The North Coast Observer
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The North Coast Observer

In this issue…

Welcome to the spring 2021 edition of The North Coast Observer, our 20th edition! In this issue, there are articles about our upcoming tsunami warning communications test, the winter storm of January 26-27, and ongoing improvement to our marine kiosk at the Eureka marina. As always, a detailed summary of the previous season is included, along with an outlook for the spring. Also, make sure to check out our astronomy corner, including information about a late May lunar eclipse.

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Facebook	facebook.com/NWSEureka
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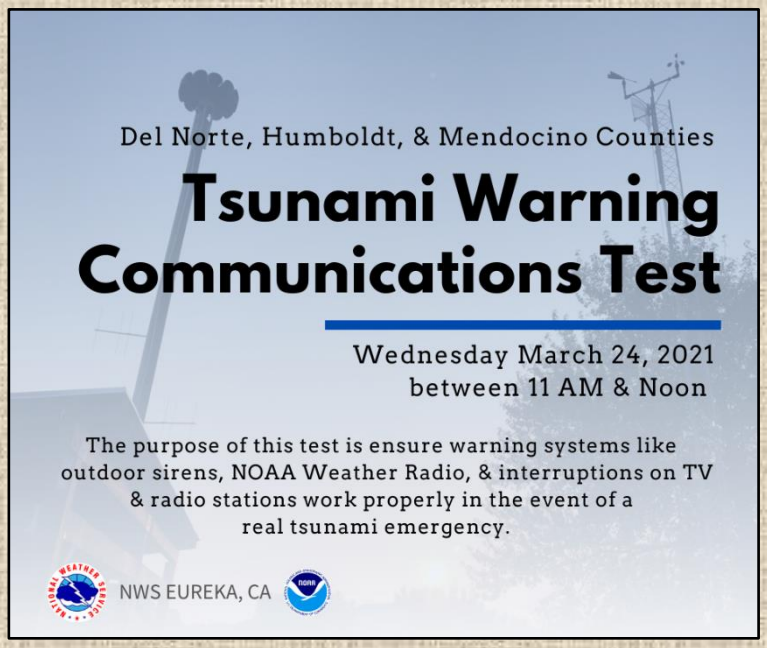
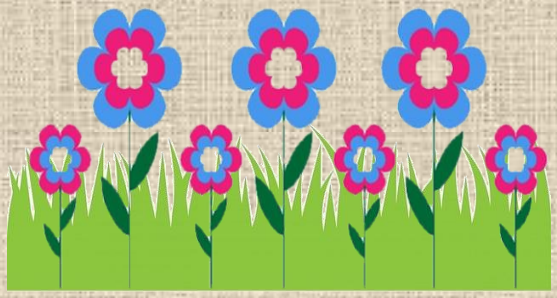
Upcoming Events	
Date	**Event**
Mar 1	Meteorological spring begins Growing season begins (zones 101, 103, 109-115)
Mar 14	Daylight saving time begins at 2 AM
Mar 20	Spring equinox at 2:37 AM
Mar 22-26	Tsunami Preparedness Week
Mar 23	World Meteorological Day
Mar 24	Tsunami Warning Communications Test
Apr 1	Growing season begins (zones 102, 104-106)
Apr 15	Growing season begins (zones 107 & 108)
Apr 22	Earth Day
May 15-21	Safe Boating Week
May 24-31	Cold Water Awareness Week
Jun 1	Meteorological summer begins
Jun 6-12	Beach Safety/Rip Current Awareness Week
Jun 20	Summer solstice at 8:32 PM

Tsunami Warning Communications Test

by Ryan Aylward & Kathleen Zontos

The annual Tsunami Warning Communications Test in Del Norte, Humboldt, and Mendocino counties will be conducted on Wednesday, March 24th between 11 AM and noon. The test will interrupt TV and radio broadcasts and turn on tsunami sirens in some areas. Additionally, local jurisdictions may test their reverse calling systems, and the Civil Air Patrol will conduct a test of their airplane mounted broadcast system (weather permitting). Be ready…and remember, it's only a test!





January 26-28 Winter Storm: Low Elevation Snow & Gusty Winds

by Matthew Kidwell & Scott Carroll

On the morning of January 26th, 2021, a very strong and cold weather system moved rapidly south from the Gulf of Alaska. This storm system brought heavy snow above 2,000 feet and strong winds to much of NW California and resulted in significant weather-related impacts.

The speed of this system helped keep the air mass from moderating as it moved over the comparatively warm ocean waters. Sub-freezing temperatures- already in place across much of the area- allowed snow to fall at low elevations by early in the morning. Temperatures at both Laytonville and Weaverville dropped to 22°F, and Ukiah bottomed out at 27°F. Most of the heavier snow fell at elevations above 2,000. Area snow totals from this event are shown in the table to the right.

