

# Panhandle Region Annual Fisheries Report

## 2013 Activities and Accomplishments



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We hope you enjoy this summary of our research and management activities in 2013. The regional management staff has undergone some changes. Recently, Ken Bouwens joined us from Alaska where he managed sport and commercial salmon fisheries for the Alaska Dept. of Fish and Game for 15 years. Ken takes over for Rob Ryan as the Avista funded Clark Fork Settlement Agreement biologist. Rob is staying with us, but will now be working on streams and lakes throughout the region. Finally, Melo Maiolie, Regional Biologist, recently retired after an outstanding career with IDFG. He's a passionate angler, so he'll continue to sample regional fisheries, but now with a fishing rod. We'll be filling his position this spring.

This newsletter is posted on the IDFG website <http://fishandgame.idaho.gov/public/about/offices>. If you have questions or want to share your thoughts, please give us a call. If you'd like to be included on an e-mail distribution list for periodic summaries and information, send a request to [jim.fredericks@idfg.idaho.gov](mailto:jim.fredericks@idfg.idaho.gov) and we'll add you to the list.

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## St. Maries to get New Fishing Pond

It may not look like much yet, but by early summer anglers will have a new spot to fish near St. Maries. In early spring, IDFG renovated the boat ramp and access area on the St. Maries River, which lies about a mile south of the town of St. Maries on Highway 3. During the planning phase for that work, it occurred to access site manager, JJ Teare that IDFG had an ideal site for a pond on the property as well. Working with IDFG engineers and access site foreman, Dave Ross, plans were drawn for a 1.3 acre pond adjacent to the river. Avista agreed to fund construction of the pond as part of the Post Falls Dam mitigation program.

Pond construction began in early December. The unusually cold weather was perfectly timed to facilitate excavation. The frozen ground kept the mud to a minimum and slowed the subsurface water flow into the pond site. Once excavation is completed, the area will be contoured and a raised berm will be formed around the perimeter to facilitate fishing. Subsurface flow from the St. Maries River will keep the pond full, and we expect the pond level to rise and fall with the river



This spring, we'll seed and plant the area with trees. We'll stock the pond with trout once the shoreline dries out and is sufficiently vegetated. Weather permitting, we hope to be able to host a Free Fishing Day event at the new pond in June. —Jim F.

## Priest and Upper Priest Lake—Fishery Futuring

The future management of the Priest Lake fishery has been a hot topic of discussion over the past two years. In short, some anglers have advocated a program to minimize the lake trout population in favor of more abundant kokanee, cutthroat, and bull trout populations. Why, they ask, has IDFG “written off” Priest Lake yet put so much effort into restoring the historical Lake Pend Oreille fishery? Others value the existing lake trout fishery and want to see it maintained. Why, they ask, would IDFG consider messing with a fishery that’s working just fine the way it is?

Complicating the matter is the link between Priest and Upper Priest lakes. Upper Priest Lake still supports an abundant cutthroat population and a healthy population of bull trout. The “simple” solution would be to maintain the native fish populations in the upper lake. Unfortunately, the ability for lake trout to pass freely between lakes through the Thorofare makes separate management strategies for the two lakes anything but simple. Preventing lake trout from taking over the upper lake has taken an intensive 15-year annual suppression effort. The program amounts to a “finger in the dike” approach that is simply unsustainable.



Large trap nets set in the Thorofare have been part of the effort to keep lake trout from taking over Upper Priest Lake.

As managers of a resource that belongs to all of the people of Idaho, IDFG is charged

with making a decision that will ultimately provide the greatest benefits to the majority over the long term. That’s more easily said than done. Not only is the public split on what they perceive as providing the greatest benefits, but there is still a lot we don’t know about the ecology of the lake’s fisheries. Before we can make long-term management decision, we all need a better understanding of the social, economic, and biological consequences of the alternatives.

Recognizing that, the recently completed 2013-18 State Fishery Management Plan directs IDFG to use the next few years to gain a better understanding of how the fishery in Priest Lake is functioning. At the same time, the plan recommends engaging a diverse group of stakeholders to provide input from a range of perspectives. The biological information and the stakeholder group will be used together to help guide development of a more informed, long-term management plan for both lakes.

