OVERVIEW

With this issue, The Osprey enters its third year of publication. Its purpose continues to be much the same as it was at the beginning: to be read by as many steelhead flyfishers as possible, worldwide, as a means of keeping the brotherhood informed on important issues affecting the sport and to help rally us at the proper times when united actions are needed. Such as to head off construction of dams across key rivers, or to require that logging is conducted so as to minimize adverse affects on river environments. We also are big on seeing that our rivers are managed for their native and wild steelhead whenever possible, and on encouraging the highest standards of sportsmanship by all who are fortunate enough to have discovered what a really special thing is steelhead flyfishing.

Below we are feeling our way but we plan gradually to enlarge and upgrade it and to broaden its coverage. Most articles to date have dealt with activities in Washington and Oregon. We hope in time the emphasis will shift so that more can be included about California, Idaho, British Columbia and the states and provinces surrounding the Great Lakes. Since, as we understand, there are steelhead in Siberia, and since "glamour" appears to be gaining momentum, maybe someday we even will have coverage from that part of the world. Toward those ends we encourage the submission of items from anywhere, anywhere, who believes he has something to say that may be of general interest. A variety of articles is welcome, similar to what you find in this issue. Here there are pieces about protecting native-run, often on the role of hatcheries in steelhead management, one by Curt Kraemer describing the movement of summer-run, and another one by Lee Wulff on catching steelhead with #8 flies! As much as possible keep them short and to the point, and send them to Stan Young, 1411 - 86th Avenue Northeast, Bellevue, WA 98004 (206-464-6576) or Bob Arnold, 3216 Mercer St. Seattle, WA 98115 (206-655-4112).

We also are seeking to expand our mailing list, currently about 500, and welcome additional names and addresses. The only requirement is that recipients be either dedicated steelhead flyfishers, or individuals or agencies in positions of influence affecting our sport. So far we have been able to produce and mail The Osprey free of donations and as long as these gifts continue to come we will not have to resort to a subscription fee. If you believe the newsletter has merit, why not make a small donation.

It will be noticed that the pieces in this issue by Tkack and McMillan take a very strong view of the risks, and their consequences, that hatchery steelhead pose to our resource. We hope that agency managers, biologists, and other responsible officials will heed these messages in the spirit in which they are offered, i.e. with utmost concern and honesty, based on increasingly-available credible evidence. Obviously, there are strong differences of opinion in managing agencies, else we would see an apparent downturn in hatchery program emphasis. We repeat that we are hospitable to views of everyone concerned about steelhead, including those who may have differing views about hatcheries. Let us hear from you, too.

WILD STEELHEAD IN WASHINGTON

The Osprey recently asked the Washington Department of Wildlife for a statement about wild steelhead. The authors of this article are WDFW staffers and present here the Department's official position on the subject. Editor.

A wild steelhead is many things: a fish to be released, a fish to be killed, a fish to be saved, a fish to be sold, a fish to be bought, baited, protected, pursued, enjoyed, enhanced and examined. It all depends on who you ask.

To the Department of Wildlife, the wild steelhead is a fish to be preserved, protected and perpetuated, while being managed for maximum public recreation. That's the legislative mandate that dictates not only the management of wild steelhead, but of all wildlife species under the authority of the Department. There are other legal mandates, including
the 1974 Boldt decision, which specifically dictates the production of wild steelhead to perpetuate the species.

But the Department has other reasons, beyond the legal requirements, for trying to ensure the future of wild steelhead stocks. From a practical standpoint, it doesn't "cost" anything to raise wild fish in a healthy river environment (except, of course, for the sometimes high costs of habitat protection, enforcement and other expenditures of time). There are no feed costs, no labor costs, no equipment, building or maintenance costs like those associated with hatchery fish. Wild steelhead are also genetically useful in reproducing in the streams of their origin, spawning more successfully and producing a larger number of healthier young than naturally spawning steelhead of hatchery origin could be expected to produce.

The wild steelhead's reputation among anglers as a strong fighter could certainly be counted as yet another point in its favor. There is also, many would argue, something inherently noble, beautiful and free about a fish that has survived to spawn in nature and has never been touched by human hands. The wild steelhead represents the freedom that many of us, with our high-blood-pressure lifestyles, can only imagine. To some, the wild steelhead is all that is still good and pure and natural about our fast-changing world.

Given the importance of wild steelhead to Washington, the Department of Wildlife's steelhead management principles include several that deal specifically with wild steelhead management. One of these principles, for example, states that wild steelhead runs are being managed for maximum sustainable harvest (MSH), which is the maximum number of steelhead that can be harvested over the long term. If more fish spawn than the MSH escapement goal, that's okay, too, since the Department does not consider wild fish spawning in excess of escapement goals to be "harmed" or harmful in any way. Sport and tribal fisheries, however, should be given the opportunity to catch those "excess" fish.

