Idaho Fish and Game Magic Valley Region Fisheries Newsletter Volume III Issue I February 2012

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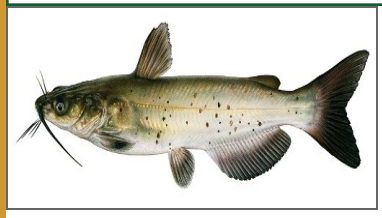
Free Fishing Day Saturday June 9, 2012

Hello Sportsman,

2011 was another busy season for the Magic Valley Region fisheries crew. This past field season saw us sampling waters all across the region. Angling opportunities abound in the region. Both warm and coldwater fisheries exist in the Magic Valley Region, and provide the angler with wonderful opportunities for catching many species of fish. This past season we embarked on a large extensive project on the Hagerman Wildlife Management Area (WMA). A creel survey was completed to estimate angler effort on the WMA, and compare it to historical angling effort , Sampling to determine carp populations throughout the WMA was also completed, with the overall goal being to reduce carp numbers. We also completed bass population monitoring on a number of large reservoir fisheries in the region, as well as revisited historical Yellowstone Cutthroat trout waters in the region to determine population estimates. Enjoy this issue and contact me anytime if you are ever interested in joining us in the field, Have fun out there!

Scott

IDFG photo



Catfish Transplant and Exploitation

IDFG photo

The Magic Valley Region supports a number of different Catfish fisheries. One of those fisheries is Dog Creek reservoir located in Gooding county. Dog Creek reservoir supports mainly a warm water fish community including bass, pan fish, tiger muskellunge, and catfish, but also has stocked trout. Channel catfish are stocked in Dog Creek reservoir each year. Most catfish stocked are between 8-10 inches, and are purchased from a local aquaculture facility. To explore cost savings avenues, in 2011 IDFG transplanted 85 large Channel catfish between 18 and 24 inches into Dog Creek reservoir from the Snake river near Parma, Idaho. Another 88 Channel catfish between 12-14 inches were caught via angling by a local fisherman, and by IDFG trap nets. These 88 catfish were tagged with orange Floy tags and released back into the reservoir. Biologists use tag return data from anglers to estimate and determine harvest in the fishery. 2 tags have been returned, for an estimated harvest of 10% of the Channel catfish in Dog Creek reservoir.

Patton Creek Restoration Effort

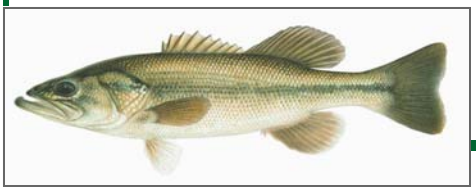
In a collaborative effort with The Nature Conservancy, and a private landowner, IDFG sampled the Patton creek fisheries community in 2011. Patton creek is a small spring creek, and a tributary to Silver creek located near Picabo, Idaho. Over time Patton creek has suffered habitat degradation, and is disconnected from Silver creek with velocity barriers. Patton creek was historically a significant spawning tributary for trout in Silver creek. At the present time both an altered channel and high temperature issues limit Silver creek trout from using Patton creek to spawn. Through Collaborative funding from Miller-Coors, cooperation from the Stevens Family , and TNC, restoration on Patton creek has begun. Riparian vegetation plantings have been completed to strengthen stream banks and also provide canopy for cooler water temperatures more conducive to trout. IDFG sampled two reaches in 2011 with backpack electro fishing gear. Species composition, and population estimates were determined. Species present in Patton creek included Sculpin, Rainbow , Brown, and Brook trout, Bridge Lip sucker, Speckled dace, and Red Side shiners. Follow up surveys will take place after the restoration is complete to compare the fisheries community and population.