### Lake Trout Population Assessment

One of the most important pieces of information needed for long-range planning is a better understanding of lake trout. Beginning in 2013, with funding from the Kalispel Tribe, we initiated a 2-year cooperative project with the University of Idaho to conduct a comprehensive population assessment. The study will provide information on the number of lake trout in Priest Lake, as well as key characteristics such as growth and survival rates, food habits and harvest rates.

Lake trout were collected with commercial scale equipment, tagged, and released as part of a large-scale population assessment.



Last spring researchers used large-scale commercial netting equipment, similar to that being used in Lake Pend Oreille, to capture trout for the population estimate. Fish were measured and marked with an individually numbered tag.



In total, just over four thousand lake trout were handled, and nearly three thousand of those were tagged and released. The incidental catch of other species was very low. We captured 3 bull trout, 1 kokanee, 95 suckers, 11 whitefish, and 22 pikeminnow—all of which were released alive.

The project represents the first comprehensive assessment of the lake trout population on Priest Lake – ever! Not only will it give us a better understanding of population characteristics, an outgrowth of the assessment will be a better understanding of the impacts of “barotrauma” — the over-expanded swim bladder lake trout often get when pulled from 100-150 feet of water by nets or anglers. The university researchers are using a variety of methods to estimate survival rates based on degree of barotrauma as well as methods of treatment. These are all extremely valuable pieces of information regardless of how the population will be managed in the long term.

*Before we can make long-term management decision, we all need a better understanding of the social, economic, and biological consequences of the alternatives*

### What can Anglers Do?

Report tagged lake trout! There are now over 3-thousand lake trout tagged in Priest Lake. Each of those tags is labeled with an individual number as well as a toll-free telephone number. By returning these tags, anglers will help us understand harvest and survival rates as well as total population size.

Perhaps more importantly, anglers can stay informed as we collect new information and work with the advisory group to make a decision in the coming years. Looking at facts as we learn them, and listening to the perspectives and values of others will help everyone involved appreciate the challenges associated with developing and implementing a long-term management plan. Tuning out the conversation, and then complaining after the fact accomplishes little.

As we gather new information in the coming years, we will continue to provide periodic updates via e-mail, and share information at public meetings. For a more personal discussion, I always welcome folks to call or come by the office. Stay tuned — Jim F.

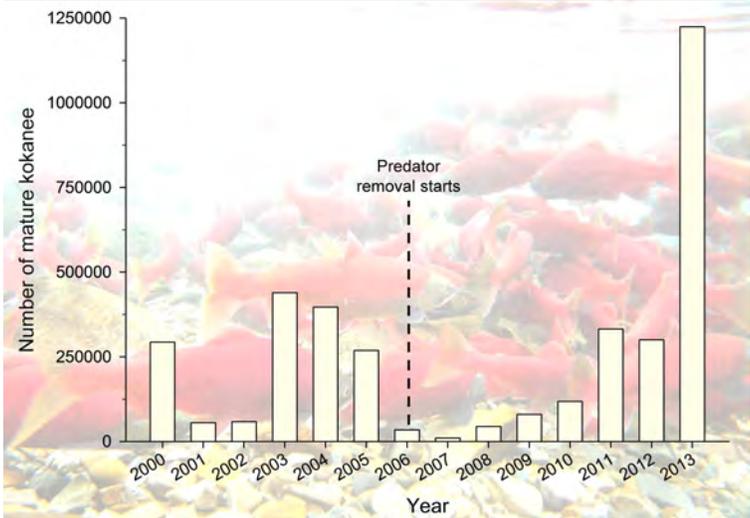
# Pend Oreille Fishery Recovery Effort Update

The Lake Pend Oreille fishery has steadily improved in recent years following intensive efforts to reduce predation on kokanee. Lake trout have been dramatically reduced thanks to angler harvest and targeted netting efforts. As a result, kokanee survival has increased and the population has grown. Two major management changes were made in 2013. First, a kokanee harvest fishery was reopened after a 13-year closure. The opportunity to harvest kokanee generated more angler effort on the lake than has occurred in years, and kokanee fishing was good. Second, the Angler Incentive Program for rainbow trout was discontinued and we've begun rebuilding the trophy rainbow fishery that once existed. The results are already evident, with bigger rainbow trout being caught. In fact, numerous fish over 20 pounds were caught in 2013, which is a notable improvement from recent years. Trophy fishing for rainbow trout should only improve if kokanee continue to do well.

