

OREGON PALEO LANDS CENTER

September 2021

Our Mission Statement

The Oregon Paleo Lands Center (OPLI) works with the Gateway Communities of the mid-John Day Basin (Condon, Antelope, Fossil, Service Creek, Spray, Mitchell, Kimberly, Dayville and Monument) to build social and economic vitality through efforts:

To conserve, interpret, and promote the natural and cultural history of the John Day Basin/Blue Mountains through time.

To develop and connect, with partners, the John Day Basin/Blue Mountains' visitor services, recreational services, natural and cultural history education opportunities.

To welcome, educate, and connect visitors, schools, area residents and businesses at the Oregon Paleo Lands Center (OPLC), and through other media.

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Board message

The global pandemic that disrupted so much of normal life in the big world has made its mark in the fossil lands of Oregon, no doubt. But it has had a few surprising effects that are not all-together bad.

One of these effects has been that people looking for a socially distanced good time are discovering, or rediscovering, the John Day Fossil Beds National Monument. Officials from the National Park Service have reported especially high use at the Painted Hills unit this summer. It is bringing the public out to enjoy public lands. The trend is also likely introducing a new generation to Oregon's amazing paleo past.

The Oregon Paleo Lands Institute is also working toward rejuvenation after a long, challenging period. This summer saw the Paleo Lands Center in Fossil add its first new exhibit in a decade, A River Flows Free. This montage of photos and music encapsulates millennia of trends and change in the John Day River Basin. The video runs on a loop at the Center during visiting hours and is also available on our website. The hope is this video will capture the imagination of visitors, new and repeat, and introduce school children to the rich history and scientific opportunity our region affords. SEE VIDEO: www.paleolands.org

The Paleo Lands Institute board of directors has also been working to renew old acquaintances in the region and make new ones. Board members have recently met with Roy Zipp, the new superintendent of the John Day Fossil Beds National Monument. The board hopes to continue and strengthen cooperation between the Monument and the institute.

Board members also met recently with Steve Memminger, district manager of the Oregon State Parks and Recreation Department. That meeting restarted progress on the John Day Basin Joint Interpretive Strategy. This plan involves State Parks, the Paleo Lands Institute, and other stakeholders in the basin. The hope is to develop efficient and cooperative ways to market the area and educate visitors. Progress on the document had been put on ice during the worst part of the Covid Pandemic. The board also plans to reach out to other old friends, including the City of Fossil, Wheeler County, and Wheeler County School Districts.

Other projects in the stir are more of the brick and mortar variety. Time has taken its toll on the beautiful natural cedar of the Paleo Lands Center. The building is in dire need of new exterior staining and varnishing. This need has gone beyond aesthetics and is now a matter of preservation.

The board is working to raise grants, donations, or both to achieve this. The Kee Family Fund is offering up \$1,500 in matching funds for every dollar raised to re-stain the Center. Jeffrey Kee is president of the Paleo Lands Institute board of directors.

The board of directors is also inviting applications for new board members. Anyone with an interest in the Paleo Lands is eligible. Residents of the John Day Basin or those with ties to the communities we serve would be especially helpful in continuing the mission of promoting the resources and communities of the basin. **Please contact jkee@hevanet.com, if you can help.**



Paleo Center Maintenance Challenge Grant



The Paleo Center in Fossil needs significant maintenance this year. The Kee Family Fund is a donor advised fund with the Oregon Community Foundation. The Kee Family has offered to match up to \$1,500.00 in donor/sponsor cash donations for building maintenance in 2021. Please consider helping us keep our building beautiful by supporting the re-staining of the exterior wood and supporting our work. All cash donations to the center are tax deductible supporting an Oregon 501 c3 organization.

[A River Flows Free Video, 10,000 years of John Day Basin History 29 Minutes](#)

-See it at regular Paleo Center Hours May - Oct, 10am - 4pm, Thurs - Sat

-See it online any day on the Home Page: www.paleolands.org

Beaver Believer Aug 5 2021

Our state animal is starting to get the recognition it deserves After a century and more of pursuit as a furbearer and being labeled by the state of Oregon as a predator the American Beaver continues to garner support for its obsessive habits. Research and restoration on Bridge Creek a tributary of the Wild and Scenic John Day River of Oregon continues to reveal and promote the restoration work of this member of the rodent family. The beaver dominated North American rivers and streams for thousands of years, maybe millions. Their dam building obsessions expand wetlands, create new channels, open forest canopies and rotate habitats for thousands of wildlife and plant species.

As Anglo-European settlers explored the region in the 1800's the value of this furbearer was revealed. The beaver fur top hat was desired by a variety of cultures and a competition to trap and produce their fur was underway.



Efforts began in the early 1800's to completely trap out beavers in the Oregon Territory. It was a strategy adopted by the Hudsons Bay Company to cripple any competing interests in the region.