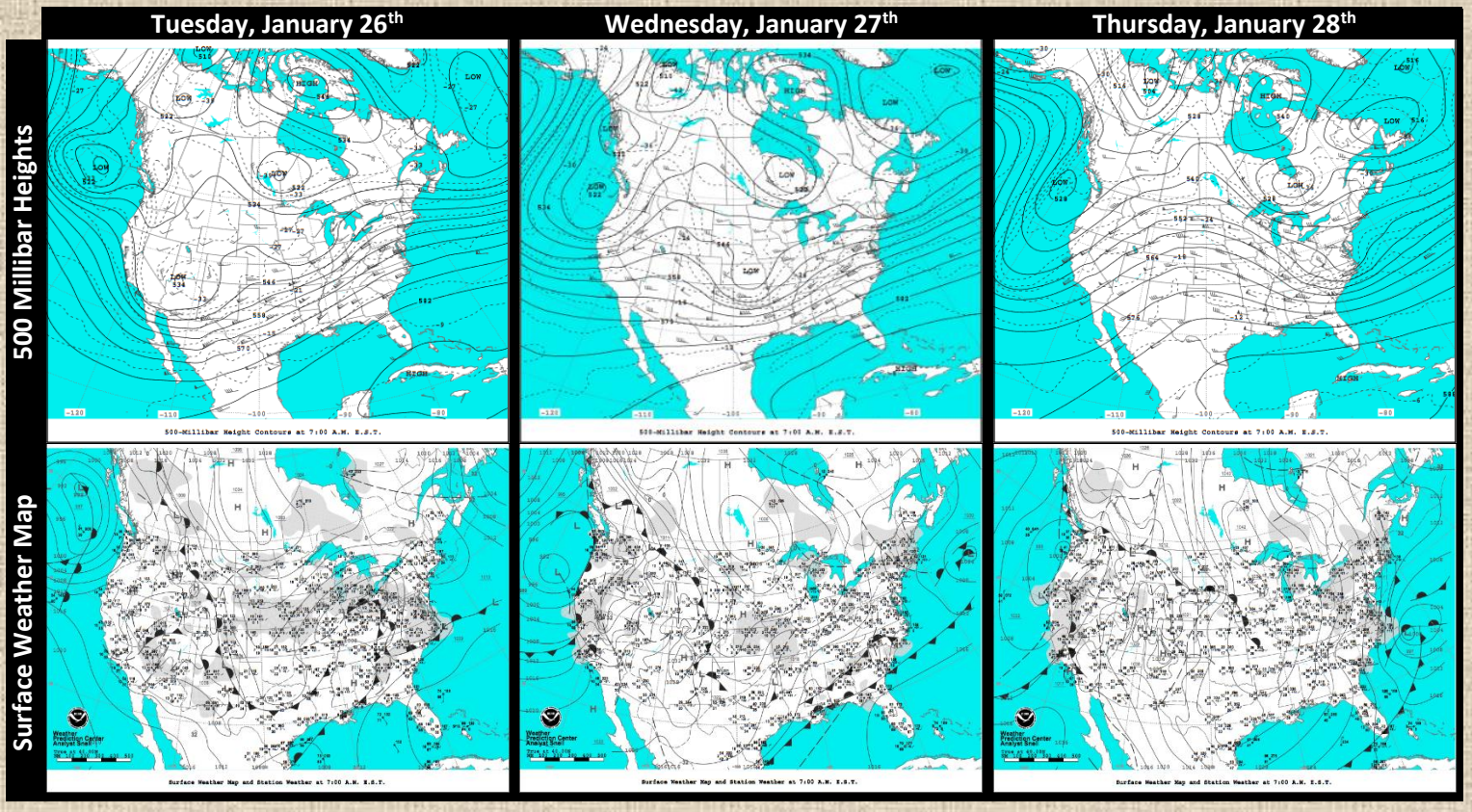
Strong southerly winds were also reported with this system, especially along the coast and over the coastal ridges. NWS Eureka on Woodley Island recorded gusts to 49 mph, Kneeland reached 72 mph, and Cahto Peak (west of Laytonville) saw gusts to 62 mph. Interior valleys also experienced gusty winds, with Ukiah reaching 31 mph and Hoopa topping out at 41 mph.

The heavy snow and strong winds knocked down numerous trees, causing power outages and blocked roads. At one point, over 18,000 people were without power across all five counties of our County Warning Area. Numerous area roads were closed, and even Highway 101 near Laytonville was closed due to a combination of heavy snow causing slippery conditions and downed trees on the roadway.

