

The Adipose

THE NEWSLETTER OF THE WILD STEELHEAD COALITION

November, 2006

The State of the Wild Steelhead Coalition: Year 5

"So let the steelhead be your example. When things get tough, when the situation seems hopeless, remember the qualities we most admire about wild steelhead: Perseverance, courage, and lonely survival against great odds. Without such an inspiration, you cannot succeed; with it, you cannot fail." -Steve Raymond's Address to the WSC, November '05

This past year marks the celebration of five years since formally organizing the Wild Steelhead Coalition. Since our short existence, I have no doubt that the WSC has made a positive difference to help increase the return of wild steelhead as well as increased visibility of their plight in the Pacific Northwest. Even though our organization is not as large and as well funded as others, we have been able to make effective changes because of focus, perseverance and the nimbleness of our organization. The challenge and focus will be to grow the organization further and establish deeper roots outside of Washington and still preserve the qualities that have made us effective. I believe our organization is a crossroads where it is time to take a jump further; I sincerely hope our member-

ship will make the jump with us. Since it is year five I would like to take this opportunity to look back and recognize the dedicated individuals of the founding committee in which I worked with laying the ground work to develop our successful organization for wild steelhead: **Dave Bailey, Duggan Harman, Les Johnson, Kevin Kent, Carl Ostberg, Ryan Petzold, Todd Ripley and Jim Starkes.**

Organization

This is my third year as President of the WSC and once again I continue to be impressed with our Board's ability to work together and their willingness to tirelessly work on many issues and challenges facing wild steelhead. This year we are saying thank you to **Jeff Johnson** for his three years of service as our 1st VP or Membership. Jeff still plans to manage our website, but plans to take a leave of absence from the Board and return at a later time. **Jim Schmitz** will move from Secretary to be our new VP of Membership. The Board is in process to infuse new members into the Board and replace some upcoming vacancies. We need members to volunteer and serve as Board members, to ensure the Board remains energetic to continue our mission for wild steelhead abundance. I would also like to thank the rest of

the Board for their work over the last year. Trustee **Rob Masonis** has been very active by attending the Board meetings to help work with us developing the 06-07 action plan and injecting support to help us build the organization in a direction that will enable us to be more effective. The Board has taken a good part of the summer to develop our Action Plan and took some time in its development to reflect on where we have been as an organization and to discuss our strategy for the future. The 06-07 Action Plan was emailed out to the membership earlier and is posted on the website. Our Region 1 Representative **Michael Mathis**, with his territory of Eastern Washington and Idaho has helped further the goals of the WSC. Mike has single handedly (even though he's uses a double hander), increased our membership and has promoted the WSC in many places- thanks Mike! As a reminder, the WSC has moved it's meeting locations to the Center for Urban Horticulture at the University of Washington Campus. **Our next Membership meeting is scheduled for November 1st, in which we will serve pizza and have a cash bar available for beer, wine and soda. Please join us for a great program about the Olympic National Park steelhead**

(Continued on page 3)

9th Steelhead Summit Alliance Meeting

Save the date for the 9th Steelhead Summit Alliance (SSA) meeting on December 9th in Portland, Oregon to be held at the Jean Vollum Natural Capital Center, from 8:30am-4pm. We are planning for another great day with a full slate of the latest research and issues facing steelhead in Oregon and Southwest Washington. Some of the research topics that will be covered include the Yakama Nation's kelt reconditioning program and the latest hatchery impacts study by Oregon State University. We have also invited Virgil Moore, the new Oregon Department of Fish and Wildlife Director, to join us and say a few words about the management of steelhead in Oregon. The Steering Committee for the SSA South includes Bill Bakke, David Moscowitz, Kate Miller, Kaitlin Lovell, Richard Kenyon and David Moryc.

The Steelhead Summit Alliance (SSA) is a consortium of organizations pursuing a common goal: conservation and restoration of wild steelhead populations throughout their native range. The purpose of forming the SSA was to coordinate wild steelhead advocacy among concerned groups, and to enable participating groups to advocate collectively to maximize our efficacy in obtaining policies, laws and regulations to achieve our goals.

If your club or organization would like to participate in the SSA or send a representative please contact David Moryc at dmoryc@americanrivers.org or David Bailey at captain@olypen.com

Wild Steelhead Coalition Financial Summary

During the year 2006 to date the WSC has utilized \$11,972 for furthering conservation issues regarding wild steelhead. Many items are discussed in President Rich Simms comments starting on page 1. Other outlays include materials for outreach activities such as decals, license plate frames and outdoor show expenses. Printing and distribution of our recovery plan was expensive. WSC representatives also attended meetings with the WDFW as well as participation in Steelhead Summit activities.

Club business and meeting expenses utilized \$2239.27 for supplies, postage and facility rents.

Income consisted of \$2015 from membership dues and \$1435.35 from donations. A good portion of the donation income came from matching fund programs such as Microsoft Giving and Matching Funds programs. The WSC is eligible for participation in these programs because we are recognized as 501(c)3 organization.