As human development advanced into the John Day Basin settlers often worked to simplify river and stream systems to meet their agricultural needs. Streams were often channelized to the outside edges of meadow floodplains, large wood along rivers were used for firewood and willows were ripped out so ranchers could see predators. Altering the natural processes of rivers and valleys has reduced the amount of water available in the basin and threatened species and habitats. Straightened waterways with little vegetation allow water to flush more quickly out of the valleys. Given enough time, focus and desire humans can learn and implement effective restoration to increase water availability and help support the recovery of imperiled wildlife species and habitats.



Bringing back the beavers to help humans get more of what we value is now a reality. In the late 1980's, land managers with the US Department of the Interior, Bureau of Land Management (BLM) working among the Painted Hills outside of Mitchell could see the benefits of the beavers work on Bridge Creek. There was more water pooling in the stream and willows were invigorated from regular trimming. Unfortunately, the flashy hydrological cycle of the area, coupled with the lack of large woody material were resulting in the regular destruction and wash out of beaver dams and a loss of their habitat benefits.

Land managers in the region from BLM and the Ochoco National Forest recognized the value of our state animal on lands they managed for our benefits and values. In 1989, these agencies wrote letters to the Oregon Department of Fish and Wildlife seeking an emergency closure of beaver trapping on the Ochoco National Forest and within the Bridge Creek system. This was in recognition of beaver as a necessary ingredient in riparian recovery. This request was granted in 1992. The Bureau of Land Management spent 17 years observing beaver work in Bridge Creek. Local managers recognized 'the benefits of beavers in altering the geomorphic conditions of Bridge Creek that are favorable for fish habitat. They also noted that the small woody material used by the rodents were getting washed out almost every year.

The mid-Columbia Steelhead (*Onchoryncus mykiss*) had been recognized as threatened for 2 decades in 2006 when more government agencies were starting to notice the efforts in Bridge Creek.



Organizations charged with reducing the impacts of human activity such as the Bonneville Power Administration realized they should look into additional investment in the waterway. Local managers began experimenting with driving wood post structures, spanning the stream to withstand spring flushes. They settled on a design that would come to be known as Beaver Analog Dams or Beaver Dam Analogs and spark increased recognition of the value of beavers in restoring desirable habitats. Eventually Bridge Creek was nominated to become an 'Intensively Monitored Watershed' under the guidance of the National Oceanic and Atmospheric Administration.

By 2015, over 100 structures were installed in the drainage that has led to measurable improvements in habitat and fish numbers. Water pooled behind the natural and human enhanced structures has been documented to buffer extreme water temperatures, provide cooler water refuge for fish and raise water tables in the valley providing additional sub-irrigated pasture for livestock producers. Beaver dam building is not appreciated by all.

Some land managers have expressed concern of the resulting increases in wetlands and surface water. It can limit and increase potential adverse impacts for active agricultural production. Live trapping and transporting beavers to where they are desired is challenging, often resulting in a 50 percent mortality of the animals. From 2010 to 2014 the Oregon Department of Fish and Wildlife (ODFW) reported 2,746 beavers were trapped by permit. Since ODFW has labeled the beaver also as a predator (for cutting and eating trees) private landowners in Oregon are not required to secure a permit to remove a beaver. There is also a federal program in Oregon to remove nuisance beavers that kills about 500 of our state animal annually.



Researchers and installers of Beaver Dam Analogs recognize that these structures can be a cheaper and easier method of stream restoration. The price for installing them averages between one and five thousand dollars per structure. This is significantly less than historical in-stream restoration work that requires much more engineering, permitting and heavy construction. However, they caution that if they are not placed correctly in the proper location it can result in real adverse impacts. In the right place the technique of driving poles and weaving willows across tributaries could be the most important restoration tool for land managers in the John Day Basin.

It appears our knowledge has progressed to circle back, recognizing that nature offers the best designs for its conservation and restoration. Is it time to take beavers off of state nuisance and predator lists and acknowledge their ability to restore resiliency across our country? Summarized by Jeffrey Kee, Vice President, Mid John Day/ Bridge Creek Watershed Council from Using Beaver Analogues for Fish and Wildlife Recovery on Public and Private Range Lands in Eastern Oregon. USDA Pacific NW Research Station July 2019, PNW-RP-612



Cant Ranch Discussion, Paleo Board members Jeffrey Kee and Richard Ross met with John Day Fossil Beds Staff.

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Thank you for your ongoing support!

Oregon Paleo Lands Center Needs You!

You can support the Oregon Paleo Lands Center in a variety of ways. Your financial support now in 2021 is vital to continue our mission of exploring, teaching about, and protecting Oregon's paleo lands. Donor benefits include a 10% discount on retail merchandise at the Oregon Paleo Lands Center in Fossil, a regular newsletter with information about scientific discoveries, history, and news of the Paleo Lands, and advance notice of upcoming OPLI and partner organization events. All donations are tax deductible.

Interested in volunteering at the Center or serving on the Board?
 Contact us at paleolands@gmail.com or www.paleolands.org or at PO Box 104, Fossil, Oregon 97830 (541) 763-4480.