**Kokanee**—The greatest highlight of 2013 was the tremendous increase in the kokanee population. Over 1.2 million mature kokanee survived to spawn. This is one of the highest spawner returns we've seen in the past 40 years and is about a four-fold increase from 2012. At the Sullivan Springs trap, where kokanee eggs are collected to fill the Cabinet Gorge Fish Hatchery, nearly 200,000 kokanee were handled, and 11.4 million eggs were collected. Compare that to 2007 and 2008, when the population bottomed out. In each of those years, only around 5,000 kokanee were handled and the total egg take was about a half million eggs. Younger kokanee also were abundant, especially age-2 fish, which means we should have another strong return next year and great kokanee fishing in 2014!

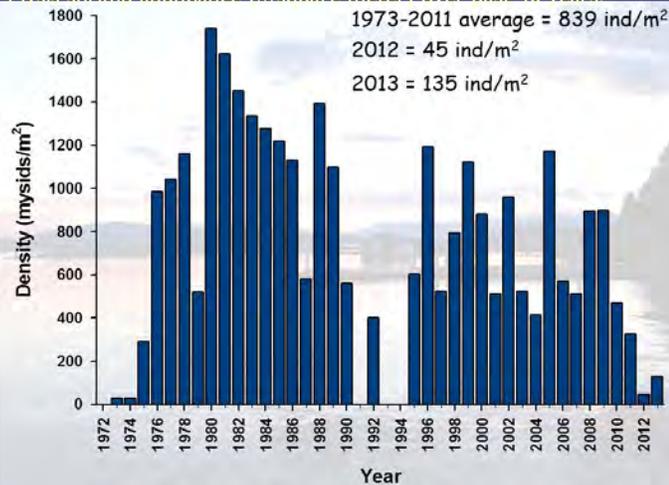
In addition to the decrease in lake trout, a decline in the mysid shrimp population may also be contributing to the kokanee resurgence. These small freshwater shrimp have been present since the late-1960s and compete with kokanee for food (both eat zooplankton). In 2012, the mysid shrimp population nearly collapsed and their density was almost 95% lower than the long-term average dating back to 1973. They remained at low density in 2013. We are unsure what caused such a sudden drop in the shrimp population, but the

Estimate of mature kokanee in Lake Pend Oreille from 2000 through 2013.



past two years of low mysid density have almost certainly benefitted kokanee. Another possible benefit to the decline in shrimp abundance could be a decrease in juvenile lake trout survival. Time will tell whether or not mysids will rebound and how much kokanee have benefitted from the reduced decline, but the timing couldn't be better.

Mysis shrimp abundance (#/square meter) over past 40 years



**Lake Trout**—Lake trout predation on kokanee has been the primary limitation to kokanee recovery over the past decade. Aggressive efforts to remove lake trout continued in 2013, marking the eighth year of this program. We continued to use both the Angler Incentive Program (\$15 reward) and commercial netting equipment to remove lake trout. Together these actions have successfully reduced the size of the lake trout population to a level where it no longer is limiting expansion of the kokanee population. This is a major achievement and possibly the best evidence to date that large-scale suppression of lake trout is not only possible, but effective.

We now are entering the next phase of this program. With a much smaller lake trout population, our next challenge is keeping these fish at low abundance into the future. We will be evaluating options

for a maintenance program that will allow for a gradual reduction of annual netting effort. Our goal is to reduce the netting effort (and cost) of this program over time, while still keeping lake trout at low abundance. We expect to continue the Angler Incentive Program for the foreseeable future, so the changes will be focused on netting activities. This process will take time, but the fact that this transition is beginning after only eight years since starting the removal program is significant.

We have a variety of new activities planned for 2014, but most notable for anglers is a 12-month creel survey. We will be conducting angler counts and interviews throughout the year to estimate how much fishing effort and harvest is occurring for each of the fish species in the lake. This survey is very important for evaluating regulations and other management actions, so we ask that you partner with us to gather this information.—Andy D., Nick W., Bill H., and Bill A.

