

Madison River Ranch News

What's happening at the Ranch



From the desk of MRR Board President

John Graifemberg

2021 has been an eventful year for MRR. Particularly the Goose Lake fire that burned in the Cliff Wade Lakes area of the US National Forest. MRR coordinated our response to the fire and possible evacuation with federal and local agencies and surrounding land owners. Our three entry gates along with the common gate between MRR and Sundance Bench were locked in the open position and then unlocked and closed at the direction of the county fire chief.



I was fortunate to be able to receive professional fire consultation from Rick Kratt, one of our new property owners. Rick is a former US Forest Service hotshot firefighter and is currently a senior firefighter with the Kern County California Fire Department. At Rick's request I obtained capacity information for our common well and the adjacent cistern. This information was provided to the county fire chief so he could better understand available firefighting water capacity. I will be working with Rick and Frank Davis in preparation for fire mitigation recommendations and a more detailed plan for possible future fire evacuations that will be presented at the June 2022 annual meeting.

Please remember that the CC&Rs require that fires on the ranch must be contained in a forest service or better fire ring. Also, no fires are permitted within 200 feet of surrounding timber. This includes the burning of brush and tree cuttings. It

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The Annual MRR Meeting will be held on Saturday June 25 at 10:00 am Cliff Lake Village Schoolhouse

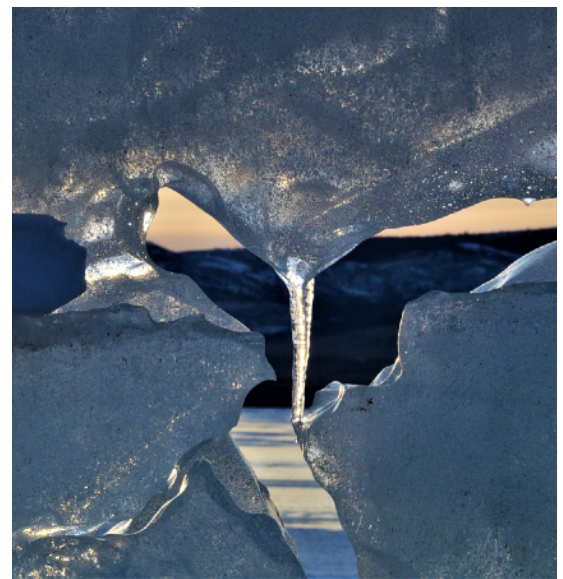


Photo by Mike Cramer

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is my understanding that the dump in Ennis will accept green waste. It could be another below normal perception year. I suggest that owners anticipate cutting of vegetation on their property early in the fire season.

The Board was short a member last summer. Phil Botsko volunteered for the position and was appointed by the Board.

MRR had a good year with respect to the sale of existing houses and raw land. Sale prices increased sharply and as you might expect so did our current property taxes. We had 6 major housing projects under construction this season with 2 more projects that have received design reviews, to be built next year.

I want to thank those who worked on obtaining a new/larger UPS/FedEx shed, particularly Rick Griffin who led the effort.

I also want to thank Wayne Booth who has the cabin above our lower gate that is access to the commons area. This fall Frank found that the lower gate was not working correctly. He determined the 3-year-old battery was not holding a charge from the solar panel and needed to be replaced. He drove to Ennis and bought a new battery. He charged the battery overnight and installed it the next morning. He verified that the gate system was working properly. I had told Wayne that the Association would reimburse him for the battery before he purchased it and a second time after he installed it. Wayne refused to accept payment and said to consider his time and costs to be his contribution to the Association.

We still have a few mailboxes available for purchase. If interested contact our treasurer Mark Juranek for payment and the post office for the key.

Property owners are responsible for their guests being informed of and obeying our CC&Rs. This year we had issues of guests, particularly RB&B guests, trespassing on private property, parking in the commons area without a parking pass or being accompanied by the owner, having fires without a proper fire ring or nearby water and unreasonably bright lights that in some cases were left on all night. Please inform your guests of the applicable CC&Rs in person or by written copy.

Wildlife on the Ranch**By Karen Roll**

People who enjoy watching birds often have a “spark bird”, a bird that really excites them. For me, it’s the American Kestrel.

The American Kestrel is the smallest of the falcons and the most colorful. They are found in many parts of southwestern Montana year round. Most kestrels migrate so the ones that are here in winter aren’t necessarily the same ones that were here in the summer. Their preferred habitats include farmlands and open country, especially areas with short grasses and sparse trees. Their population has declined over the last 50 years due to habitat loss and use of pesticides but their numbers have remained stable in the last ten years. Kestrels have been seen on Madison River Ranch from April through October often perched on a post or near the top of a tree. They often pump their tail while perched.