At present our bottom line has a balance of \$14,069.



Bob Young, Publisher 206-323-2189
Email: fishbum@seanet.com

Board of Directors
President: Rich Simms
425-880-4254
rks57@yahoo.com

1st VP Membership:

VP Fundraising:

VP_of_Fundraising@wildsteelheadcoalition.com

VP Conservation: Dick Burge
360-765-3815
fskibum@olypen.com

VP Communications: John Case
206-329-9009
johncase@microsoft.com

VP Science: Nate Mantua
206-706-8592
nate@xsat.com

VP at Large: Jim Schmitz
253-606-0477
lostriver99@yahoo.com

VP Political affairs: Todd Ripley
425-281-0571
c_n_r_nates@hotmail.com

Secretary: Richard Hunt
425-745-2539
richardh@OBWilliams.com

Treasurer: Bob Young
206-323-2189
fishbum@seanet.com

Past President: Jack Berryman
425-821-1774
cohojack@hotmail.com

Trustees

Jim Tuggle John McGlenn
Jim Lichatowich Bill Bakke
Frank Amato Duggan Harman
Rob Masonis

Regional Reps

Region 1 & Western Idaho: Mike Mathis
509-927-6733 michaelmjmathis@aol.com

Region 3: Steve Worley
509-962-2033 worleybugger@elltel.net

Region 4: Rob Endsley
360-676-1321 rendsley@earthlink.net

Region 6: Bob Ball
360-374-2019 rball@olypen.com

Region 5&6 South: Ron Nanney
360-484-3406 nanney3@willapabay.com

NW Oregon: Shane Stewart
503-640-8346 sstew54@earthlink.net

(Continued from page 1)

and bull trout.

Steelhead Summit Alliance (SSA)

The WSC continues to be involved and participate in the Steelhead Summits with organizations and clubs from around the Northwest and British Columbia.

The next Summit is scheduled for early December in Portland, Oregon. I would like to thank **David Moryc** of American Rivers, **Kaitlin Lovell** of Trout Unlimited and **Bill Bakke** of the Native Fish Society for helping the WSC take ownership of the SSA and their help expanding a successful voice for steelhead. **David Moryc** has included an article in this issue of the Adipose that provides a report on the SSA. The WDFW, in it's Executive Summary to it's Assessment of Washington State's Anadromous Populations and Programs, acknowledges the SSA as one of a number of groups which assisted in identifying key questions and in development of a report outline. Also a special thanks to **Dave Bailey** who continues to be our Summit Coordinator, and **Dick Burge**, **Nate Mantua** for their continued involvement.

WSC Steelhead Paper

The WSC published our second research white paper titled "The Status of Wild Steelhead and Their Management in Western Washington: Strategies for Conservation and Recreation." The paper provides a status of wild steelhead on the West Coast with a focus on the ESU's of Washington. An examination of harvest practices and impacts, considerations for new policies, recommendations by the WSC and a proposed conservation based wild steelhead management plan. Information from this paper was reviewed and shared with WDFW and was implemented into their steelhead paper. The WSC has also mailed copies to the Washington Fish and Wildlife Commission and to state and federal legislators and tribal leaders. Follow up meetings are in the works to talk face to face with decision makers. The WSC Steelhead Management Plan information was included. This paper was a large undertaking and consumed much time for various members of the Board, but in the end it has and will continue to have tremendous impact for improved conservation for wild steelhead.

Again I would like to thank **Dick Burge**, **Nate Mantua**, **Jack Berryman** and **Larry Doyle** for their strong resolve in bringing this important document to completion.

Conservation

The WSC Board of Directors has also focused on many conservation issues this year that will benefit wild steelhead. The following are some highlights:

- The WSC Donated \$6000 to support an acoustic tagging study for wild steelhead in the Skagit River. This steelhead tagging study is one of several studies planned for Puget Sound and Georgia Basin salmonids and is being done in a collaborative effort between WDFW, Seattle City Light, Army Corps of Engineers, NOAA Fisheries, UW, Tribes and Pacific Ocean Salmon Tracking project. For more information on the project got to the following website address: <http://www.postcoml.org/>.
- Produced and sent letters and followed up with **Restaurants Unlimited**, **Schwartz Brothers Restaurants** and **Red Apple Markets** requesting that they discontinue the sale of wild steelhead in all of their respective restaurants and markets immediately and in the future. Information with the letter was provided to educate their management on the plight of wild steelhead and they should not be served. A letter was also sent to **GI Joes** Sporting Goods Stores requesting that they discontinue allowing wild steelhead to be included in their store sponsored Winter Steelhead Derby. A follow up letter is in the works to remind them not to include wild steelhead in this year's derby.
- Signed on to litigation with Earth Justice and other conservation groups regarding the Upper Columbia River ESU Endangered Species Act Listing.