Area Snowfall Totals

Location	County	Snowfall	Elevation
Ruth 2WSW	Trinity	**28”**	3,099’
Coffee Creek	Trinity	**27”**	2,500’
Bridgeville 5ENE	Humboldt	**14”**	2,675’
Weaverville	Trinity	**14”**	2,082’
Ukiah 8NW	Mendocino	**13”**	2,492’
Leggett 10SE	Mendocino	**10”**	2,078’
Collier Tunnel (Hwy 199)	Del Norte	**8”**	2,200’
Soda Bay 1E	Lake	**8”**	2,188’
Hyampom General Store	Trinity	**6”**	1,300’
Orick 9SE	Humboldt	**6”**	2,300’
Big Bar	Trinity	**4”**	1,247’
Ettersburg 3NW	Humboldt	**2”**	1,644’
Redwood Valley 2NE	Mendocino	**2”**	982’
Lower Lake	Lake	**1”**	1,450’
Willow Creek	Humboldt	**1”**	400’

8 inches of snow at Buck Mountain, elevation 2,450 feet (photo courtesy Dottie Simmons)



Winter Weather Summary

by Matthew Kidwell

DECEMBER

Rainfall for the climatologically wettest month of the year in Northwest California got off to a slow start and never really caught up. High pressure early in the month kept most weather systems to the north of the area and only a couple weak systems brought any rain. The second half of the month saw some improvement, but still the month ended up with only 40 to 60 percent of normal precipitation. The sunny afternoons and chilly mornings associated with high pressure and dry conditions brought above normal high temperatures inland while the coastal areas generally stayed close to normal. The strongest system brought strong winds to the area on Christmas Day in addition to moderate to heavy rain.

JANUARY

Northwest California finally saw rainfall amounts closer to normal in January. The precipitation was generally spread out through the month with only the second week seeing consecutive dry days. Areas in the north and near the coast saw near to slightly above normal rainfall, while interior Mendocino county and much of Lake county saw only 60 to 90 percent of normal. Rainfall totals since October 1st remain well below normal, especially in the south where less than fifty percent of normal rain has fallen. Still, for Mendocino county this remains well above the driest start to a water year recorded in 2013-2014. The most significant storm of the month came on January 27th and 28th when heavy snow fall at low elevations, bringing widespread travel impacts and utility outages. Temperatures in the north remained near normal, while Mendocino and Lake counties saw slightly above normal temperatures.

FEBRUARY

The wet pattern from January continued into the beginning of February, with the first few days seeing moderate to heavy rainfall. Following this wet period, high pressure built into the area and kept the weather dry for the next week. Another wet period followed in the middle of the month. However, after the 20th, little to no additional rain fell across the area. As a result, there were large temperature swings. Mendocino and Lake counties saw highs reach into the mid 70s on a few days. Overall, the month ended with 50 to 75 percent of normal rainfall. Temperatures were below normal across the coastal areas with consistently cool temperatures.

Winter Record Events

Date	Location	Record	Value	Previous Record
Dec 7	Ukiah	Max Temp	77	76 in 1912
Jan 12	Crescent City	Rainfall	3.82	3.00 in 1959
Jan 17	Ukiah	Max Temp	78	77 in 1920
Jan 18	Ukiah	Max Temp	80	76 in 1920

temperatures in °F, rainfall in inches

Winter Climate & Spring Outlook

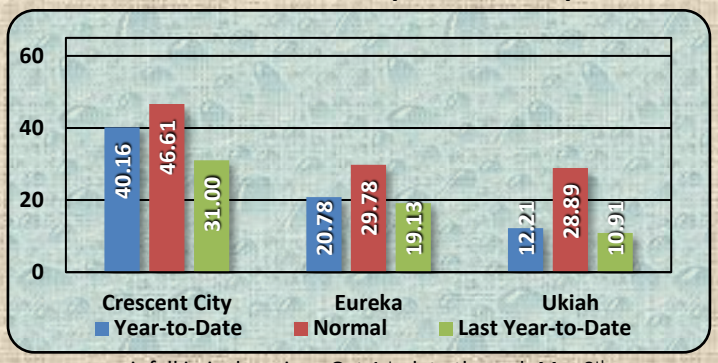
by Scott Carroll

Winter 2020-21 Monthly Climate Comparison

	Crescent City			Eureka			Ukiah		
	Ave Hi	Ave Lo	Total Precip	Ave Hi	Ave Lo	Total Precip	Ave Hi	Ave Lo	Total Precip
Dec	54.9	40.0	7.59	55.8	38.9	3.96	60.9	34.2	2.89
Jan	54.3	43.3	15.22	55.6	40.9	7.10	58.8	39.4	3.97
Feb	50.9	39.0	7.88	53.0	40.3	4.32	63.2	37.6	2.69

temperatures in °F, rainfall in inches

Water Year-to-Date Precipitation Comparison



rainfall in inches since Oct 1st, data through Mar 9th

Spring Outlook (March-May)

click images for links

The Climate Prediction Center's winter outlook for northwest California is calling for nearly even chances of above or below normal temperatures *(figure 1 below)*, although there is a slightly better than even chances of above normal temperatures across portions of Mendocino and Lake counties. There are also nearly even chances of above and below normal precipitation *(figure 2 below)*, with a slightly better than even chance of below normal precipitation across parts of Mendocino and Lake counties.