## Coeur d'Alene Lake Fishery Monitoring

The Coeur d'Alene Lake fishery is a delicate balance between predator (Chinook salmon) and prey (kokanee salmon). Further complicating the picture is the natural conditions in the lake, which can be very good for the fishery (good zooplankton production) or very bad (excessive runoff and flooding). Over the past 30 years, we've seen lots of ups and downs in both species. Fortunately for the past 3-4 years, we've seen excellent environmental conditions, and anglers are benefitting.

### *Kokanee Population Monitoring*

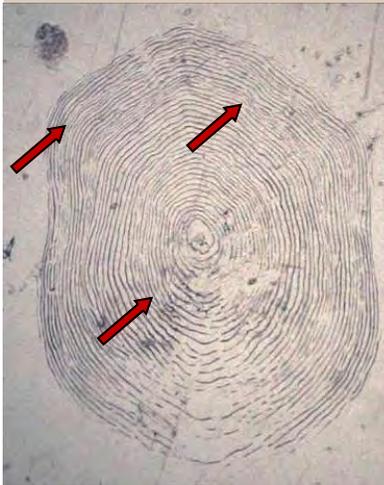
Each year we monitor the kokanee population using a midwater trawl and hydroacoustic equipment. Collecting the kokanee and estimating numbers is only part of the job. We also have to determine how old they are, so we can assess growth rates and abundance of each age class, from fry up to spawners. To do that, we examine scales from a representative sample of fish and look for annuli or growth "checks" that occur when fish cease growing in the winter. In 2013 we were once again encouraged to see continued high abundance of spawners, as well as juvenile year-classes. We estimated over 3.5 million age-1 kokanee. This continues to bode very well for both kokanee and Chinook anglers alike (and the bald eagles that feed on the spawned out kokanee).

### *Wild and Hatchery Chinook Salmon Evaluation*

The growth in the kokanee population has allowed us to begin building the Chinook population. In 2011 the regulations were changed to allow only 2 Chinook per angler, with a 20" minimum size. The rule, combined with the abundant prey base, appears to be making a difference. A total of 743 lbs. of Chinook were weighed in during Lake Coeur d'Alene Anglers Assn's annual "Big One" derby.

To monitor the population, we estimate spawner escapement by counting redds (spawning nests) in the tributaries to Coeur d'Alene Lake. Early surveys were done from a helicopter, but we now float the main spawning sections of the Coeur d'Alene and St. Joe rivers using canoes. Ideally, Chinook escapement will result in 100-120 redds—enough to produce enough juveniles to maintain a good fishery, but not so many that the kokanee population is jeopardized. This year we counted 129 redds—a bit high,

Scale impression and the annual "checks" of a 3-year-old kokanee sampled in Coeur d'Alene Lake.



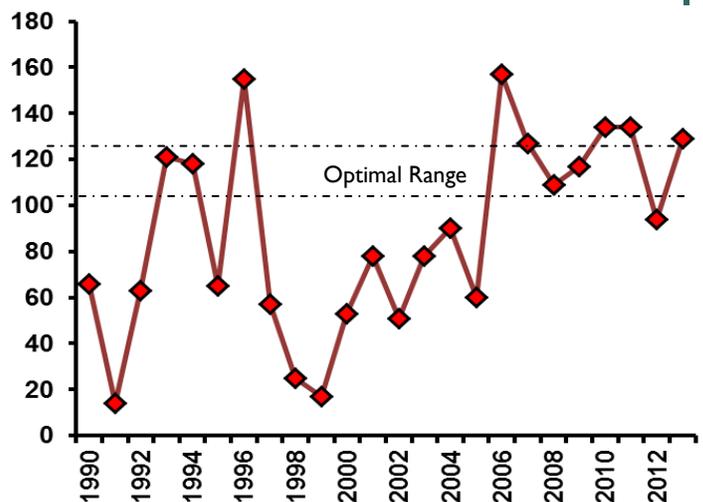
but not cause for alarm.

In addition to counting numbers, we also assessed the age of spawning adults. Like all salmon, Chinook die after spawning. To learn their ages, carcasses were recovered from the Coeur d'Alene River and otoliths (ear stones) were removed from the heads. Once removed, the otoliths are sanded and burned to help identify the annual growth rings. We were pleased to see that over half of spawners were 5-year-old fish, and only 2 of 16 were 3-year-olds. This suggests that harvest pressure is not forcing fish to spawn at younger ages, and smaller sizes.