(Continued on page 4)

(Continued from page 3)

- The board also voted and sent a \$500 donation to the **Friends of Wild Salmon** <http://www.friendsofwildsalmon.ca/> in Terrace, British Columbia in their fight of Atlantic salmon farming expansion at the Skeena River mouth. And a \$200 donation and membership was sent to the **Hoh River Trust** <http://www.hohrivertrust.org/index.html> in support of securing land along the Hoh River for habitat protection and to preserve the Hoh River valley in public trust.
- Submitted Conservation Editorials and letters to **NW Fly Fishing, Salmon, Trout and Steelhead** and **Salmon and Steelhead Journal** magazines regarding the status and plight of wild steelhead.
- We continue to battle the **Stohrdahl** mine expansion proposal along the East Fork of the Lewis River in SW Washington which, if allowed to happen, will further degrade habitat along this famous steelhead river. We also continue to monitor the Columbia River commercial **by-catch of ESA listed wild steelhead** in the Columbia River spring chinook commercial fishery to ensure that the percentage of by catch is not allowed to be raised.
- The WSC also submitted comprehensive input to WDFW Major Rules Cycle, which contained some important issues regarding steelhead. And provided the same comprehensive input to the Olympic National Parks rules proposals and requested the ONP to stay the course on the wild steelhead harvest moratorium.
- Provided a \$500 scholarship award to the Univ. of Washington to support **Michael Dauer**, a doctoral student at the university. Michael is continuing the project started by Jennifer McLean on steelhead genetics in Forks Creek, a tributary of the Willapa River.

General

- The WSC's fundraising banquet last November was a huge success with an inspiring reading, written just for the WSC, by renowned angling author **Steve Raymond**. **Jeff Bright** designed and provided a beautiful slide show celebrating steelhead. **Bill Bakke** received the second **WSC Conservation Award**, recognizing his life's work and perseverance as a wild steelhead advocate and Bill McMillan provided a reading on Bill's behalf. Once again many thanks to the individuals, shops and companies who donated to our successful event! The money generated by this fundraiser has been a big help with the WSC's continuing work on our mission. **We look forward and hope you will join us at our fourth fundraising banquet on February 10 at the Mountaineers Club in Seattle, WA.**
- We also participated in two outdoor shows to help bring attention to the plight of wild steelhead. The WSC had a booth at the Monroe Sportsman's Show, we also had a table at the Olympic Sportsman's Show at the Jefferson County Fairgrounds, and a table at the Clearwater Spey Clave in Idaho. Thanks to all who participated!

We would like to recognize the many who have donated time and funds this year to the Wild Steelhead Coalition. And finally, we would like to thank our membership and other conservationists who have supported the WSC over the course of the year. Your time and contributions are making a difference for wild steelhead. Happy 5th Anniversary and on to year 6!

Rich Simms

Wild Steelhead Coalition
2005-2006 Board President

The following article appeared in the Fall '06 issue of NW Fly Fishing Magazine-

Wild Steelhead Coalition Unveils Plan for Washington's Wild Steelhead

By Richard T. Burge, Nathan J. Mantua, and Jack W. Berryman

Wild steelhead are in crisis throughout Washington. Except for a handful of stocks on the Olympic Peninsula and in southwest Washington, wild steelhead in the state have been in a prolonged period of serious decline, and most of Washington's wild steelhead stocks are either already listed on the federal Endangered Species Act, chronically failing to meet habitat-related escapement goals, or are in a period of declining abundance. Wild steelhead declines in Washington are just one part of a much broader pattern of decline.

In the past century, the entire Pacific Northwest has witnessed catastrophic declines in wild salmonid populations and run productivity due to a combination of degraded freshwater and estuarine habitat, poor hatchery practices, hydropower dams, natural cycles in river- and ocean-carrying capacities, and management and harvest policies.

In the mid-1950s, more than 125 Washington rivers produced wild steelhead harvests, and 120,000 to 160,000 steelhead were annually harvested by Washington anglers. Recently, only 11 rivers have remained open to harvest, and by the 2002-03 season, the harvest was just 3,554 fish, most of them from a few rivers on the Olympic Peninsula.

History shows that Maxi-

mum Sustained Harvest (MSH) concepts, the ruling management philosophy for Washington's wild steelhead, are a prescription for periodic and long-term escapement failures and fishery closures. The high harvest rates promoted by MSH management aim to keep spawner numbers low. MSH harvest rates are based on an attempt to maximize annual harvests, not on protecting the long-term resilience of the target fish populations. For Washington's steelhead, the combination of harvest-driven low escapements and unrecognized and/or unpredictable natural changes in river and ocean productivity results in run sizes that often fail to meet escapement goals. As a consequence of chronically depleted runs, the health and resilience of the steelhead populations are jeopardized.