Nation-wide, there are better than even chances of cooler and wetter conditions across the northern tier of states, while better than even chances of warmer and drier conditions are anticipated across the south.

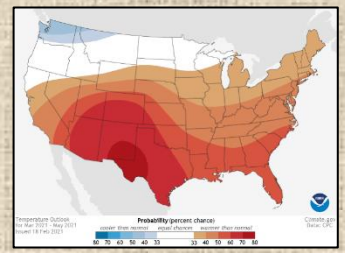


Figure 1 – Temperature Outlook

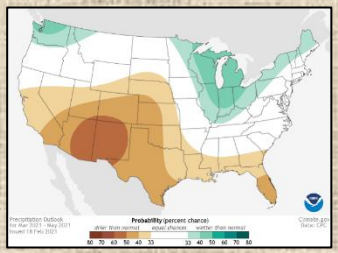


Figure 2 – Precipitation Outlook

More detailed outlook information can be found on the Climate Prediction Center's website. For more detailed local climate information, visit NWS Eureka's homepage, then click on the Climate and Past Weather menu.

Astronomy Corner

by Scott Carroll

On Wednesday, May 26th, a total lunar eclipse will be visible from northwest California. The penumbral portion of the eclipse, when the earth partially blocks sunlight from reaching the surface of the moon, begins at 1:48 AM. The moon will be setting in the southwest sky as the eclipse is coming to an end. This should make for some spectacular views…as long as the weather cooperates. Make sure to bundle up, as average low temperatures across the area are in the 40s in late May!

Total Lunar Eclipse – May 26, 2021	
Penumbral eclipse begins	1:48 AM
Partial eclipse begins	2:45 AM
Total eclipse begins	4:11 AM
Maximum eclipse	4:19 AM
Total eclipse ends	4:26 AM
Civil twilight begins	5:18 AM
Sunrise	5:50 AM
Partial eclipse ends	5:52 AM
Moonset	5:59 AM

Times are for Eureka, CA, but will be similar for our entire area.

There are also a couple of meteor showers during the springtime. The first is the Lyrid shower, which reaches its maximum around April 22nd. The best viewing of this shower will be late in the night between moonset and dawn. The second meteor shower of the spring is the Eta Aquarid shower, which reaches its peak on May 4th. The last quarter moon will be near the radiant of this shower, making viewing more difficult.

Moon Phases							
March		April		May		June	
☾	5th	☾	4th	☾	3rd	☾	2nd
●	13th	●	11th	●	11th	●	10th
☽	21st	☽	19th	☽	19th	☽	17th
○	28th	○	26th	○	26th	○	24th

Night Sky Calendar	
Date	Event
Mar 9	Moon-Saturn conjunction
Mar 10	Moon-Jupiter-Mercury conjunction
Mar 19	Moon-Mars conjunction
Apr 6	Moon-Saturn conjunction
Apr 7	Moon-Jupiter conjunction
Apr 17	Moon-Mars conjunction
Apr 22	Lyrid meteor shower maximum
May 3	Moon-Saturn conjunction
May 4	Moon-Jupiter conjunction Eta Aquarid meteor shower maximum
May 13	Moon-Mercury conjunction
May 15	Moon-Mars conjunction
May 26	Total lunar eclipse
May 28	Mercury-Venus conjunction
May 30	Moon-Saturn conjunction
Jun 1	Moon-Jupiter conjunction
Jun 10	Mercury inferior conjunction
Jun 11	Moon-Venus conjunction
Jun 13	Moon-Mars conjunction
Jun 27	Moon-Saturn conjunction
Jun 28	Moon-Jupiter conjunction

Moon phases and event information courtesy of NASA

More Upgrades to the Marine Kiosk

by Scott Carroll

The National Weather Service in Eureka has maintained a marine weather kiosk at the Woodley Island Marina for several years. The kiosk employs a touch screen to allow the user to access a variety of weather data, including marine forecasts, satellite and radar imagery, model data, buoy observations, and tide predictions.

We have continued to update the kiosk to improve the look and functionality, as well as to add additional content. Clickable marine and land forecast maps have been added, and links to other NWS Eureka text products have been included. Buttons have been added to other pages to make kiosk navigation easier.

Look for more features in the coming months as we continue to make improvements and additions. Our ongoing goal is to make the kiosk a one-stop source of information for mariners venturing out of the marina or heading inland from the marina. If you visit the marina, even if it's only for a bite to eat or to sightsee, stop by and give the kiosk a try!

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