Another MSH steelhead management principle states that all wild runs are considered "viable" except those in streams where habitat is no longer accessible and formal replacement mitigation is involved. A viable run is one that is managed for (at least) MSH. Where wild runs are returning at or below escapement need, fishery on these runs are managed by closures, catch-and-release angling or other management for hatchery-origin fish. Although no wild fish harvest is best when runs are below escapement needs, a maximum incidental harvest of 10 percent may be allowed to help tribal and sport fisherman a chance to catch hatchery steelhead in the same river system.

The Department suspects that hatchery stocks can adversely impact wild populations through genetic exchange, so it attempts to minimize the escapement of hatchery steelhead, which are after all, put there to be caught.

The state's wild fish resource is currently being managed according to interim estimates of maximum sustained harvest, calculated from a composite model of spawners and their progeny. Some 10 years of gathering sport and tribal catch information, scale samples and spawner-survivor information has provided the Department with a good baseline of information to generate that composite model. Each additional year of data gathering enables NOW to refine the spawner-recruit relationship for wild steelhead and to more accurately predict run sizes, harvestable numbers and appropriate escapement goals. Past, current and future efforts by NOW and the tribes have and will yield some of the most accurate data ever compiled on steelhead populations, anywhere.

Knowing everything we can about the state's wild steelhead runs is valuable not only to resource managers and fishermen, but to all of us. The health of our wild steelhead runs, after all, can tell us a lot about the health of our streams, our planet, and our future. At the very least, the Department of Wildlife considers our wild steelhead populations an important part of the quality of life we enjoy here in the Evergreen State.

THE DISTINCTION BETWEEN WILD AND NATIVE STEELHEAD IS IMPORTANT

With all the publicity that has been given to managing rivers for their wild steelhead, we should remember that there is an important distinction between steelhead that are wild and those that are native. While it is true that all wild steelhead are stream-bred, and all native steelhead are wild, not all wild steelhead are necessarily native. They may be the descendants of fish that were introduced in the river as juveniles, after having been raised in hatcheries, and then managed to return as adults and spawn successfully.

Quite a few Northwest rivers still have viable populations of native steelhead. Where a river is so remote that it has seldom been fished, such as in Alaska or portions of British Columbia, the chances are good that virtually all of its steelhead, even those that spawn in the river's lower reaches, are native. The temptation to plant such rivers with hatchery steelhead would never have arisen. The only possibility that fish of hatchery origin were present is if streams from some other planted river had somehow lost their way and wandered in.

Even rivers that are readily accessible to man, heavily fished, and have been planted for many years, often harbor remnant populations of native steelhead. It may be that these natives have avoided gene dilution with the hatchery fish because they spawn in parts of the river that were unavailable to hatchery fish. Unavailable because of being in tributaries that contain too little water, tributaries too steep or otherwise inaccessible, or streams too far away from where the hatchery fish were planted. Such native steelhead typically are quite small, are endowed with unusual stamina, have a very strong homing instinct, and may possess other inherent traits that uniquely equip them to reach those out-of-the-way places that are unavailable to hatchery fish. Or if they inhabit the same waters as hatchery fish, they have avoided interbreeding because they spawn at a different time of year than the hatchery fish. Thus, even where hatchery plants have been or are being made, it is sometimes possible for native steelhead to continue to retain their genetic integrity.

It is important that we know which rivers still harbor native steelhead and, once known, take special steps in the management of those streams to make sure that the natives are adequately protected. One way of doing this is to require the release of all wild steelhead. They are recognized in Washington because the adipose fin of all hatchery fish are missing from having been clipped before release when smolts. The release of wild steelhead is especially important in rivers where it is known that only a relatively few native remain. Then the risk that those few remaining ones might be caught and killed is minimized. Where it is known that there are still plentiful numbers of native fish and little chance of their being endangered, then a strict catch and release requirement is not so important.

Extra care should be taken by river managers to safeguard all known populations of native steelhead, regardless of which rivers they are found in or where in the river they are found. Best that such rivers be managed exclusively to sustain and enhance the native runs, even if that necessitates that all sport fishing be on a strict catch and release basis. However, if hatchery plants are deemed advisable, the river should be managed so that the existing native fish are in no way placed in jeopardy. Best that the hatchery broodstock be obtained from among the river's native population, being careful not to impact the population by removing too many. (The risk would be greatest in small, high-up tributaries which support very few native adults.) If, as a last resort, hatchery stock from another river must be brought in, extreme care should be taken to avoid the possibility of cross-breeding with the native fish.

MOBIEMENT OF SUMMER-RUN STEELHEAD IN PUGET SOUND STREAMS

One of the intriguing feats of steelhead fishing is the mysterious appearance of the fish in the streams. An understanding of the in-stream appearance of the adult steelhead not only increases one's enjoyment of the resource but it should also lead to increased angler success. The steelhead's behavior is programmed to ensure the survival of the race. Understanding this programming is also to understand individual fish behavior. Steelhead return to their natal streams for only one reason and that is to spawn. The fish are not in the stream to feed, although there may be some infrequent feeding, that they behave differently from resident trout. The fish are genetically programmed to return to their home stream or hatchery to spawn and to do this as safely and efficiently as possible. Because summer-run fish enter their home streams four to six months prior to spawning and feed very little, they must survive on their stored fat. Successful spawners by definition have evaded predators and managed to live on limited fat reserves.