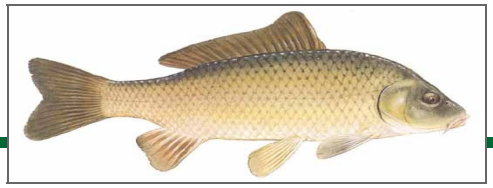
IDFG Photo

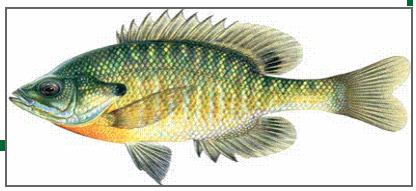
IDFG Photo

Hagerman WMA Fisheries Sampling

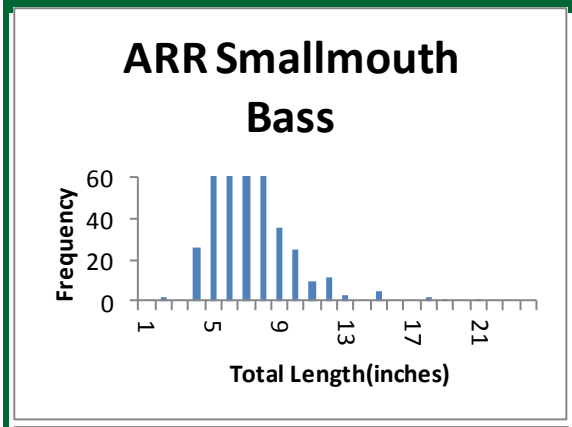
Historically the Hagerman Wildlife Management Area (WMA) south of Hagerman, Idaho provided some of the best Bass and Bluegill fishing opportunities in the Magic Valley region. The Bass ponds, Anderson Ponds 1,2,3,and 4, as well as the west highway pond all provided a unique small pond fishery. Angler effort surveys completed by IDFG in the early 1980's showed high angler use and high angler fishing satisfaction. In the mid to late 1990's that all changed. It changed because of a fish called the Common carp. Common carp are native to Asia. Carp alter water quality, reduce primary productivity, and severely impact warm water fisheries. They compete heavily for food as well as habitat. They are fast growing and can produce millions of offspring. Once carp become established in a fishery, they are extremely difficult to control. In 2011 IDFG started a multi faceted approach to understanding the fishery dynamics on the WMA . This included conducting an angler creel survey for comparison to the 1980s survey. It also included inventorying water structures and water movement, as well as the current situation with carp . The long term goal being to remove carp to a point where Bass and Bluegill fisheries could rebound. In 2011 all water control structures were surveyed to document barriers against carp movement between fisheries on the WMA. By controlling carp movement IDFG could then survey each fishery separately. In the spring of 2011 IDFG completed Mark and Recapture population estimates on Anderson Pond #2 and #4. Once the population estimates were determined, carp suppression, and removal could then take place. Immediate carp removal took place on Anderson Pond #1 where 59 carp were removed, and west highway pond where 164 carp were removed because carp were of spawning, at the time of sampling. Based on population estimates in Anderson Pond #4, 85% of the carp were removed . In Anderson Pond #2, where population estimates were higher than in Anderson Pond #4, only 43% of the carp where removed. Continued sampling and removal will be done in 2012.