Only during periods of high run productivity do MSH policies meet the management objectives of providing substantial harvest opportunities without compromising stock productivity. It is clear that productivity varies in space and time due to both human- and climate-related changes in river, estuary, and ocean conditions. It is also apparent that healthy steelhead populations exhibit a great deal of diversity in life histories and that this diversity is critical for maintaining population resilience in a variable environment. The MSH concept is not focused on diversity and fails to account for time-space changes in productivity. The flaws in the MSH concept are unfortunately demonstrated in streams such as those on Hood Canal and south Puget Sound, where steelhead populations plummeted one to two

decades ago and still remain at low levels in spite of prolonged harvest closures.

An additional serious problem with MSH concepts regarding Washington's steelhead is that the data used to develop escapement goals are based on run sizes and productivity starting in 1976. By then—significantly—many stocks were already in severe decline. For example, the annual harvest on the Skagit River in the 1950s (when spawner escapement was not counted as part of the run) was often higher than the total runs (harvest plus wild escapement) in the years after 1976. Contrary to MSH's scientific underpinnings, many of Washington's rivers with very low wild steelhead spawner populations have failed to rebound.

The Wild Steelhead Coalition (WSC) believes that the present MSH policies place the remaining few healthy stocks at an unnecessary and unacceptable risk of overfishing and fishing closures. MSH policies put the steelhead populations of the Olympic Peninsula rivers at risk of collapse and place Peninsula steelhead fisheries at risk of closure if (and likely when) productivity declines from the high levels experienced in the recent past. With this probable occurrence, all wild-stock fisheries in Washington may be closed to fishing.

The four pillars supporting the health of wild anadromous fish populations are abundance, life history and genetic diversity, spatial distribution, and productivity. Each of these pillars supports the inherent resilience of a steelhead population, its capacity to bounce

(Continued on page 6)

back from short periods of low abundance. The MSH concept runs counter to the first three pillars and by doing so, also undermines the fourth.

Washington's existing habitat-related stress on salmonid populations is periodically amplified by natural downturns in productivity related to changes in ocean conditions, regional drought, extreme flooding, and landslide episodes. Layering MSH harvest policies upon these largely unpredictable changes and the highly degraded habitat amounts to a management philosophy that errs strongly on the side of providing maximum numbers of wild steelhead for harvest at the risk of seriously depleting spawner abundances and diversity. The high harvest rates that come with MSH fisheries remove the least productive and most heavily fished components of the stock as a whole, thereby reducing the abundance and life history diversity of the stock complex, which ultimately leads to a reduced spatial distribution of spawners. This combination results in a quadruple threat to the long-term health of wild steel-

head stocks.

The WSC believes that co-managers must adopt approaches that foster wild steelhead resilience. To that end, the WSC contends that optimizing the balance between providing quality steelhead-fishing opportunities and protecting steelhead ecosystems demands a shift away from past MSH policies toward a greater use of Wild Fish Release (WFR) and selective gear regulations. Increasing the use of WFR while reducing harvest would offer immediate economic benefits in the form of maximizing recreational seasons and quality fishing. At the same time, WFR policies would yield immediate ecological benefits by vastly reducing fishing impacts on the four pillars that affect adult spawner populations. A greater use of selective gear regulations would increase the protection for resident rainbow trout, parr, smolts, and fish of other species that are integral parts of steelhead ecosystems.

The WSC has developed a management plan for wild steelhead based on the best science, ecological principles, and angler

support. This plan provides for improved conservation of healthy stocks and recovery of those that are now depleted, with goals to rebuild all stocks. It also allows for high stock productivity periods to help maintain viable populations and quality fisheries through the low productive periods. The WSC also suggests limited harvest fisheries on wild fish when their abundance is 50 percent above the minimal escapements prescribed by MSH models. Reformed hatchery production should continue to provide the lion's share of the steelhead harvest so that wild fish runs can remain healthy and provide for quality WFR full-season fisheries.

A shift away from a focus on maximizing the harvest to a focus on protecting and restoring the wealth the fish bring to our watersheds is a long-term philosophy that promises to benefit the overall health of Washington's wild steelhead. For a copy of the entire plan, visit www.wildsteelheadcoalition.com.

WSC Seeks Conservation Award Nominations

The WSC Board is seeking nominations from its membership for this year's Conservation Award. The Wild Steelhead Coalition "Conservation Award" is presented to an individual or group that, through their actions and/or accomplishments, have made significant and noteworthy contributions to the protection and propagation of wild steelhead. Please send us your nominees and why you believe their actions have been of benefit for wild steelhead. The award will be announced and presented at our WSC Banquet/Fundraiser on February 10th, 2007. The award winner cannot be a WSC Board Member, but can be a WSC Member or someone outside the organization. Send nominations to wscmembership@yahoo.com or mail to 218 Main Street #264, Kirkland, WA 98033 by **December 15**.