Unfortunately, despite stocking 20,000 juvenile adipose-clipped Chinook each

year, we're still seeing very few hatchery Chinook in the fishery. We've made changes to release timing, and more recently switched hatcheries where the fish are raised, and we'll continue to try to find a combination that works, but for the time being, the fishery continues to be primarily driven by natural reproduction. While that's not a bad thing, it means that we're at the mercy of Mother Nature, and it also means the late summer fishery is primarily concentrated at the south end of the lake.

All indications are that, for the foreseeable future, anglers should continue to enjoy a good balance in the kokanee and Chinook populations and a productive Coeur d'Alene Lake fishery.—Jim F.



The number of Chinook salmon nests or "redds" counted in the Coeur d'Alene and St. Joe rivers from 1990 to 2013.

# KOKANEE ABOUND

*Between the Old, the New, and the Renewed, Kokanee Kept Anglers Busy*

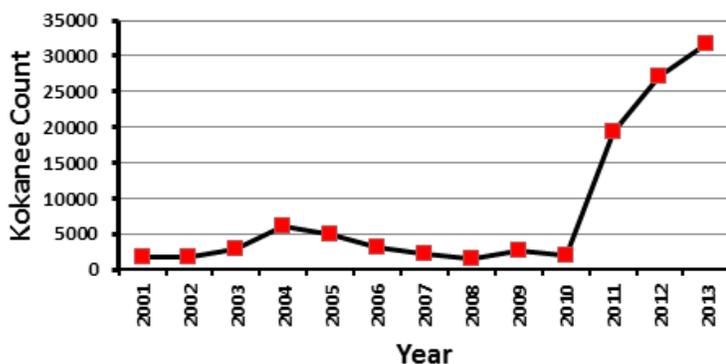


It's been a long time coming, but the Lake Pend Oreille fishery recovery effort has reached an important milestone. For the first time since 1999, anglers can harvest kokanee. One of the big questions we've had is whether kokanee anglers would come back, considering how long the fishery has been closed to harvest. Based on the 2013 season, the answer would seem to be a resounding "yes". Though the limit is still fairly restricted at 6 per day, hundreds of anglers participated in the fishery and most had little trouble finding kokanee, which were well dispersed throughout the lake. Kokanee ranged from 9-11 inches and were fat and healthy. For more information on the Lake Pend Oreille fishery recovery program, see page 3.

Meanwhile dozens of anglers headed to Hayden Lake this past summer to take advantage of a newly established kokanee fishery. Beginning in 2011, IDFG stocked 100,000 kokanee fry into the lake in an effort to rejuvenate the once-popular off shore trolling fishery. Thus far, the program has worked well. As 2-year-old fish, the kokanee stocked in 2011 grew to 16-18 inches and created a popular fishery.

Several hundred kokanee survived the fishery to spawn—some up Hayden Creek and others on the shoreline around the lake. For the most part, while interesting and fun to see, the spawning activity won't likely have much of an impact on the population. September spawning kokanee generally need cold running tributaries to reproduce successfully. Though they may try to spawn along the lake shore, the relatively warm lake water temperatures cause embryos to hatch out prematurely. Successful lakeshore spawning is associated with a November/December strain of kokanee. Those fish spawning in Hayden Creek will likely fare better, but accessibility and low flows in late summer will likely limit the number of fish that are able to make their way into

**Priest Lake Kokanee Spawner Count**



Hayden Creek. In the big scheme of things, it's doubtful that there will be significant natural reproduction, but that's not a bad thing. The intent all along has been to manage numbers primarily by fingerling stocking. We've increased the stocking number to 150,000 fingerlings and will continue to evaluate the fishery. Anglers should continue to enjoy some good Hayden Lake kokanee fishing in the future.

On Priest Lake, kokanee continued to increase in numbers (see Figure). Though summer trawling and hydroacoustic estimates were not encouraging, meaning overall densities are still very low, shoreline spawning counts indicated a third year of successive increases. Though anglers didn't typically catch lots of fish in 2013, those they did catch were 14-16 inches. While we don't know whether this trend will continue or the population will collapse, kokanee have been a welcome addition to the Priest Lake fishery.