In the summer, they hunt in the early morning and evening, eating mostly large insects such as grasshoppers. During the winter they hunt throughout the day and eat small mammals, birds and amphibians.

Kestrels usually nest in a tree cavity laying three to seven eggs. Some of our neighbors have put up nest boxes and have had kestrels successfully nest in them.



Madison River Temperature

By Gene Welch

This is largely a repeat from Fall 2011, but revised with new information in 2016 and 2021. It may be more about temperature and fish than many of you wanted to know. However, you probably care about trout, and especially in the upper Madison, so here are some facts that may interest you. The Madison is rather special having an extensive, ongoing temperature monitoring and fish kill prevention effort.

Temperature is probably the most important environmental variable that regulates reproduction, growth, survival and distribution of fish populations. Being

poikilothermic (i.e., cold-blooded), a fish's body temperature varies with the ambient

water temperature. As cold-water species, trout have thermal requirements that are lower than most other freshwater fish. There are species differences,

but generally trout prefer temperature in the range of 53-65F, which is also optimal for growth and activity. Above or below that range they will be much less active. At higher temperature there is little or no energy left for growth after normal metabolic demands, so remaining active above their optimum is not energy efficient. Continuous exposure to about 75F for four days is usually lethal.



Photo by Mike Cramer

Temperature is extremely important in the Madison, because the river reaches maximums that exceed the usual preferred range in the upper river and lethal levels in the lower river downstream from Ennis Reservoir. Thermally-caused fish kills have occurred in the lower river in the past; the last was in 1988. To manage river temperature and prevent a thermal fish kill in the lower river, water temperature is continuously recorded at 15 sites throughout the river's length from April-October and air temperature at 7 sites. This work has been funded by operators (now Northwest Energy) of the two hydro dams for more than 25 years.

Maximum river temperatures usually occur in late July and early August. Average maximum during the warmest 14-day period at three up-river sites

Ranch Recipes

Thanks

Eleanore Botsko

Reuben Dip

In a crockpot add

- 1 jar of sauerkraut
- 1/2 package of cream cheese
- 1 package diced pastrami or corn beef
- 1/2 cup thousand island dressing
- 2 cups shredded Swiss cheese

On high until all cheese is melted. Mix well.

Serve with sliced French bread or rye crackers.

Enjoy!

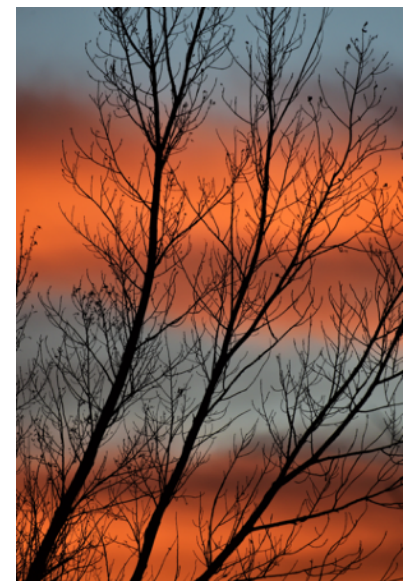


Photo by Mike Cramer

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in 2010 was 69F with only about 1F variation among the sites. The average maximum was about the same in 2015 for the warmest two weeks. The sites are at Kirby Ranch (upstream of the West Fork), Wall Creek and McAtee bridge. The highest summer maximum averaged 71F for the three sites in 2010. So, trout in the upper river were exposed to high temperatures well above their optimal range for an extended period in 2010, which was not the warmest summer in the past ten years; the summer maximums at the upriver sites in 2007 averaged 2F higher (73F) and 74.3F in 2015, the highest recorded since monitoring began in 1994.

Fortunately for the trout, summer clear nights in MT are cool causing substantially lower daily minimum water temperatures. The average daily minimum for the same 14-days in 2010 was 57F at the three up-river sites. That represents a 12F difference between average maximum and average minimum, which was about the same as the average of daily differences. The low night-time temperature allows the fish a respite from the stressful day-time highs. As a result, trout growth and survival are dependent on the daily average temperature, more than the daily maximum. The average daily median temperature, which is similar to the daily average, was within the optimal range at 63F and for the three sites during the warmest 14-day period in 2010. The average daily median at the three sites was about 2F higher in 2015. Thermal conditions are more favorable in the upper river, partly due the effect of Hebgen Reservoir.

Hebgen normally has a cooling effect on the river, because outflow is drawn from depth. Its outlet average daily median temperature during the warmest 15-day period in 2007 was 6F cooler than the inlet. However, water was released from Hebgen at the surface during construction of a new intake began in 2012. Maximum temperature of water released during 2012-2015 was about 5F higher than during 1996-2011. Temperature was also higher in 2017 due to surface releases.

