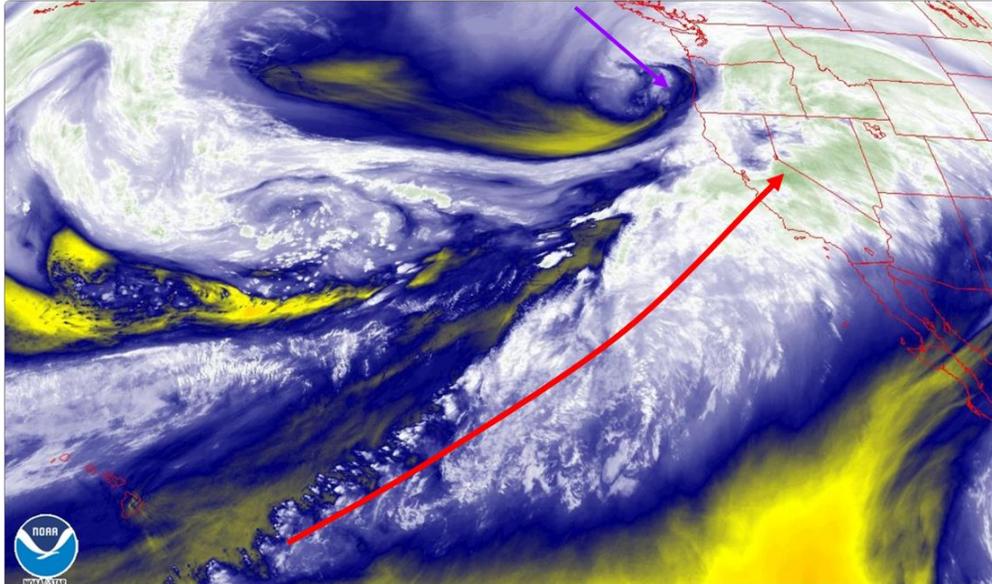
Things become more interesting because the jet stream does not flow in a straight W-to-E line. It usually undulates north and south as it wraps around the globe, and the undulations themselves propagate, like a wave on a rope. What happened this winter is that the undulations often stopped propagating, and the West Coast became locked in a pattern with the jet stream flowing from the NW as seen from this region, rather than the more typically flipping between NW to W to SW and back again as undulations pass. This "stuck" pattern led to a repeated train of vortices (i.e., storms) traveling SSE down the coast from the Gulf of Alaska. Each vortex carried Alaskan cold air with it and plenty of moisture evaporated from the ocean. Most importantly, many of the vortices detached from the jet stream so each just leisurely lingered off the coast while dumping snow here. This past winter the jet stream pattern often became stuck in a position that thereby enhanced snowfall here. A few years ago, it became stuck such that we were marooned in a dry zone, hence the drought.

Here is a satellite picture (taken on January 7, 2023) of just such a vortex. The white, and especially the green color, shows where atmospheric moisture is most concentrated. (The yellow, orange and red further to the south increasingly represents dry air). The long, squiggly solid-blue arrow shows the jet stream flow direction, deviating way up to the north (and off the map), then turning and heading our way from the NW, and actually persisting or recurring in that form for much of the winter. The purple arrow points to the center of the spun-off vortex and indicates its direction of travel down the coast and towards us.



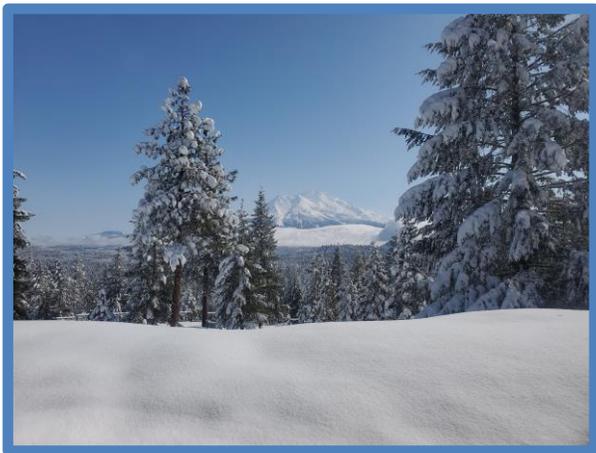
The national media put an emphasis on "atmospheric rivers" (AR) slamming California. Often the jet stream has a northern branch and also a southern branch. The southern branch picks up a lot of moisture from the warmer Pacific waters near Hawaii. But the presence of "our" Gulf of Alaska vortex (as pictured above) can sometimes draw that moist air farther north (because the vortex is a low pressure center) and clash it with the cold air that the vortex transports down from the north. This creates a very

