

Outdoor Recreation Heaven

by Dixie Chichester

For those of us who count the minutes until the next time we can get out to hike, fish, camp, bike, picnic, swim, paddle or ride in our own incredibly gorgeous Pend Oreille County, the near future may prove to be extremely exciting. The Pend Oreille County Parks and Recreation Advisory Board is currently in the process of developing a new Parks and Recreation Comprehensive Plan and is setting some mighty nice goals and objectives concerning our outdoor recreation opportunities in the next 6 years. Some of the possible projects outlined in the new plan include the construction of more trails, a disc golf course, improved camping/ picnicking opportunities, environmental education/ outdoor recreation programming, activities for youth and improvements and expansion of our popular, new Pend Oreille River Water Trail.

The 2008 Commissioners (Oliver, Merrill and Cummings), realizing that a vibrant county parks and recreation program would not only provide recreation opportunities for County residents but also attract tourists, entice new residents, improve the County's economy and provide jobs, passed a resolution stating all proceeds from timber sales from a section of land ceded to the County by the State Department of Natural Resources be deposited into the Park Fund to establish and improve parks and recreation throughout Pend Oreille County. This Park Fund, enlarged by some recent logging, along with a new, approved Parks and Recreation Plan, will allow Pend Oreille County to apply for grants and receive matching funds to assist in renovating and developing new parks and recreation facilities and programs.

The Parks and Recreation Board has gone to great lengths to determine what types of outdoor recreation activities the residents of Pend Oreille County desire. In June of this year, 244 participants in an outdoor recreation survey made their opinions known about current park facilities, desired activities and parks and recreation financing. The top two requests were for more self-guided nature trails and more day-use picnic areas. Complete results of the survey can be found on the survey link on the parks and recreation page of the County website, www.pendoreille.org/county/parks.asp

The survey also tried to determine levels of satisfaction of existing County parks. Thanks to the efforts of WSU Extension, Kalispel Tribe, PORTA, US Forest Service, PUD and many other agencies, one of the highest rated and most often used outdoor recreation opportunities is the scenic Pend Oreille River Water Trail. There are currently about 24 designated water trail sites and Pend Oreille County owns 12 of them. At these 12 sites, plans are in place to improve boat launches, add picnic tables, install interpretive signs, build a restroom at one of the sites and develop wildlife viewing areas. Water sport classes, paddling tours and other water/nature related programs are also on the agenda.



λiyé?

In order to turn these plans into reality, Pend Oreille County and other outdoor recreation agencies in the area will require plenty of assistance from volunteers. Please call right now and join others in the "Adopt a Water Trail Site" to help in maintaining a clean and safe Water Trail. Watch in 2014 for the opportunity to become a member of the Pend Oreille County Parks and Recreation Foundation. You can also visit the County parks and recreation website (shown above) to keep track of planned projects and events. For more details about any of these programs or to place your name on the new Parks and Recreation e-mail/ mailing list, call the Pend Oreille County Community Development Office at 509 447-6454. Right now opportunities in "Outdoor Recreation Heaven" are all around us and it is great news that those opportunities will just be getting better and better.

Restoration of Bull Trout Passage at Albeni Falls Dam

Jason Connor, Fisheries Management Program, Kalispel Tribe of Indians

The Pend Oreille / Clark Fork River flows 500 miles from its source near Butte, Montana, through Pend Oreille Lake, Idaho to its confluence with the Columbia River in southern British Columbia. Eight non-federal hydroelectric dams and one federal facility (Albeni Falls Dam) have been constructed without fish passage. These dams have fragmented bull trout habitat throughout the basin and blocked the fish from returning to natal spawning tributaries. Fish passage facilities have been or will be constructed at all non-federal hydroelectric facilities in the US portion within the coming decade. The US Army Corps of Engineers is currently conducting a feasibility study for permanent fish passage at Albeni Falls Dam.