Relatively low temperatures prevailed at the most upstream Kirby site. The daily average temperature during July 1- September 15 in 2010 and 2015 were 59F and 62F, respectively. Average daily temperature at Kirby during 2018 and 2020 were around 59F during reservoir bottom releases, and 61-63F during surface releases in 2012-2015 and 2017. The daily averages were well within the optimum range for trout. While daily maximums ranged from 64-69F during the warm July to August period in 2021, daily averages were around 61-63F (USGS data). Thus, low night time temperatures kept the daily averages within the optimum range.

Thermal conditions for trout are more stressful down river from Ennis Reservoir. The 14-day average maximum at the Norris site was 76F in 2010 and the minimum was 68F, the former being lethal if it were continuous for four days, and the latter above the optimal range. The highest daily maximum was 78F in 2010 and 80F in 2007. Clearly there is a serious threat of a thermally-caused fish kill in the lower river. Maximums were even another degree higher at sites farther down-river. The average diurnal range at Norris was 8F, so the average daily median for the 14-day period was 72F, not lethal, but well above the optimal range and 9F higher than the upriver average daily median of 63F.

A pulse-flow system was developed by MFWP and power companies in 1994 to prevent thermal fish kills in the lower river. The system activates if maximum temperature exceeds 68F at the Ennis Dam outlet and the next day's forecasted air maximum exceeds 80F at Three Forks (river mouth). Those conditions result in a pulse release of 1400 cfs (cubic feet/second) in early morning to cool the downstream reach by late afternoon. With incremental warming of the outlet up to 73F and next day predicted Three Forks air up to 95, pulse releases will increase to as high as 2400 cfs. Pulse releases were needed each year from 2000 to 2007, but not

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in 2008-2010. Water is released from Hebgen Reservoir to replace the water loss from Ennis Reservoir. There were 29 to 43 pulse releases in 2000, 2003, 2007 and 2013, while 12-18 releases occurred during six other summers including 2015. These releases drew down Hebgen 2.68 and 2.12 feet in 2003 and 2007, with lesser amounts the other years.

Madison River temperature may have increased over the past century. Air temperature has increased from 0.9 to 3.6F per century at nearly all of over a hundred monitoring sites in the Pacific Northwest during 1920 to 2000, and the Madison responds quickly to air temperature. However, the current record is not sufficiently long-term to detect a trend. The current river monitoring will be extremely valuable to determine any future trends. Not only are air temperatures expected to increase further in the future, summer stream flows in the Pacific Northwest are predicted to decrease substantially by the 2020s, because snowmelt will be earlier. Lower stream flows probably mean higher water temperature. This does not bode well for Madison River trout. It's fair to ask if future generations will enjoy the fishing experiences that we currently take for granted?

Gene Welch, 2021

Acknowledgement: The data discussed here were taken from annual reports by Pat Clancy, Travis Lohrenz, Mike Duncan and Matt Jaeger with MFWP.



New UPS Fed Ex shed

At the annual MRR membership meeting in June the membership approved funds for a larger UPS/ Fed Ex shed. Rick Griffin offered to head up a committee to carry out the project. The Strong Shed Company from Idaho was the company that built and installed the new shed. The new shed is 8 feet by 12 feet and 12 feet high and is in place and structurally complete. It has a roof which slants to the back so snow and rain will drain away from the door. There is a bi-level shelving system on the long side and one end has been left without shelves to accommodate large boxes which didn't fit in the old shed.

In the spring the shed will be painted, a culvert will be installed and the access leveled out with gravel. A portable lighting system will also be put in so ranch owners can find their packages after dark.

Other ranch members who helped Rick with the project included Scott McMahan who donated 7 yards of gravel for the foundation and helped to level it out. Hills, Phil and Jim Dawson also assisted.

Both UPS and Fed Ex drivers expressed thanks for the new shed, saying the new shed will save them much time and energy because loading packages into the old shed was like trying to solve a puzzle with too many packages for the size of the shed.