September 27, 2006

**SEPA/NEPA Coordinator
Regulatory Services Division
WDFW Habitat Program
600 Capitol Way N. Olympia,
WA 98501**

**RE: Comments to the WDFW
on the SEPA Scoping Process
regarding the preparation of
the State-wide and the Puget
Sound Resource Management
Plans (RMPs) for steelhead.**

Thank you for the opportunity to provide comments and suggestions for the WDFW RMP for Puget Sound and the State-wide RMP. The Wild Steelhead Coalition is a conservation organization dedicated to increasing the return of wild steelhead to the waters and rivers of the Pacific Northwest. We hope you will find our comments and suggestions helpful in your process of developing new scientific based management strategies to form the basis of these RMP's. The bold-faced, bulleted-list presents our major comments, along with some discussion in the accompanying text.

RMP Comments from the Wild Steelhead Coalition:

- **New management programs and plans must be based on the best science available, and on a process that always errs on the side of wild fish to assure success in rebuilding the many depleted wild steelhead populations in Washington.**

The WSC does not believe our state's conservation values should be compromised by planning steelhead recovery through integrated hatcheries and integrated wild stocks until the science of this untested strategy is thor-

oughly studied and evaluated in carefully designed field experiments.

- **The first work of the Puget Sound and State-wide EIS should be to analyze the present goals of Washington steelhead sport fishers.**

Sport fishers goals have changed in the last 20 or so years due to the declines/listings of wild steelhead in their home rivers and the observed risks of further declines in the steelhead resource. It has become evident in recent years that fishing for wild steelhead every year and during the normal winter months of December through April is far more important to sport fishers than a large wild harvest. The state's goals for sport steelhead fishers should be providing for full season opportunity every year, planning for a reasonable harvest of hatchery fish and a limited harvest of wild fish when the populations are significantly above the minimum escapement goals. Clearly the tribal goal is different, but the state and the tribal goals can be compatible, given proper discussions of ways to meet each party's needs.

- **WDFW should evaluate and determine the level of spawner abundance that must be rebuilt and maintained during the high productivity cycles to buffer the declines during low productivity periods while allowing for continuing sport fisheries.**

Management programs need to restore the abundance of wild steelhead, not only at the watershed level, but in every tributary and in each time segment of the run. Recent genetic work has shown that each tributary and each run period may have differ-

ent populations. The time is past when we can manage at minimum escapement goals. Increasing habitat problems and the ever present changes in ocean and river conditions have produced long dynamic productivity cycles. Managing harvest at the present escapement goals means going into the low cycles with the minimum spawning stock. As productivity falls below replacement, stocks will decline and become depressed and fisheries will close.

The early modelers of MSH in the 1950's stated that managing at maximum harvest rates would mean annual closures in some fisheries due to random variation. Those modelers were not familiar with natural productivity cycles that can last 10 to 20 years and have great impacts on anadromous fish populations. Long low productivity cycles will mean some stock abundance are driven very low, possibly to functional extinction before the high cycles return. At best, most wild stocks will take a long time to recover and some may never again provide opportunities for sport fishing.

One of the best ways to assure healthy populations and fisheries during the low productivity cycles is to build abundance during the high production periods. The WSC has proposed managing harvest beginning at 150% of "maximum sustained harvest" (MSH) escapement goals to build this buffer. At this level, managers should be able to prevent stock depression during the low cycles, retain steelhead resiliency and provide for quick recovery, if necessary, when higher productivity returns. WDFW could model various levels of abundance and apply productivity levels and time periods experienced during the recent low cycles to determine the level of abundance necessary

(Continued on page 8)

(Continued from page 7)

to maintain the required spawner escapements (the minimum escapement goals) and sport fisheries during a full cycle.

- **Wild steelhead ESU's in Washington that have not been listed under the Federal ESA or proposed for ESA listing should be evaluated for their special characteristics that have, to date, prevented stock declines/depressions in these areas.**

Graphs of the wild steelhead runs to the Olympic Peninsula and South West Washington ESU's (see WSC 2006) show abundance cycles that are probably related to marine and freshwater productivity cycles. In the past decade, stock health in these rivers was buffered and maintained by large spawning stocks, normally 20% to 100% above their respective MSH-determined escapement goals. During the 1990's, many of these rivers maintained healthy spawning populations due to these buffers during downturns in productivity.

More recently we have seen these rivers managed for harvests that reduces the populations closer to their respective MSH escapement goals. In some cases, such as the wild winter run Hoh River steelhead, spawner abundance has fallen well below the escapement goal due to overly optimistic pre-season forecasts and intensive harvests. This reduction in annual spawners has set these populations up for potential declines below the minimum required escapements when the productivity again falls.

Recommendation: On some Olympic Peninsula rivers, the WDFW has been giving the tribes a major portion of the total harvest allocation, apparently to stave off foregone opportunity issues. If the

sport fishery received—but did not actually harvest—its full allocation, these excess fish would escape to the spawning grounds, increasing the spawning population and help to maintain a desired buffer for future declines in productivity.