Bull trout were historically abundant in the Box Canyon Reach of the Pend Oreille River between Metaline Falls and Albeni Falls, but precipitously declined after construction of Albeni Falls Dam in 1952. In their 2000 Biological Opinion, the US Fish and Wildlife Service (USFWS) commented on their rapid disappearance and noted that “their numbers [had] decreased to the point that individual fish [were] noteworthy”. Hundreds of thousands of fish have been sampled in that reach since 1988 by multiple entities, with bull trout only numbering in the dozens.

Gilbert and Evermann (1895) surveyed the Box Canyon Reach for the United States Fish commission in 1892 and described its water as “clear and pure and cold (**nx^wuk^wk^w, ne^latk^wm**) – an ideal trout stream,” further noting that “salmon trout”, identified as bull trout in the taxonomy section of their report, were “quite abundant . . . We know of no stream which offers finer opportunities with rod and reel than the lower Pend Oreille.” Jordan and Evermann (1908) identified the Box Canyon Reach as one of the nation’s premier bull trout waters: “It has been our pleasure to fish for Dolly Varden [i.e., bull trout] in many different waters, among which we recall with particular satisfaction the Pend Oreille River from the Great Northern Railroad [i.e., Newport, Washington] to the international boundary . . .”. Bull trout persisted in good numbers throughout the Box Canyon Reach until the 1950’s: “many large Dolly Varden [i.e., bull trout]” were harvested during a Field and Stream tournament held on the Pend Oreille River in 1957 (Metaline Falls Gazette, April 3, 1958) (Scholz et al 2008).

Historical records documented that salmonids easily ascended the natural falls upon which Albeni Falls Dam was constructed. Gilbert and Evermann (1885) noted, “These falls [were] scarcely more than a pretty steep rapid and would not interfere at all with the ascent of salmon[ids].” Rathbun (1895) observed that “trout [species not indicated] pass[ed] freely up the[se] falls” (Scholz et al 2008).

Albeni Falls Dam created two types of problems for bull trout in the Pend Oreille Basin. First, bull trout from natal tributaries above the dam that either become entrained or choose to pass downstream are unable to return to spawn in those tributaries. Source populations could include bull trout spawning in the Priest River, inlet tributaries of Pend Oreille Lake, or tributaries of the Clark Fork River. Second, adfluvial bull trout that formerly spawned in tributaries below the dam and migrated upstream to a cold water refuge in Lake Pend Oreille, Idaho are no longer able to do so. Further, completion of Box Canyon Dam in 1957 inundated the Box Canyon Reach, converting it from “an ideal trout stream” into a reservoir that was not conducive to bull trout production (Scholz et al 2008).

Because of these impacts from Albeni Falls Dam, the USFWS Biological Opinion (USFWS 2000) directed the Corps to evaluate the feasibility of restoring passage at Albeni Falls Dam. This research began in 2001 and continues today including movement, habitat use, survival, genetic assignment of natal tributaries, and biological statistics. The Kalispel Tribe, Eastern Washington University and Pacific Northwest

National Laboratories have been providing temporary upstream passage by boat electrofishing, snorkeling and dip-netting in coldwater refugia, and angling since 2007. Twenty-eight bull trout originating from tributaries upstream of the dam have been returned upstream, providing valuable information on the homing behavior of bull trout in the watershed.

Due to concern about personnel safety, potential electrofishing injury to bull trout, and low capture efficiency, alternative methods of bull trout capture have been sought. The Kalispel Tribe and partners have begun developing a temporary upstream trap to be fished annually in the tailrace of the dam as an additional interim fish passage measure in lieu of intensive electrofishing downstream of Albeni Falls Dam. We expect to operate the facility annually (beginning 2014) from March-July until river temperatures exceed 16-18 °C and again in fall once temperatures drop below that point. Providing effective fish passage at the dam will allow connectivity among essential habitats, including access to thermal refugia, forage and natal spawning tributaries. This will result in increased survival, productivity, and genetic integrity of the population which should naturally promote recovery.