Stan Young

Curt Kraemer
COULD OUR RIVERS RUN DRY?

Through the summer and fall of 1989, a special committee of Washington's legislature has been conducting a review of the state's water policy, a complex collection of laws, administrative rules, tributaries, and building codes that has evolved, and continues to evolve, through the years.

ABOUT OUR AUTHORS:

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SEAN GALLAGHER is a school teacher who fishes steelhead in Canada and the U.S. A consummate flyfisher, he is a member of the Steelhead Committee.

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over the past 100 years. At stake are enormous vested interests, including organized agriculture's concern about irrigation water from rivers and wells, municipal water purveyors who eye population growth as opportunity as well as challenge, developers, and hydro-power interests who use the "free" water of our rivers flowing unharnessed to saltwater in times of draught, and those various groups, like us, who seek to protect the optimum flows of our rivers for the sake of fish and riparian habitat. This "review" already has become a battle, despite the fact that by Christian holiday, legislation is yet formally proposed, although interest-group positions were pretty well staked out. And although the battle may well go on for several years, what happens in the upcoming legislative session (January - April 1990) demands close scrutiny because major policy directions may be set.

As background, a little-noticed law was passed in March 1985 which mandated this policy review. The law was urged by agriculture, municipal water companies, and industrial users because the Department of Ecology, after long and thorough public hearings, was about to enact its Preferred Alternative Water Allocation Program which would have put heavy emphasis on instream flow protection as a major goal in Ecology's efforts to regulate water permits and allocation of off-stream water use. Strong instream flow protection was seen as a major thrust to balance us-for-us for the afore-mentioned interest groups.

Your FFF officers are already active in tracking these developments, and we will keep Federation informed through club newsletters and other forms. Steelhead flyfishers should, in the meantime, be alert for opportunities to insist that their elected representatives to Olympia carefully consider and formulate their positions on instream flow. This is the buzzword we need to learn to live. In Olympia, an instream flow advocate is one who insists on maintaining optimum water levels in rivers to ensure good fish and riparian habitat, including restoring flows to streams that already are drawn down too far. These efforts, obviously, run directly counter to the interests of those who support population growth, particularly in the Puyallup River region, projected toward nearly double within the next 30 years.

One concept needs to be clearly understood and talked about. Controlling population growth is the only affordable way in which to save our rivers. But as a practical matter, curtailing growth in a most difficult task anywhere, and Washington is certainly no exception, anything but a formula for tough hardnosedness. If one considers that we have a measurable amount of naturally-available water, and that, on average, it will be about the same over future years, then it is only a matter of time before population will overwhelm water availability. Conservation simply can't do enough. The experts tell us that maybe ten percent of available water can be conserved in the Puget Sound basin, perhaps thirty percent in eastern Washington where greater efficiencies (usually in irrigation) are possible. Thus the crisis will occur when water becomes so expensive as to make it socially unacceptable to use more, either by limiting the number of people who use it or by pricing it beyond reach. But the immediate threat, in the next few years, is that as these inevitable events approach, we will just as inevitably find ourselves our natural resources by taking "a little here and a little there" in a futile effort to postpone the unavoidable, until when that time finally does arrive we will have nothing left. Both water and habitat will be gone as they have been known and traditionally associated with Washington's unique way of life.

Thus, the only sensible approach is to put strict limits on these nibbles in the very near future, so that when we decide, in years to come, that water is too expensive, we still will have the instream resources traditionally known in Washington. If we fail to do this in the near term, we will most certainly eventually become as the rest of the world, streamheads lined with concrete, dust-tox except when handling only that spring runoff which has not been diverted into man-made reservoirs, impoundments also of concrete and stone which provide habitat for nothing at all, save a few wayward flags and fees. Take a drive through rural southern California and see for yourself.

Our rivers, and the way we use them, are a vital index of our quality of life, that makes the Northwest a unique place in which to live. This water policy issue will be the subject of great debate in these coming months and we must let ourselves be heard. If we do not speak out, we will have only ourselves to blame.
The WASC has been operating for three years now. It is a loose association of about fifteen members. Most of us live in the Seattle area, but there are no members living in each of the other principal regions of Washington, so the entire state is covered. Most committee members are activists and self-starters who have a special interest in fly fishing for steelhead and who are willing to devote some of their time toward furthering the sport. Each sets his own priorities and follows his own agenda in pursuing the things that especially interest and concern him. The role of the committee chiefly has been to get the group together periodically for a discussion of issues, an exchange of ideas, and to try to get some general focus on what is important and how best to move forward. Under this arrangement the committee essentially is as effective as the sum of the efforts of the individual members.