Elsewhere in the region, abundant kokanee populations in Coeur d'Alene and Spirit lakes continue to provide great opportunity. Though kokanee in these two lakes tend to run 9-11 inches, the 15 fish daily limit makes an outing worth while.

Kokanee anglers needn't look only to the big lakes for opportunities. Lower Twin, Mirror, Brush, Smith, and Bonner lakes all provide some kokanee fishing. None of these lakes has significant natural reproduction, so the fisheries are maintained by annual stocking of fingerlings. In general, stocking densities are lower because these lakes are also stocked with trout. Anglers shouldn't expect to catch a 15-kokanee limit, but whether ice fishing in winter or trolling in the summer these smaller lakes can offer great fishing. —Jim F.



The Hayden Lake kokanee were a big hit with anglers (and a few yellowjackets) in 2013.

## Kootenai River Fisheries Research

### *Tribal Hatchery Helping to Restore Native Fish Populations*

One component of the Kootenai River white sturgeon recovery effort is using non-lethal gillnets to evaluate catch statistics of wild and hatchery reared juvenile sturgeon. Wild recruitment remains a major concern for the long-term future of this population, and annually we only catch about 10 wild juveniles in our gill nets. However, juvenile sturgeon raised and released from the Kootenai Tribal Fish Hatchery are doing well. In 2013, IDFG captured 1,417 juvenile sturgeon which marks the highest juvenile sturgeon catch since we began this program in 2002.

In 2013 we initiated a detailed evaluation of juvenile sturgeon growth and survival rates to better understand how many juvenile sturgeon reside in the Kootenai River/Lake system, and if current stocking densities are affecting growth. Preliminary results suggest that both survival and growth rates are highly variable among years and growth rates have not significantly declined in recent years with increased stocking densities. The long term goal of this recovery effort is a self-sustaining

population, but hatchery reared juvenile sturgeon are providing an important stop-gap measure until natural recruitment can be restored.

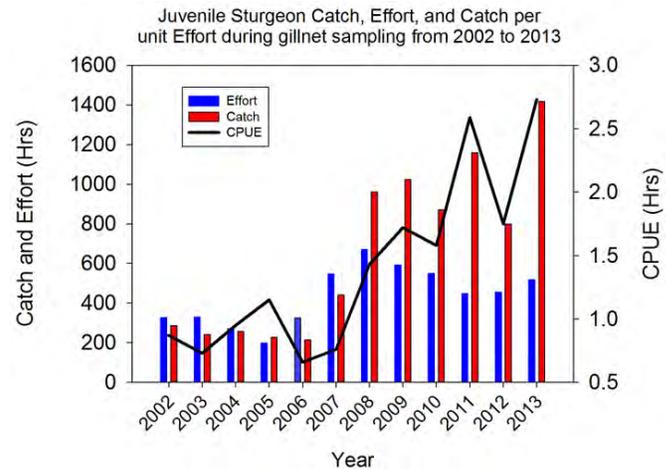
Burbot are also benefitting from a hatchery program. In 2013 IDFG fishery biologists captured 180 burbot in hoop nets on the Kootenai River. This is a substantial increase from previous years and a direct result of recent hatchery releases to recover the dwindling wild population. Intensive rearing techniques for burbot have been increasingly successful in the past few years. The University of Idaho (funded through the Kootenai Tribe of Idaho) raised and released 450,000 larvae and 10,000 juvenile burbot in five locations throughout the Kootenai River in 2013. Recently, recaptured burbot from the early releases show excellent growth.

The primary obstacle to burbot spawning and hatching success is thought to be a combination of altered flows and temperatures as a result of Libby Dam. Although these factors have not yet been resolved to enable natural recruitment, we hope adults will use the cooler tributaries lower in the basin, such as the Goat River in British Columbia, to spawn. In addition, burbot may benefit directly from stocking into these lower tributaries since physical conditions to support natural reproduction may still remain. Although not a complete substitu-



Juvenile burbot or "ling"

Biologists use electrofishing to evaluate the rainbow trout population in the Kootenai River.



tion for natural reproduction, intensive hatchery stocking is possibly a means of sustaining the population and rebuilding a fishery.—  
Ryan Hardy and Pete Rust