Successful downstream passage of migrating fish at Albeni Falls Dam is also necessary to sustain, increase, and restore migratory bull trout, as well as other native species. Injury and mortality associated with passage through hydroelectric turbines and spillways is a major concern. The Corps, Kalispel Tribe, and contractors plan to quantify the direct effects of passage through Albeni Falls Dam in the fall of 2013 using marked fish released above the dam and subsequently recaptured and evaluated immediately downstream. This study should provide insight that can potentially lead to operational changes, structural modifications, and/or pattern and rate of spill.

For more information on the Kalispel Tribe involvement in bull trout passage at Albeni Falls Dam, please contact:

Jason Connor, Fisheries Management Program, Kalispel Tribe of Indians
(509) 447-7285, jconnor@knrd.org



aáycčst

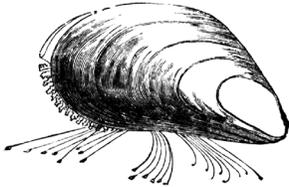
Like all salmonids, bull trout have a fleshy adipose fin located between the dorsal fin and the slightly-forked tail. The back and sides of bull trout are typically an olive-green/brown color with light cream to crimson colored spots that are similar in size to the pupil of the eye. The belly is often pale yellow or a whitish color. The pectoral, pelvic, and anal fins have a white leading edge and the dorsal fin lacks markings, appearing opaque.

In 1998 Bull Trout were listed under ESA as a “threatened” species. The Pend Oreille Salmonid Recovery Team chose bull trout as the top priority fish species for recovery in the Pend Oreille River Watershed. Bull trout are extremely sensitive to environmental disturbance which makes this an indicator species of environmental change. (www.posrt.org)

▲ ▲ ▲ ▲ Worse than Milfoil? Invasives in the Pend Oreille River ▲ ▲ ▲ ▲

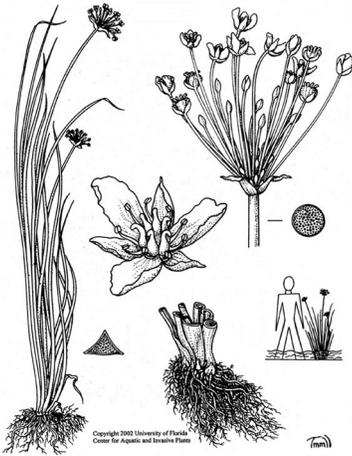
by Sharon Sorby, Pend Oreille County Weed Board coordinator

Eurasian milfoil (*Myriophyllum spicatum*), is one of the worst aquatic plant pests in North America. It spreads fast through fragmentation—a tiny sprig dropped into a clear waterbody can soon become a milfoil jungle. By late summer in 1982, Eurasian milfoil covered approximately 200 acres of the Pend Oreille River. By 1988, it had infested over 2400 acres. The rapid spread of Eurasian milfoil is a cautionary tale to alert us to possible new invaders.



Zebra mussels (*Dreissena polymorpha*) and Quagga mussels (*Dreissena bugensis*) are native to the Caspian Sea. They were introduced into the Great Lakes in the mid 1980's in ships ballast water and have spread to several popular western lakes including Lake Mead and Lake Havasu.

Where introduced, these small shellfish reproduce prolifically, threatening native fish and costing taxpayers millions by clogging power plant, irrigation and other water intakes. Because the mussels can live out of water for up to a month they may be easily transported on recreational and commercial boats. They can be attached to hulls and propellers, live as microscopic larvae in bilges and live wells, or can be introduced with plants attached to boat or trailer. So far, none have been detected in the Pend Oreille system. Preventing introduction is the goal of boat check stations like the ones in Idaho or the volunteer monitoring program on Diamond Lake. A lot rests on the diligence of recreationists in effectively cleaning boats and trailers when moving to a new body of water.