Last spring the committee adopted a statement of Purpose, Organization and Activities that spells out the thrust of what it seeks to accomplish and the framework for its activities:

**PURPOSE, ORGANIZATION AND ACTIVITIES**

**PURPOSE:** To protect, maintain, and enhance the steelhead resources in Washington state, especially native and wild fish, and to maintain the integrity of steelhead river ecosystems.

**ORGANIZATION:** The Committee is an integral part of the WFF's International and Northwest Steelhead Committee, as well as an attendant of the WFF's Washington Sub-Committee. Officers are chairman, vice-chairman, secretary, and treasurer, selected by a majority vote of members present. Officers serve for two-year terms and may be re-elected. Meetings are open to the public at the discretion of the chairman, but no less often than every three months. Dates and times as may be established, from donations, by proceeds from fund-raising activities, and from funds provided by the parent organization. The treasurer submits to the Committee an annual accounting of receipts and expenditures, due the first meeting of the new year.

**THE STEELHEAD HATCHERY HOAX**

One of the long-standing rationales for need for hatchery steelhead has been to compensate for habitat degradation caused by human activities along streams: timber harvest, mining, grazing, etc. What has happened on the Toutle River in recent years brings that old rationale into serious question. Here are some remarkable statistics:

In the spring of 1985, 1,807 wild winter run steelhead spawned in the South Fork Toutle River, according to recent surveys conducted by Washington Department of Wildlife (WDFW). This was just five years after Mt. St. Helens erupted, and ash was blown north, killing 80% of the spring-run migration. But in contrast, at least 2,700 fish were reared by the hatchery.

The following article is intended to evoke reader response. Letters/communications will be welcome and published as space permits in upcoming issues of The Gazette. Miller.

**STREAMBANK ACCESS**

The following article is intended to evoke reader response. Letters/communications will be welcome and published as space permits in upcoming issues of The Gazette. Miller.

Included in the statement of goals of the Washington Steelhead Committee in this one-line: "The Committee works to improve stream access." Simple enough. But just how do we do this and do very many of us really want to be successful? After all, a steelhead has diligently discovered his own favorite fishing places is not likely to work very hard to make those valuable secrets available to others. And if our lives are at all reflective of reality, steelhead fishermen are among the world's most secretive gentlement. A "clique" among us is apt to consist of two friends, each a little suspicious of the other while they occasionally share the same water.

Still, the problem needs understanding. Typical of the dilemma is the Kalama River. As Bill McMillan has pointed out, that stream in the 1960s/70s had a good run of fish and the fishermen were small in number. Anglers got along well enough with the growing number of streamside property owners. Then the Game Department decided to use Gobber Creek (a major upstream Kalama tributary) as a testing area for introducing hatchery plants. The results were more than dramatic and soon the number of returning fish were far greater than they had been, and the number of fishermen pursuing these fish grew proportionately. Inevitably, the streamside landowners ran more and more abuse of their properties, and more and more postings went up. Today, as any Kalama fisher knows, it takes a pretty thick skin to sneak around in the fly-only water when one sees all those KEEP OUT signs.

On the Kalama's "success" has been its diminution in terms of access. Improved steelhead returns become increasingly irrelevant as the angler finds it more and more difficult to get to the fish without breaking the trespass laws. The fisher finds himself trying to outwit the law as well as the fish and the experience is significantly degraded.

Every steelhead knows that the problem gets worse each year on his favorite stream. Our ranks grow as the word gets around about all the fun we are having. We respond by becoming more and more protective of whatever arrangements we have made for accessing our favorite water. Yet organizationally we profess to want to make steelhead fishing more enjoyable for more people: to "promote" the sport. This would be true if only because of the considerable commercial pressure put on your guides and outfitters, but the point exists throughout our ranks: I want to share steelhead fishing with a friend, my friend, with his son, and so on.

To propose solutions to this piece would exceed space limits. But the problem is something like a small toothache that I suspect is getting to get much worse. I can get by with only aspirin for awhile, but eventually some "serious steps" will be needed.

What do you think?
Kevin Porter—In fact there has been no observable spawning in the waters of these more heavily silted, and often wandering, mainstem channels in part, because of Wegner's salmon salvage operations. However, the habitat network provided by their small tributary streams was little affected by the operation, and in 1971 these tributaries were the primary source of steelhead on the lower Rainy Trail, 453 steelhead on the North Fork, and 402 steelhead on the Green. Total escapement for the Toutle River system in 1971 was an estimated 2,567 wild winter fish, including 1,650 steelhead in the South Fork, just seven years after the completion, with much of the system's fish habitat heavily damaged or entirely out of production, without any form of hatchery supplementation for winter run steelhead.