- **WDFW should evaluate a range of harvest management options, including no wild steelhead harvest.**

A range in harvest options will give Regional Fisheries Managers and sport fishers the opportunity to recommend the type of fishery and risk level they prefer

- **WDFW should analyze the run prediction error and the parameters necessary to develop a complete reconstructed run estimate.**

Pre-season run forecasts should be conservatively planned, including the use historical error estimates, and managers should always aim to prevent annual harvest plans that reduce the spawner escapement below escapement goals. Reconstructed runs should include not only the harvests and spawner escapements, but catch and release mortalities, estimates of unreported harvest, net drop out and marine mammal take.

- **WDFW should analyze changes in life history diversity, including changes in the abundance of early winter runs (December and January abundance) and the importance of the resident form, the rainbow trout, in helping to maintain viability in anadromous populations. This analysis should also evaluate the annual losses of rainbow trout, steelhead parr and smolts during the summer trout fisheries and during the fall and winter fisheries for anadromous salmonids. Fur-**

ther, the analysis should suggest management strategies for recovering and preserving the diverse forms of steelhead.

On the Olympic Peninsula there is information that shows the early winter runs (December and January) have declined significantly, possibly more than 50%, due to increased fishing pressure that began with intensive fisheries targeting hatchery fish in the early 1960s. Early and late runs on the Dean River in BC have been found to be different populations, meaning that the loss of the early runs may have profound genetic and life history impacts on abundance, productivity and resilience of the population as a whole. We suggest that the EIS includes a comprehensive review of the literature on run-timing and stock diversity (including WDFW 1996; Royal 1976; Deshazo 1985; and WSC 2006), as well as historic steelhead landings from Puget Sound (and state wide rivers as their RMP's are written) rivers from the 1940s and 1950s and compare them to the most recent catch data available to determine what changes occurred in the run-timing for wild steelhead.

- **The RMP should evaluate the literature on the importance of resident rainbow trout for steelhead populations.**

Kostow (2003) and recent studies on the Olympic Peninsula indicate that rainbow trout can be important in steelhead population dynamics and productivity. On the Olympic Peninsula, 15% of the steelhead spawning interactions included male rainbow trout. (McMillan, in press). At Snow Creek and Hood River, about 40% of the parents of returning adults were not adults and believed to be juvenile *O. mykiss* (either rainbow

(Continued on page 9)

(Continued from page 8)

trout or young precocious steelhead). Recent evidence also suggests that rainbow trout can provide a reservoir population for helping stock recovery when the anadromous form is depleted. The abundance of fry, parr, smolts and rainbow trout is tightly linked with the natural productivity of steelhead and to their resilience in the face of unfavorable events. The RMP should further evaluate methods to protect all rainbow trout and all resident steelhead (fry, parr, and smolts) from fishing mortality including summer trout closures, bait bans, and selective gear fishing.

- **The increases in hatchery fish plants over the last 40 years need to be evaluated for their ecological impacts on wild steelhead. These evaluations should include not only hatchery steelhead smolts, but also the abundance of other salmonids that Washington state hatcheries produce and plant in anadromous rivers each year.**

The low survival rates (SAR indices) of hatchery steelhead in Puget Sound suggest that WDFW should consider major reductions in hatchery smolt production to help in the rebuilding of wild stocks. Many biologists believe that reduced ocean survival is responsible for much of the decline of steelhead in Puget Sound and Southern British Columbia. This indicates fewer food items for smolts and growing fish and considerable feeding competition between wild and hatchery smolts for these limited food supplies. Studies in Prince William Sound suggest that hatchery production did not increase total productivity in pink salmon; it only decreased wild fish production.

Reducing the smolt releases will not necessarily mean reduce hatchery production for adult steelhead as survival rates may increase. Given the large number of steelhead and salmon smolts now released from PS hatcheries, the fact that steelhead hatchery returns are the lowest in the state, (about 0.4% in recent years) and ocean survival is believed to be a major problem for PS steelhead, reducing competition and juvenile biomass may have far reaching effects in improving the productivity for both wild and hatchery fish.

The WSC believes that undesirable ecosystem impacts of large hatchery releases are one of the many problems that have caused serious declines in wild steelhead populations in Washington. For Puget Sound the WSC suggests full implementation of the HSRG principles and recommendations for segregated hatcheries. Further, we recommend significant reductions in hatchery releases on rivers now experiencing poor productivity, and the elimination of hatchery smolt releases in rivers that have not met wild steelhead escapement goals for two or more years in a row. This temporary process is aimed at reducing the potential suite of negative impacts (e.g. disease, competition, predation, and interbreeding between hatchery and wild fish, or sustaining an abundant predator population that targets steelhead smolts) of hatchery smolts and recruits on wild fish during periods of low wild stock productivity and preventing mixed stock fisheries.

- **Existing wild brood stock hatcheries should become part of a carefully designed set of ecosystem-scale experiments. In such experiments, protocols for “integrated” hatcheries should be strictly followed, including careful controls on the number of**

hatchery fish spawning in the wild and wild fish spawning in the hatchery. All experiments should be fully evaluated for their impacts on the genetics, productivity and domestication of wild steelhead before new hatchery programs of this type are planned. This evaluation should include field studies of the reproductive and life history fitness of the integrated wild stocks and the ability of the program to maintain the natural genetics of the wild populations.