### *Nutrients Improving Fishery*

Phosphorus and nitrogen are essential components of all aquatic ecosystems. Since Libby Dam began operating on the Kootenai River, in northern Idaho the river has become nutrient-limited due to trapping of nutrients behind the dam. This nutrient limitation has translated from the bottom of the food web (e.g., periphyton and macroinvertebrates) to the top (e.g., fish). Beginning in 2005, the Kootenai Tribe of Idaho (KTOI) and IDFG, have been adding liquid phosphorus and nitrogen to the river near the Montana/ Idaho border to compensate for these lost nutrients. 2013 marks the ninth year of the nutrient additions, and it was also the year in which the highest volume of nutrients were added to the river. Monitoring and evaluation conducted by both IDFG and KTOI shows positive results at all trophic levels. Algae and insect densities in the treatment reach have increased by more than four times from pre-treatment years. More importantly, fish populations are showing positive responses, as well. Electrofishing catch of all species has nearly doubled since nutrient additions began.

Rainbow trout populations, as measured by electrofishing catch at a fish monitoring site below the nutrient input site increased from 165 to 406 rainbow trout per hour after nutrient additions. Not surprisingly, this is translating into better fishing. The most recent creel survey in 2011 reported angler catch rates of 0.66 trout/hour, which is a significant improvement from the 0.20 trout/hour in 2001. The Kootenai River also boasts 280 trout/mile, which is a marked improvement from 180 trout/mile prior to nutrient additions in 2004. With the success of this experiment, the KTOI and IDFG plan to continue adding nutrients in the years to come, and it is expected that sport fishing in the Kootenai River will continue to get better and better.—TJ Ross

## Assessing Walleye Harvest Rates



Walleye were illegally introduced in the Montana portion of the Clark Fork drainage in the 1990's. IDFG first documented them in Lake Pend Oreille and the Pend Oreille River in 2005. Since then, they've dispersed widely and shown successful reproduction, though overall numbers remain low. Typical of a new and expanding population, walleye currently exhibit fast growth, good condition, and early maturity.

Angler interest in Pend Oreille walleye has increased along with the population. While some anglers have advocated a management strategy that would encourage the growth of the population, others are concerned about potential adverse impacts to the existing sport fishery and native fish populations. IDFG policy states that where walleye have been illegally introduced, they will not be managed with size or bag limits. The liberal limits have been a point of contention with some anglers who believe the population is currently being overharvested. A description of exploitation (annual harvest) rates and total use (percentage of the population that is harvested or caught and released) is essential to understanding the impact angling is having on walleye abundance and size structure.

With the help of a volunteer angler, we conducted an evaluation of walleye exploitation (annual harvest) rates in Pend Oreille Lake and the Pend Oreille River. From April through August 2012, a total of 257 walleye were tagged by angling and electrofishing, primarily in the northern portion of the lake and the transitional area between Pend Oreille Lake and the Pend Oreille River. Tagged walleye ranged from 10 to 27 inches, but most were 16-18 inches.



As of October 16, 2013, only 17 tagged walleye had been caught by anglers. Of those, 14 were harvested. After adjusting for reporting rates and tag loss, we estimated annual harvest to be 4.5% and total use (accounting for caught and released fish) was 6%. These harvest rates are well below a level that would affect size structure or abundance. In other studies across North America, walleye populations did not decline with exploitation rates under 20%, and some withstood exploitation rates exceeding 30%. Our evaluation suggests that fishing regulations have little bearing on the walleye population. At current rates of harvest, angling isn't an effective tool to suppress or control the expansion of the walleye population.

Want 'em or not, the reality is walleye are here to stay — at least for the foreseeable future. Given the size of the Pend Oreille system and the wide distribution of walleye throughout, we have no practical means of effectively removing enough walleye to drive the population down. Maybe that

will change, but until it does, IDFG can do little more than monitoring distribution and abundance and assess impacts to our existing fish populations. We'll have to hope they're minimal.—Jim F.

## Crappie Investigations

Regional staff began an assessment of crappie populations in some of the regions more popular crappie lakes. Hayden Lake is one of them and is currently the only lake in the state that has a regulation on crappie (6 fish none under 10 inches). Twin Lakes also has a very important crappie fishery on which there are no restrictions. The objective of this assessment was to compare crappie growth rates and abundance between these and other lakes within the region to determine if the crappie fisheries can be strengthened.