In striking contrast, the neighboring Kalamo River's mainstem was surveyed with a combined wild winter run escapement of only 248 steelhead. Although the Kalamo's tributaries were not surveyed in 1971, the mainstem's low escapement has caused observed alarm within WW. While the Kalamo drainage has been heavily logged, its mainstem habitat quality remains "passable" compared to that of the Toutle's mainstem drainage, including the South Fork. Despite the comparatively good habitat quality, the Kalamo is far from meeting the wild steelhead's need for 1,100 steelhead, under WW's management strategy of maintaining contained harvest (SSH). The likely reasons for not meeting this goal are overharvest by sportmen who live in the Kalamo during the winter (who are primarily attracted there by large returns of hatchery steelhead), genetic interaction with hatchery steelhead when spawning in the wild—leading to subsequent poor hatchery run spawning survival; juvenile competition with reduced hatchery stocks, and other juvenile survival problems that appear to result from the release of hatchery salmons and steelhead stocks that are poached into the Kalamo each year. (Revitalization could only be seen in the river and never go to sea!)

Here are just two examples of neighboring rivers: One whose fish habitat has been massively impacted, and yet where wild steelhead are doing remarkably well (with one major tributary doubling escapement goals), and one whose fish habitat is comparably "passable," yet where wild winter run steelhead are doing poorly, i.e., well below escapement goals.

So it now seems evident that wild steelhead are remarkably capable of seeking out a quality of habitat that is sufficient to meet their needs even when much of their natural habitat has been vitally destroyed. By contrast, even good steelhead habitat seems incapable of providing adequate wild production when the wild stock of fish is impacted by the multiple effects of hatchery programs and poorly regulated harvest.

It should be emphasized that it was the volcanic disaster that caused the Toutle's wild winter run steelhead to be left entirely alone, something that rarely happens on rivers nowadays under intensive hatchery programs on Washington and Oregon streams. From 1971 through 1976, the Toutle had no winter spawning wild steelhead. But since mid-1977, the number has been building. The scientific question: Should there be any role at all for steelhead hatchery programs on the great majority of Northwest streams?

The answer to that question depends on how one defines sportfishing success and opportunity. In British Columbia, steelhead sportfishing success is measured by the amount of time it takes to catch a steelhead, and a steelhead is counted part of the catch even if it is released. British Columbia advocates the catch and release of steelhead as the primary component of sportfishing opportunity. As increasing numbers of anglers have come to follow the Fish and Wildlife Branch's promotion of steelhead release, sometimes voluntarily and sometimes through regulations—the number of angler hours (on days) required to catch a steelhead has dropped, indicating faster fishing, and the number of steelhead caught have risen to historic highs in the past three to four years; and all the while the 90 percent of wild and 75 percent of hatchery fish are released. For 1984-85, anglers averaged 0.6 steelhead caught per angler day on R.C. streams with an average annual catch of 14 steelhead per angler! The 145,520 steelhead that were caught that year, 4,598 were estimated to be wild, and the rest from hatcheries. So many U.S. sportsmen recently have been attracted to British Columbia by wild steelhead angling opportunities that the managers have begun controlling the number of visiting anglers on the Fraser River and are considering similar measures on the Skagit system. Without control, they fear that the values that have made these wild fisheries so attractive (relative narrowing low angler hours per fish) will be lost. At the present time, and with steelhead sportfishing opportunities as measured, B.C. hatchery fisheries play a relatively minor role, and generally do not affect visiting U.S. anglers, who are trying to escape the very problems associated with hatchery fisheries readily available at home.

How opportunity and success measured in Washington and Oregon? Usually by catch data provided by sportmen that can tabulate only the number of steelhead killed. While the release of wild steelhead is required on some streams (very few in Oregon), there is no effective provision for recording or sampling the released catch, and for the most part the release of wild steelhead is not actively encouraged by the managing agencies (particularly in Oregon) outside those seasons and streams where it is mandatory. (Now state available to the Volunteer Angler Credit Information Program, but its capacity has not expanded as from catching or from angler claims and it is not always systematically reported. Streamside credit exists, data taken by WDFW agents directly from fishermen, also help.)

When the kill of steelhead is the predominant measure of sportfishing opportunity and success, then only hatcheries can sustain the type of harvest that many sportmen have come to expect through the encouragement of the Washington and Oregon agencies. These agencies require sportmen to record and measure their success—in a pool for each fish—and the system itself demands and perpetuates an over reliance on the steelhead hatchery. It generally has nothing to do with biological or habitat considerations, but is an inescapable consequence of how the managing agency asks the sportmen to define the sport and in so doing to save its face.

This perception of themselves as more heed of harvest (they are more traditional angler), and the "hatchery credit" measure of sport experience by the hatcheries, has caused a distorted image of Washington/Oregon sportmen and of the essential qualities of their sport. This distortion has been caused precisely by the choice of systems through which Washington/Oregon agencies have chosen to review that sport, and in this biased image of their very creation has arisen a hatchery steelhead base that no sincerely responsible government can afford on the scale that it is presently applied in the name of "recreation."

RIVER ETIQUETTE

I have often listened with envy to the tales of old timers, of remote and uncrowded steelhead streams. It must have been exciting to search the pools and riffles to uncover their mysteries, knowing that few lines, if any, had been there before. Unfortunately, experiences like these have become rare and we are now more likely to be searching for open spots to fish, rather than exploring virgin water.