In addition:

1. **WDFW should explain the differences between their planned programs of integrated hatcheries/ integrated wild stocks and those of the HSRG, and the risks and expected impacts of each.**
2. **WDFW should state the average and minimal PNI levels that would be maintained in their integrated programs and the reproductive and life history fitness values expected at each level.**
3. **WDFW should state the maximum allowable proportion of hatchery fish that will reach the natural spawning grounds and the allowable stray rate.**
3. **WDFW should evaluate and state the average domestication level of wild stocks at a series of generations (such as 5, 10, 20 generations).**
4. **WDFW should compare these evaluations to the present introgression rate (s) (the rate after 15 more-or-less generations) of the isolated hatcheries presently operational in Western Washington.**

There is considerable interest, hype and political motivation in converting non-local broodstock

(Continued from page 9)

hatcheries to wild-broodstock hatcheries. There are studies showing some wild species (especially those with a short in-river time), such as Chum salmon, may increase with this technique but there is very limited information on the values of such programs for steelhead. Before moving into the use of wild broodstock techniques statewide. Carefully designed and executed experiments with a range of hatchery management techniques are needed before any one approach is embraced by WDFW. A suite of experiments should include “controls” where no hatchery fish are planted, “segregated” programs, and “integrated” programs. The impacts of each approach should be understood well beyond the 2nd generation to assure that the long term use and a given approach is not harmful to these traits, and impacts should be determined by field research, not theoretical or modeling studies. There are now 14 wild broodstock steelhead conservation hatcheries on line in western Washington now and several (such as the Wynoochee and Snider Creek on the Sol Duc) should be good candidates for monitoring and evaluation. All conservation hatcheries must be monitored for a variety of performance measures. Changing existing non-local broodstock hatcheries to wild-broodstock/integrated hatcheries should be put on hold until the science is clear on the impacts they will have on wild steelhead.

- **The HSRG, ISAB, and ISRP all recommend wild steelhead management zones to preserve population genetics and serve as control areas needed to evaluate the performance of different steelhead management approaches. These zones can also help**

to determine the true carrying capacity through time and a better understanding of the ecology of all wild fish. WDFW should evaluate the values of establishing these zones for all species of wild salmon, trout and other indigenous species.

Research in these reserves will allow us to understand the true ecological interactions and carrying capacity of all wild species with the full compliment of marine derived nutrients. These zones will also preserve a wild genetic bank for future needs. Infusing integrated hatchery fish of other species into these reserves will reduce many of the benefits of these zones to wild steelhead and other wild salmonids.

- **WDFW should evaluate the level of enforcement necessary to assure the important rules protecting wild steelhead are maintained. In addition, WDFW should:**

- 1. Consider implementing a program similar to “eyes in the woods” for Washington’s anadromous rivers,**
- 2. Conduct a specific study to determine the unrecorded harvest in sport and commercial fisheries,**
- 3. Recommend special fines and license loss terms for illegal harvest**
- 4. Evaluate the value that a harvest tag system may have in reducing illegal harvest.**

Most fishers believe that enforcement is inadequate to stem the loss of wild stocks due to poaching. Some guides in the Olympic Peninsula believe that only about one half of the fish harvested are recorded. This problem contributes to the lack of specific information on the run sizes and annual catch.

A special random contact study is recommended to gain better information on the illegal harvest. Further, we recommend larger penalties for illegal harvest and a harvest tag system to assist enforcement in controlling the non recorded catch.

- **WDFW’s RMPs should include the recent and historical information on total steelhead run-sizes, tribal and sport catch, etc, by river.**

If historical run-size, harvest, and escapement information is not included in these plans, it will be lost for future use. This loss will contribute to the concept of the “Shifting Baseline Syndrome”, wherein new managers view recent resource characteristics (e.g. abundance, diversity, and productivity) as “normal” because information on historical properties is not available.

- **WDFW should conduct an economic review of areas and situations where conservative management and abundant wild fish stocks have had positive impacts on local communities.**

Case studies of the economic impacts of conservatively managed fisheries in the Yakima Basin; Ennis, Montana; and Smithers, BC would provide valuable information for WDFW and local communities to review when considering various management strategies and regulations.

Respectfully submitted,

Wild Steelhead Coalition

Red Shed Spey Clave

Fun for two handed enthusiasts and beneficial for wild Steelhead

By Michael J. Mathis, Region 1 Representative

For the second year running Linda & Mike (Poppy) Cummins, owners of the **RedShed Spey Shop**, hosted a Speyclave in lovely Lenore, Idaho, on the banks of the legendary Clearwater River. The all day event was held September 23rd at the Lenore rest area. And for the second year my room mate and Steelhead partner, Susan Conard & I held down the Wild Steelhead 'booth.' The invitation to set up a booth was a compliment to the WSC in that we are the only vender allowed to actually market and sell anything. But then again The Red Shed is a Steelhead oriented fly shop and long-time supporter of the WSC.