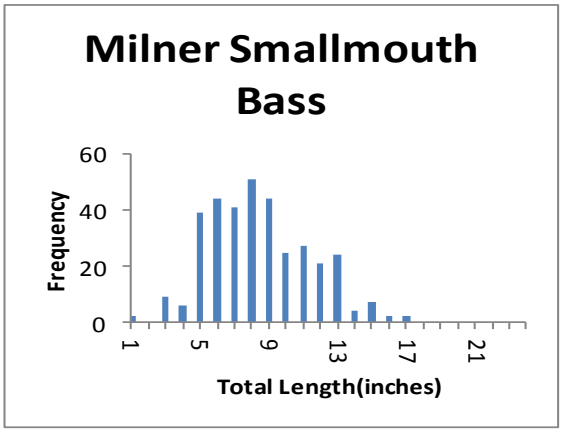


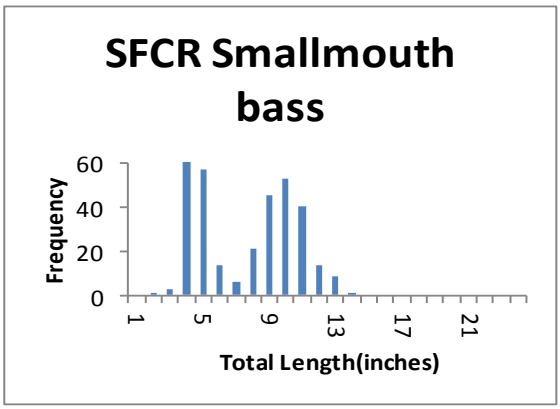




IDFG Goes Fishing In The Dark



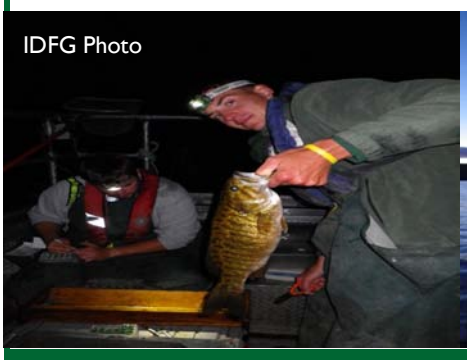


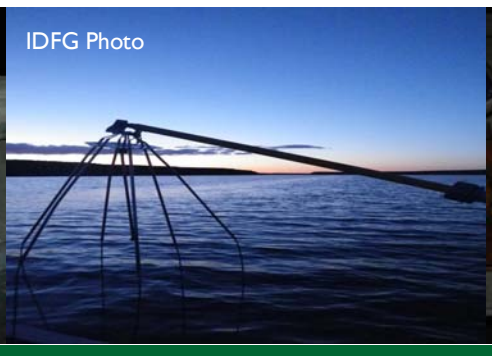


When most other folks have finished a long day of work in the summer and are relaxing on the porch, the IDFG Magic Valley fisheries crew is just getting ready for another night of fishing in the dark. It is standard routine for most fisheries folks to sample in the dark , so wearing a headlamp and lifejacket is a must. Sampling fisheries in the dark of night is more efficient, and also is easier on the fish. Temperatures are cooler at night, and easier to work up the fish and collect the required data. IDFG fisheries biologists use all types of sampling gear for nighttime work, oftentimes using large sampling boats. Having up to date navigational gear is a must as sampling becomes challenging and sometimes dangerous depending on weather. Kokanee salmon trawling, large reservoir Bass monitoring, and large stream driftboat sampling for Trout are all done at night.

In 2011 three large reservoirs were sampled for smallmouth bass with nighttime electro fishing. Anderson Ranch, Milner, and Salmon Falls Creek Reservoirs were all sampled. Smallmouth bass sampling is completed every three years at randomly generated sites on the reservoir, and is completed in 15 minute sampling units. Bass monitoring is conducted in an effort to monitor smallmouth bass population trends and better understand population dynamics. Bass monitoring includes collection of data necessary for evaluation of relative population abundance, (CPUE) Catch Per Unit Effort, stock structure, fish condition, growth, and survival. Population trends in monitoring will be used to evaluate regulation scenarios and changes in angler exploitation or effort. Bass monitoring is conducted in the spring with water temperatures between 12.8°C and 18.3°C . All bass collected are measured and weighed. Average length at age is calculated from the sub-sample of fish from which age was estimated. Proportional Stock Density (PSD) which is the number of fish greater than or equal to 12 inches divided by the number of fish greater than or equal to 8 inches multiplied by 100, is calculated to represent the available size structure of the present populations. Relative weights are calculated, and are summarized as the average within a designated size group. Mortality and survival are estimated to evaluate the effects of exploitation and other limiting factors. Annual mortality and survival is estimated using a catch curve.