On many of our streams, large numbers of hatchery fish return to relatively small sections of river, which guides often overlook, and often poor etiquette and angling ethics. It is sad that many steelhead anglers must serve their apprenticeships under these conditions and then continue to spread the "hatchery mentality" to other fishers and rivers.

I have talked to both fly fishers and sport fishermen who are concerned about the problem and believe we can have a positive impact. We combat poor angler ethics and etiquette by educating new anglers through our own example on the river.

While it is important that we begin with our own children, we should also realize our potential for working with the public. Seminars, clinics and even articles for beginners should include discussion on stream etiquette. It cannot be enough to teach someone how just to catch fish, we must offer information on how to share water with others, with the least amount of interference.

An unwritten rule of fishing is that we never step in front of another angler who is working a pool. When we are on a large piece of water, we continue moving so that others are able to work the water behind us.

When working a run with your fisherman, it is important that we follow the same traditional rule that we would with fellow fly fishermen. Veteran steelhead fly fishermen know this rule and should take every opportunity to educate new anglers.

I usually pick up discarded line and litter on my way off the river. I hope that this practice will spread to new anglers and that littering on our rivers will become even less acceptable behavior in the future.

When we land and release a fish, other eyes are on us; it is a good time to show good angling ethics, including respect for the fish.

In retrospect, the anglers I have advised most did not catch all the fish, but rather left me with a love and respect for the fish and its environment. While we will never be able to turn back the clock to the Good Old Days, we still have a valuable resource worth fighting for. It is my hope, whether we steel a rare evening by ourselves on the river, or share our water with others, that our record will continue to be a pleasant and measurable experience.
WILD STEELHEAD CONSERVATION
(THE BIG PUMP SYNDROME)

Bill Bakke

in the last issue of The Oregonian, Bill Bakke wrote of the negative impacts of hatchery steelhead plants on wild fish in Washington's Kalama River—as reported in a study by the Washington Department of Fisheries—and the inherent conflict facing fisheries managers with hatcheries. The problems are resource stewardship and public trust versus increased catch rates. Bill's article is a highlight of the Big Pump Syndrome and how it is unfolding just about all of us. This is a thoughtful and forceful argument.

Next, if not all, hatchery programs have been initiated and continue to operate as if a wild fish population didn't exist. The goal of a typical hatchery program is simply to increase the catch. The hatchery is operated like a big pump, pushing more fish through the ecological constraints of the river. This works for a little bit but there is evidence that it begins to fail as the ecosystem adjusts to the increased number of fish.

The Big Pump plan prevents public policy from evolving. When the hatchery operates independently of the ecosystem, the public and the agencies can ignore the signs of degradation such as habitat loss and reduced wild populations. However, in Oregon, the hatchery agency can develop a fish management plan for a lease without including water resources and forestry agencies. Consequently, the state's natural resources agencies can continue to have conflicting missions as long as the big pump operates. The Big Pump temporarily overcomes habitat degradation, shielding the habitat problem from public awareness and concern.

And so anglers continue to believe that the real threat to fish are steelhead and other fisheries, not the Bonneville Power Administration, the Forest Service, or western water policy.

Endlich, they know it like this: 'hatcheries are the easy way, the politically successful way.' Dependence on hatcheries reduces the will to attack and solves the real problems of natural protection and abates for too much money that otherwise might be directed to these ends.

The public and the agencies assume that the public will just go on pumping, that depleted management and the cost of operating in taking the toll. Oregon has been in deploring maintenance for so long that to bring the hatcheries up to standard will cost more than $14 million. The federal hatcheries also have been deploring maintenance to save dollars to produce fish, and bringing them up to standard in the Columbia Basin will cost $75 million. Now, the federal government may close some Mitchell Act hatcheries in Oregon and Washington.

Nonetheless, the agencies and tribes have remained undaunted in their single-minded insistence on more hatcheries. They have successfully persuaded the Northwest Power Planning Council to move ahead on the development of three new hatcheries in the Columbia Basin. All three, the Yakima-Tillamook, the Umatilla, and the Northeast Oregon, are to be used for planting hatchery fish to rebuild wild runs in other streams. Nurturing does this sound like a contradiction, but 26 million has been allocated to the Yakima facility before the biologists have reached agreement on how hatchery fish can be outplanted without degrading wild populations. The agencies and tribes have not supported the Council's priority for wild fish restoration, and they have finally persuaded the Council to retreat from that objective.