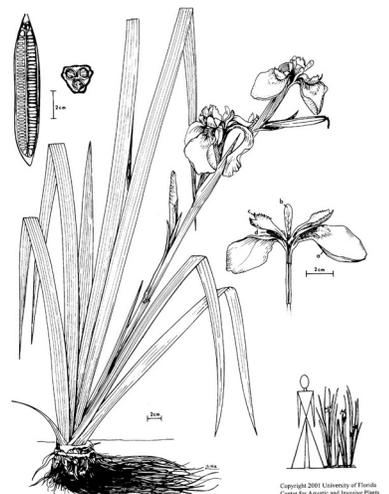
A new invasive weed that is poised to be a problem is flowering rush (*Butomus umbellatus*). This weed can form dense stands, and since it spreads rapidly through rhizome fragmentation, extreme care must be taken in digging and removing the plant. It has become established in Lake Pend Oreille, and was first found in the Pend Oreille River downstream of Albeni Falls dam in 2010 and removed. A survey conducted with volunteer help last summer found at least 30 clumps of the weed distributed from Newport to Cusick. Boater help is needed in detecting and reporting new spots.

Besides clogging waterways for boating, fishing and other water recreational activities, the plants are the perfect habitat for the snail that carries the parasite that causes swimmer's itch. It is already present in some of the rush clones that have floated in from upriver. Removal of the clones may prevent the parasite from becoming established in the lower Pend Oreille River.

Yellowflag iris, (*Iris pseudocorus*) has become common on several local lakes and in portions of the Little Spokane River. An escaped ornamental, it outcompetes the native vegetation and is difficult to remove once established. Several areas along the Pend Oreille River are being treated this fall and help is needed to detect new infestations.

Many other potential aquatic invaders could also give Eurasian Milfoil a run for the money in impacting fish habitat, water quality and recreation—hydrilla, Brazilian elodea, parrotfeather milfoil and water hyacinth are a few that come to mind.

Please contact the Pend Oreille County Weed Board if you have questions about identifying aquatic weeds or to report new areas of invasives along the river. You can stop by the Weed Board and Extension Office at 418 S Scott (next to the Courthouse) to pick up information about identifying these non-native invasive pests, phone 447-2402 or email ssorby@pendoreille.org



Kalispel Natural Resources Department
WSU/Pend Oreille County Extension
South 418 Scott
PO Box 5045
Newport, WA 99156

PRSRT STD
POSTAGE & FEES
PAID
NEWPORT, WA 99156
PERMIT NO. 40



WSU Extension programs are to be offered without regard to race; sex; religion; age; color; creed; national or ethnic origin; physical, mental or sensory disability; marital status; sexual orientation; and/or status as a Vietnam-era or disabled veteran.

or current resident

Persons with a disability requiring special accommodations while participating in this program may call 1 509 447-2401 at least 5 days before the program.

Pend Oreille County Extension
S. 418 Scott, PO Box 5045, Newport WA 99156

Life Long Learning Opportunities in Pend Oreille County

<http://pendoreille.wsu.edu>



in this issue...

Getting to the River

The Kalispel's River

Outdoor Recreation Paradise

Restoration of Bull Trout Passage

Forest Stewardship

Worse than Milfoil?



WSU/Pend Oreille Extension introduced the Sense of Place program in 1999, with a focus on place-based stewardship education. Since 2001, a partnership with the Kalispel Tribe of Indians Natural Resources Department (KNRD) has supported this newsletter and allowed us to expand class offerings through EPA funding. Further staff support comes through Renewable Resources Extension Act (RREA).

Recently, the "Sense of Place" partnership has focused on Pend Oreille River Water Trail development. This newsletter and associated water trail interpretive materials are one result. With adoption of the water trail concept plan, the many community partners involved with water trail development are moving forward with maps, signage, new logo and websites and even a facebook page. Please continue to enjoy the river with us, and to be curious about its past and its future. We are blessed to have this artery of life running through our county—in turn, we owe it our respect and our commitment to keep it alive and well for future generations.