intense and elongated stream of precipitation. Sometimes that stream can impinge upon Northern California, but if so, it is relatively warm and produces heavy rain, not snow, at our elevation. But this winter, the ARs impinged upon areas to our south rather than hitting us directly. We felt the direct effect of the meandering Gulf of Alaska vortices as snow and cold. But, the recurrent vortices helped direct the ARs into Central and Southern California. Here is a March 10, 2023 satellite picture of that happening:



The Gulf of Alaska vortex is shown, as before, with a purple arrow. The AR stream, which has become entrained and drawn north by the vortex, is shown as a red arrow.

This all explains *what* happened but it does not explain *why*. Why does the jet stream pattern ever become stuck at all? This question is now the subject of intense publically-funded research, so hopefully we will know the answer in a few years and then make better season-long predictions. One reasonable hypothesis is that the known rapid human-caused warming in the Arctic may decrease the temperature gradient compared to the equator, and that decrease affects (directly or indirectly) overall global airflow. (Indeed, recent research has shown that such global alterations are indirectly slowing down ocean currents, which also affect air flow patterns). But, one global phenomenon does *not* seem responsible: the periodic west-versus-east sloshing of surface warm water across the width of the tropical Pacific (i.e., La Niña versus El Niño). This past winter has been a La Niña period, which historically has been associated with warm and dry weather in Southern California, exactly the opposite of what actually happened. One thing is clear: the stalling of the upper airflow leads to prolonged periods of extreme weather.



Snow level at 4100' as of March 15



Great to see Hammond Pond Full Again!

2023 Board Members

President	Erich Ziller	530-261-0683
Vice President	Larie Wearing	530-859-0990
Secretary	Evan Hadfield	214-620-7434
Treasurer	Valerie Baake	925-788-9875
At-Large	Neera Paine	530-859-1924
	Tricia Elberts	530-859-1036
	J Curtis	312-898-2091
	Doug Lathrop	530-219-5332

Community Liaison - Neera Paine & Tricia Elberts
The Hammond Ranch Scene Editor - Larie Wearing

The HLA Board of Directors cares about and wants to hear members' opinions, suggestions and ideas. Members are welcome to attend any of the board meetings. If you plan to attend, please let the host know in advance so that accommodations can be made.

We also encourage members to write to us and create a dialogue on topics of interest to Hammond Ranch landowners. The Board members can be reached by phone at the numbers listed above, by snail mail c/o HLA, P.O. Box 795, Mount Shasta, California 96067, or via email at hla@hammondlandowners.org.



Calendar

- HLA Board Meeting – Second Tuesday of every month, 6:30 p.m. Call any board member or send an email to hla@hammondlandowners.org for meeting location and/or Zoom link. Let us know of your questions or concerns so they can be included on the agenda.
- The Annual HLA Picnic is usually scheduled for the Saturday after the 4th of July. In 2023 it will be the 8th of July.
- HLA Members' Annual Meeting is the first Saturday in November, November 4 this year. We hope you can attend.
- Siskiyou County Board of Supervisors – First, second and third Tuesdays of every month, 10:00 a.m., County Courthouse, Yreka. Call the Clerk at 842-8081 to confirm the meeting.
- Siskiyou County Fire Safe Council - Meets monthly. Check their website for dates, <https://firesafesiskiyou.com/>
- Hammond Ranch Fire Safe Council -- Contact a Board member about participating.



Moving or changing email address?

Please send changes of address to:
The Hammond Ranch Scene

c/o HLA

P.O. Box 795

Mt. Shasta, CA 96067-0795

or email to: hla@hammondlandowners.org