In the 1970's the salmon and steelhead populations above McNary Dam on the Columbia were being reviewed for possible listing under the Endangered Species Act. The agencies dismissed that review by claiming that the Power Council's fish programs would provide the needed recovery measures. But the Council has never directly addressed the recovery of specific endangered stocks nor has the agencies requested it. The Council announced in 1997 that the Grande Ronde steelhead had become extinct and that 22 other stocks were threatened in the Snake River basin. Further, we find that the agencies participated in soliciting information on Columbia River salmon and steelhead stocks but never attempted to assess their status. So Oregon Trout reviewed the data and found that of the 109 wild stocks inventoried only 16 were in good condition while 81 were marginal, 16 were facing extinction, seven were extinct, and nine were of unknown status. At the same time, the agencies, at the request of the Power Council, submitted a list containing only three marginal stocks.

Oregon, Washington, and Idaho have a serious conservation problem. Eighty percent of the Columbia River runs are composed of hatchery fish and this fish stock is a sad testimony that a severe ecological crisis is at hand, but it has never been characterized as such by the agencies.

Until the Northwest Power Council made the request, there was no estimate of the miles of stream removed from production in the Columbia Basin, and there was no estimate of fish losses owing to development of the basin. But by taking the initiative and collecting the data, the Council has been able to set a rebuilding goal for the endangered species of the basin. At this time Oregon still does not have a statewide occurrence of the number of stream miles removed from production for salmon and the state has not inventoried the number of extinct stocks. It is difficult to know what management options are available if the size of the farm and its productive capacity is unknown. But that is the situation in which fish managers find themselves.

A record of extinct salmon and steelhead stocks has not been compiled for the Columbia Basin. But one is needed to generate a sense of urgency for the conservation of what remains and Oregon Trout has begun to compile such a list. Even though this work is not complete, Oregon Trout has been able to document 10 extinct stocks of which 7 are steelhead. This extinction constitutes a large reduction in the overall genetic diversity within the basin. This has happened since 1860 and has affected every portion of the region. However, the greatest impact has been in the basin's upper estuaries where one would expect the most divergence within the whole genetic resource. As an example of the unique nature, one steelhead stock, now extinct, had to migrate 1,476 miles and reproduced in an arid environment. It was extinguished by irrigation withdrawals.

The public is being told by the biologists that the natural salmon and steelhead stocks of the upper Basin, running to rivers above eight major dams, are too small to warrant investments in habitat rehabilitation. These same biologists are also saying that the conservation of these stocks cannot be a constraint upon harvest, primarily commercial harvests in the mainstem mixed-stocks fisheries. This is a short-term view of economics rather than stewardship, and it will lead us to the Endangered Species Act as the last measure available to protect these resources.

The agencies and tribes can avoid the Endangered Species Act in two ways. One would be to practice conservation and restore the threatened wild populations. The other is to subvert the intent of the Act by outstanding hatchery fish into every subbasin, in the name of "rebuilding the runs," so that indigenous species cannot be defined as wild. Wild fish are gone there will be nothing to protect and there may no longer be legal grounds for conservation management.

The Willamette study is the only one of the kind in the Northwest, and it shows, without doubt, that by stocking hatchery fish the wild population is degraded. Anglers take up the challenge presented by the Willamette study and strongly support the conservation of wild salmonids, both steelhead, and we must appeal to a larger public for support. Otherwise, fisheries management methods and habitat destruction will continue to eliminate wild populations, and nothing of spiritual or biological value will be left.

THE ROLE OF HATCHERIES IN STEELHEAD MANAGEMENT

Stan Young

There was a time when hatcheries were thought to be the ultimate answer to steelhead runs depleted by dam construction, road building, logging, over-harvest and other man-made effects. It was easy, merely dump 100,000 tiny hatchery-raised juveniles in a river and a few years later several thousand mature adults would magically turn up, ready to be caught. Almost too good to be true. A group of fishermen who had come to expect dwindling returns. And, for a while, it worked beautifully. Beautifully, that is, if one wasn’t too busy about the fact that the fish were so almost all mirror images of each other, and that most arrived in the river at about the same time. Beautifully, too, if one could overlook the fact that, if a disease should strike the hatcheries and wipe out an entire generation of steelhead, in a few years they could expect to return at all.

But there were those among the anglers who had been around long enough to have experienced steelhead fishing as it was meant to be enjoyed. They never knew what size to expect when a fish struck. It might be five pounds, and then again it might tip the scales at fifteen, twenty, or even thirty pounds. Bright new fish continued entering the rivers month after month after month. Disease was unheard of.

And then some in British Columbia got the idea of trying to protect and value their runs of native fish, rather than writing them off and turning to hatcheries as had been done in the south. As a result, the fish would remain in almost all mirror images of each other, and that most arrived in the river at about the same time. Beautifully, too, if one could overlook the fact that, if a disease should strike the hatcheries and wipe out an entire generation of steelhead, in a few years they could expect to return at all.
This isn’t to claim that there is no role for hatcheries in the management of steelhead. Just that in most rivers where viable runs of native fish still exist, they should be managed primarily to protect and enhance those native stocks, with the objective of achieving a fishery of native-runs that is self-sustaining. The same is true of rivers devoid of native fish in which the demographics of hatchery fish have become established and are self-perpetuating, stream-bred wild steelhead. The use of hatchery-reared steelhead should largely be confined to those rivers that for one reason or another are unable to produce stream-bred steelhead, or not in sufficient numbers to make it worth-while trying. Or, as in the case of a river like the Skagit, where it is possible to make a planted of hatchery fish that returns months earlier than most of the native-runs and serves to satisfy a large part of the tribal quota for that river.