Susan and I arrived at 0'dark thirty to stake our location next to the BBQ. After setting up our table and hanging the WSC banner as a back drop, we headed for the river for a couple hours of fishing before the clave got going.

The success of the Clave in 2005 was enormous. In a planning session, Linda, Mike and I projected approximately 50 attendees. When the event shut down, over 150 had registered. There were some anxieties for this year's attendance with fears centered on the price of gas but also the rumored Clearwater run being late. Our concerns were quickly put to rest and by 9 AM it seemed as though every manufacturer was represented parking was at a premium, and the Salmon River/North fork bunch were present and once again a welcome site. Casting demonstrations and instruction ran continuously as did knot tying and splicing seminars. And while Poppy announced events with his bull horn, son-in-law, Dale, Amanda, Josh & Linda Cummins prepared the burgers hot off the grill with all the trimmings.

Larry Aiuppy, WSC member, demonstrated his *own* Spey cast to the intent interest of many while wife Jan answered questions at their Echo/Snowbee display; Peter Crow, Smith Action Optics, *new* WSC member, displayed many styles of my favorite eye wear including their photo-chromatic-Polaroid lens. Bob Meiser, *new* WSC member, was available to talk about his line of rods and Chris Kelly from Sage loaned me one of Sage's new X-Axis, 16 foot Spey rod which is nothing short of an astonishing casting experience!

By 4 PM, the event was winding down. The burgers and potato salad were gone and long-rod anglers were quietly heading off to their favorite evening beat. Nearly 160 had formally registered. The weather had been a perfect Indian summer day.

The highlights of the day were many and unique to the attendees. My personal favorites included watching Simon from Nextcast Lines and Bruce Kruk, Loomis Representative from Trail, B.C. making casts in excess of 200 feet with Simon's new long belly line. Tom Larimer, Larimer, Outfitters from Hood River, hooked a Steelhead while giving casting instruction to yours truly. It was pretty funny for Tom and all those watching because when I handed my rod to Tom after I had made a cast, Tom was unaware it was fly-equipped. People had been swinging yarn through this tailout all day and it was probably the first real fly the fish had seen!

As a Regional Representative for the WSC, my personal goal was to bring on a dozen new members, renew existing memberships, visit some acquaintances from last year, cast some new long belly lines, eat a burger or two and share some Steelhead accounts. I met my goal.

We were able to enlist over a dozen new members, listed below and renew a number of existing memberships. Regional Representatives and others might consider this type of venue for the introduction of the WSC in other areas. And although I personally missed

a fair amount of the demonstrations, by the end of the day, I felt good about Susan's and my accomplishments and I still had nearly five prime hours of daylight remaining on my beloved Clearwater.

Please welcome New & Renewing Members:

Larry & Jan Aiuppy, Livingston, Mt., Echo & Snow bee Rep.
Peter Crow, Ketchum, Idaho
Smith Action Optics
Linda & Mike Cummins
Redshed Spey Shop
Sandy & Victor Colvard
Fishing nomads
Sar Dougherty
Steelhead enthusiast
Dr. James Gustin, DVM, Orofino
Fly fisherman
Capt. Doug Hart Ft. Meyers, Florida
Flats Guide
Thomas Larimer, Hood River, Ore.
Larimer Outfitters
Ed Link, Northfork, Id.
Northfork Guides
Michael J. Mathis
WSC Region 1 Rep.
Robert Meiser, Medford, Ore.
R.B. Meiser Fly Rods
Jack Moore, Kent, Wash.
Fish Hunter Enterprises
Bob Nall, Carmen, Id.
Steelhead fisherman
John & Heidi Rabel Exuma, Bahamas
Fly fishers
Keith Talley, North fork, Id.
Steelhead fisherman
Mark Vallier, Missoula, Mt.
Fly fisherman

Some of the Spey Clave attendees



Wild Steelhead Coalition
218 Main St. Box 264
Kirkland, WA 98033

The Wild Steelhead Coalition (WSC) is an organization dedicated to increasing the return of wild steelhead to the waters and rivers of the Pacific Northwest.



Meeting Announcement

Wednesday, Nov. 1, 2006

6:00-9:30 pm

Meetings are held at the University of Washington's Center for Urban Horticulture on the Union Bay Campus. We will be gathering in the Classroom of Isaacson Hall. Links to maps with driving directions (as pdfs) and the buildings are on the web at: <http://depts.washington.edu/urbhort/html/info/facilities.html>

Our speaker this month will be Sam Brenkman. Come hear about what's going on in regards to wild steelhead and bull trout in the Olympic National Park. Pizza will be served at 6:00 PM with a cash bar for beer, wine and soda with an opportunity to visit with your fellow steelhead fanatics. Come on out and support the organization