We collected crappie from lakes using trap nets and electrofishing in late spring and fall and measured and aged each crappie. However, possibly due to the time of year in which we sampled, too few crappie were collected this year to fully evaluate the fisheries from these lakes. Preliminary results suggest crappie from Hayden Lake have better growth rates than those from Twin Lakes. Nonetheless, using what we learned this year, sampling will contin-

ue in the coming year in the Panhandle's crappie lakes.

Based on the size and age structure of crappies sampled in 2013, both by anglers and electrofishing, we saw strong age-classes of sub-adult fish in the 8-9" range. This suggests that both Hayden and Twin Lakes should provide some excellent crappie fishing in 2014 and 2015. —Kasey Y.



## Acknowledgements:

We appreciate the partnerships and support from the many individuals, organizations and agencies that help us to achieve our mission, including:

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Avista  
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Bureau of Land Management  
U.S. Fish and Wildlife Service  
U.S. Forest Service  
Coeur d'Alene Tribe  
Kootenai Tribe of Idaho  
Kalispel Tribe  
Rathdrum Parks and Rec.  
Lake Coeur d'Alene Anglers Assn.  
Lake Pend Oreille Idaho Club  
Panhandle Bass Anglers  
Pend Oreille Bass Club  
Shoshone Co. Sportsmen Assn.  
Bonner Co. Sportsmen Assn.  
Kootenai Valley Sportsmen Assn.  
North Idaho Flycasters  
Inland Empire Fly Fishing Club  
Trout Unlimited  
Priest Lake Sportsmen Assn.  
Idaho Dept. of Lands  
Idaho Dept. of Water Resources  
Dept. of Environmental Quality  
University of Idaho  
Montana Fish, Wildlife and Parks

# Idaho's State Fish

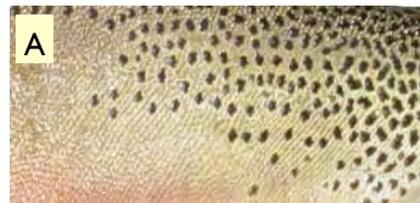


## *A Lake Pend Oreille Highlight*

Did you know cutthroat trout are Idaho's state fish? In the Panhandle Region of Idaho, westslope cutthroat trout are the native cutthroat trout. Cutthroat are commonly identified by their bright orange throat slash and sparse spotting concentrated near the tail and upper portion of the fish. Westslope cutthroat trout once provided fantastic fishing opportunities in north Idaho's large lakes, such as Lake Pend Oreille, Idaho's largest lake.

Cutthroat trout in the Lake Pend Oreille system spawn and live as juveniles in streams. Some of these fish then move out to the lake to grow large and return as adults. Others stay in the stream to live their whole life. Although still the most abundant fish species in most tributary streams to Lake Pend Oreille, the number of cutthroat trout that migrate from streams to Lake Pend Oreille has declined from their historic abundance. Declines in Lake Pend Oreille cutthroat trout are commonly linked to changes in stream habitat, competition with introduced fish species, or barriers like dams that prevent access to once linked spawning streams upstream and downstream of the lake.

The Idaho Department of Fish and Game along with partners such as Avista Utilities, US Forest Service, and many others recognize cutthroat trout are a valuable resource and have the potential to provide great fishing opportunities. These partners are identifying and implementing a variety of projects to help increase the number of cutthroat trout in Lake Pend Oreille. Recent projects include such efforts as reducing non-native predators like lake trout in Lake Pend Oreille, conserving valuable stream habitat through conservation easements on private property, restoring good complex stream habitat for cutthroat by adding large trees to key stream reaches, and developing fish passage facilities around dams. In addition, these partners are working hard to gather additional information to identify where the next best places are to do even more for this fish of Idaho — Rob R.



### **NAME THAT SKIN**

Many fish are best identified by skin color and spot patterns. How well do you know your fish? *Hint:* these are all from trout that can be found in northern Idaho waters.

Answers below.....

A—cutthroat trout (the black spots and uneven pattern is a giveaway); B—rainbow trout (black spots, evenly distributed and a characteristic "pink rainbow" down the lateral line); C—bull trout (the pink spots are unique to bull trout); D—brown trout (note the irregular black and red spots with blue/gray halos)