Fish stranded after Hebgen Lake Dam glitch cuts off water to Madison River

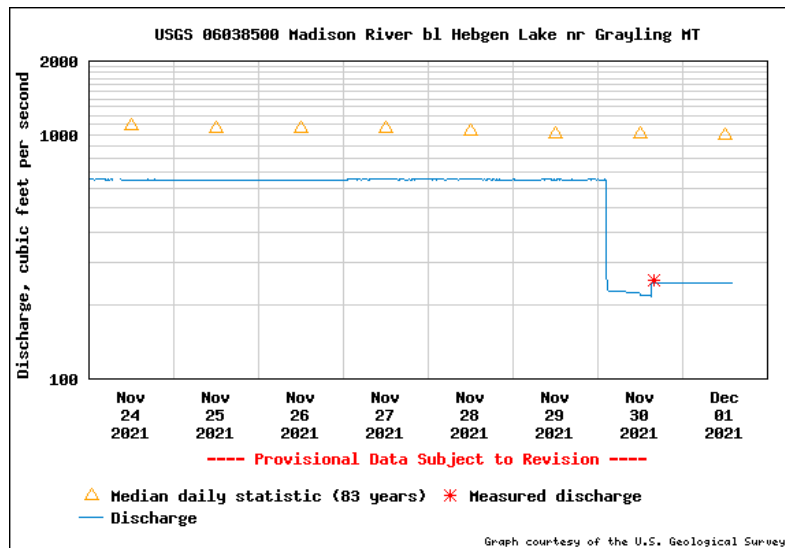
Information for this article is quoted from Billings Gazette, Bozeman Daily Chronicle. Most photos courtesy of Kelly Galloup.



Nov. 30, 2021. A dramatic plunge in the upper Madison River due to a problem at the Hebgen Lake Dam has stranded some fish and bodes ill for brown trout eggs resting in now exposed gravel.

“It was pretty ugly up there,” said Kelly Galloup, owner of a fly-fishing shop close to the dam.

Overnight releases from the dam plunged from about 650 cubic feet per second to 195 cfs in a freefall recorded on U.S. Geological Survey’s streamflow gauge below the dam. Likewise, the gauge recorded a sharp decline in the water temperature as it went from 39 degrees to 32 before rebounding to 34 degrees after the gauge was exposed to the air.





“NorthWestern thought it was a glitch in. their gauge,” Galloup said

The energy company’s public relations specialist said in an email that NorthWestern was aware of the problem and was working to restore the flow.

"The real question is how they could not know it happened," Galloup said.

An angler on his way to fish the river at 9 a.m. was the first to notice the declining river level, Galloup said. The fisherman stopped at the shop, and Galloup and his colleagues began working the phones to try to alert NorthWestern Energy officials to the problem but couldn’t get through. Then they tried agency personnel who finally reached NorthWestern officials. Montana Fish, Wildlife & Parks information officer Morgan Jacobsen said fisheries biologists were on scene assessing damage to the resource.

“The severity at this point is unclear,” he said.

Jacobsen discouraged anyone from traveling to the river to rescue stranded fish. Galloup said people stepping onto the dried riverbed could inadvertently crush brown trout eggs resting in gravel that's been exposed.

Montana Trout Unlimited tweeted a photo of the gauge, alerting people around the nation to the concerning conditions on one of the most popular trout fisheries in Montana. Then calls began pouring in to Galloup's fly shop from the East and West coasts.

"People care about this river," he said. "This puts a big exclamation point on it."

Initially, the low flows were limited to a two-mile stretch of water just below the dam, but by late Tuesday afternoon the flows were plunging next to Galloup's shop and moving slowly downstream.

"The brown trout eggs are what everyone is worried about," he said, because if the eggs die the river could potentially lose an entire year-class of fish.

Photos Galloup shot show the upper river reduced to a trickle, dead trout stranded around a dewatered pool and sculpins and trout left stranded on the streambed.

NorthWestern contracted with an Anaconda company to manufacture a new coupler that divers worked late into the night to install on Dec 1. Once the repair was completed the gate was opened to restart flows 46 hours after the part failed.

NorthWestern will conduct a thorough investigation, including a root cause analysis, to fully understand the failure,

We at Madison River Ranch can sigh a huge relief as the water levels around 3 Dollar Bridge receded slowly enough that the fish did not get stranded as indicated in the photos above.

Many thanks go out to the volunteers that helped in the effort to rescue trapped fish from the shallow water.



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<http://www.madisonriverranch.org>

Barbara Gibbs, Karen Roll, Newsletter Editors

RemindersGate combination
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5971**Thank You All**

Many thanks to all the helpers that make MRR such a special place to be: Board Members, weed sprayers, roadside litter cleaners, photographers, web designers, road crews, gate keepers, delivery trucks and mail delivery people, newsletter contributors, and YOU.

We Would Like To Meet You

We would like to meet our neighbors on the ranch! One of the usual articles in the bi-annual newsletter is an introduction. There are many new ranch owners that have not yet had a chance to write an article to introduce themselves. It is interesting to learn what drew people to the Madison River Valley and the Madison River Ranch.

To share your introduction contact a Board Director via the ranch website:

<http://www.madisonriverranch.org>