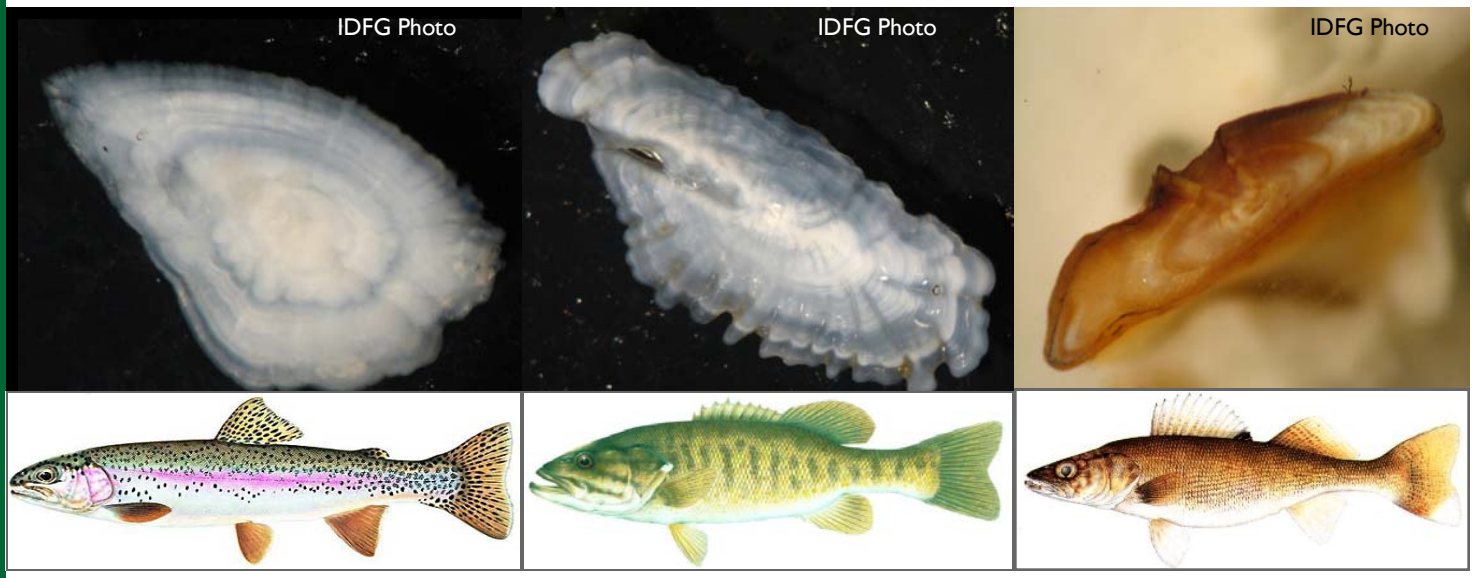
Reservoir	CPUE	PSD	Ave.Length(in)@ Age 3
ARR	34	22	7
Milner	23	39	8
SFCR	32	21	8





What Is An Otolith, and How Do Fisheries Biologists Use Them?

An **otolith** is a structure in the inner ear of vertebrates. They are sensitive to gravity and linear acceleration. The composition of fish otoliths is very useful to fisheries scientists. The calcium carbonate that the otolith is composed of is primarily derived from the water. The shapes and proportional sizes of the otoliths vary with fish species. Fish otoliths accrete layers of calcium carbonate and gelatinous matrix throughout their lives. The otolith growth rate varies with growth of the fish, which results in the appearance of rings that resemble tree rings. By counting the rings, it is possible to determine the age of the fish in years. By measuring the number and the thickness of individual rings, fisheries biologists can estimate fish growth because fish growth is directly proportional to otolith growth. IDFG Fisheries Biologists collect otoliths from various fish species in the field, and otoliths are collected from a representative sample to estimate length at age. Otoliths are prepared for age estimation by breaking centrally, burning or browning the broken edge with an alcohol burner, and viewing the broken edge with a dissecting microscope at 30X – 40X. Otoliths are coated with mineral oil to improve viewing clarity. IDFG Fisheries biologists collect otoliths from many species of fish including Trout, Kokanee salmon, Bass, and Walleye.



Whats Coming Up In 2012?

1) IDFG Fisheries Management Plan

2) IDFG Fishing Rule Changes (Biological and Non Biological)
Scoping and Public Comment

3) IDFG "Wildlife Summit"
August 24-26, 2012
Visit our website at: http://fishandgame.idaho.gov/summit/
For information on this event.

BE OUTSIDE
IDAHO CHILDREN IN NATURE

Have a Goal and Have Fun

Take a Kid Fishing in 2012

Scott Stanton Photo

Scott Stanton Photo

IDFG Hosted 25 fishing events in 2011, and took over 3000 kids fishing through both the Take Me Fishing Trailer, and the Trout In The Classroom Program.

IDFG Photo

IDFG Photo

" All wildlife, including all wild animals, wild birds, and fish, within the state of Idaho, is hereby declared to be the property of the state of Idaho. It shall be preserved, protected, perpetuated, and managed. It shall be only captured or taken at such times or places, under such conditions, or by such means, or in such manner, as will preserve, protect, and perpetuate such wildlife, and provide for the citizens of this state and, as by law permitted to others, continued supplies of such wildlife for hunting, fishing and trapping."

http://www.fishandgame.idaho.gov/ifwis/fishingplanner/

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