Bill McMillan

SNORKEL COUNTS ON S.W. WASHINGTON RIVERS

This article should encourage any fishing club which asks itself “What can we do to help?” It provides a good example of how individual involvement pays off. Editor.

For the third straight season southwestern Washington steelhead and anglers suffered during a long, dry summer that extended right up to the beginning of November. It would almost appear as though the weather patterns more typical to northern California have extended northward to the mouth of the Columbia River. Whether the “greenhouse effect,” or merely acycle weather pattern such as prompted the dust bowl of the 1930s, I don’t think any responsible scientist is yet willing to commit to, but certainly it is worthy of fishery consideration and notice for more careful planning.

Summer steelhead fly fishing was the poorest I have experienced in southwest Washington. Reasons: unusually high March/April flows which stimulated early and rapid movement of wild ’sprangers’ into the upstream waterfolds, lack of returns from hatchery steelhead steelhead, extremely low water flows from mid-July to early-November, wild fall run of steelhead likely overharvested by salmon snagging activities, and a lengthy lower Columbia commercial season in which steelhead remained in the Columbia rather than entering drought-stricken tributaries. But despite poor fishing, considerable progress has been made in gathering wild steelhead information on the Wind River, thanks to increasing cooperation between the Washington Department of Wildlife (WDW) and the Clark-Shamala Flyfishers.

In February, the WGW extended its manpower to WGD’s Wind River red surveys which determined that Panther Creek and the Wind’s main canyon stretch are providing more wild steelhead spawning than previously documented. Although the red surveys were still less exhaustive than desired for accurate escapement estimates, it was projected that the Wind’s wild summer run spawning escapement for 1985 (1987 summer return) was 336 steelhead. This compares with previous estimates of: 1985 - 424 steelhead, 1986 - 426 steelhead, and 1987 - 606 steelhead, as determined from previous WGW red surveys.

At the instigation of WGW, Judge Weinhimer (WGW Regional Biologist) coordinated a cooperative snorkeled count of 20.6 miles of Wind River from Fairview to the junction of Wind River with the Columbia. All told, more than 50 volunteers showed up (about 10 WGW members) from all over the state of Washington (and a few from Oregon) with at least five agencies represented (including Bonneville Power Administration, Northwest River Planning Council, U.S. Forest Service, U.S. Fish and Wildlife Service and numerous WGW personnel) and a few research stations. Although the numbers of wild steelhead that were found on the August 27th count were somewhat disappointing (but expected), the numbers of rainbowsteelhead pairs that were found were in the river were cause for absolute jubilation. Altogether, 509 wild steelhead were counted, 194 hatchery steelhead, 132 unidentified steelhead (could be their adipose fin), 1,215 rainbowsteelhead (477 wild resident rainbow, 25, red rainbow), 85 miscellaneous hatchery steelhead smolt, 8,426 juvenile chinook, 10,670 alewife, 1,365 whitefish. While all snorkeled groups kept accurate count of adult steelhead, only about half of the nine snorkeled groups kept accurate juvenile counts. For the entire river, rainbowsteelhead pair may have numbered more than 20,000, and if they were to transfer into wild steelhead smolt next spring (although some will remain as resident rainbow) as a possible ten percent single-to-adult return (possible with wild steelhead survival), with wild steelhead survival, it would translate into a 1991 fall-run return of 7,000 summer run steelhead that approaches historical carrying capacity! This is still dangerous speculation, but pair numbers were far above those encountered in past CFS Wind River snorkeled that began in 1985. Certainly there is reason for great, but guarded, optimism.

A June 27th snorkeled survey of the upper Watusahul River by CFS provided a count of 182 early summer run returning (springers) with only eight hatchery steelhead counted among them, and with only one of those hatchery steelhead found above the waterfalls that all of the wild fish eventually will ascend. An October snorkeled on the Watusahul provided a count of 144 steelhead with no hatchery steelhead observed in the upper river node area that is “home” to the wild summer run stocks. It was estimated that a likely 100 steelhead may have passed upstream into uncontrollable reaches during a couple of small September/October floods which would indicate a return very similar to the 250 - 260 fish counted in 1984 and 1985. In 1985, prior to wild-release regulations implemented on the Watusahul in 1986, any steelhead were counted in the upper Watusahul. This would indicate that nearly two-thirds of the wild run was harvested by anglers prior to the wild-release regulations if the Watusahul had a similar 250 - 260 return-to-river run of summer steelhead as has been the case since 1986.

THE GOOD OL’ DAYS

The Survey has come upon a nostalgic view of stream sportfish. From the North Umpqua River (Oregon) "Steakheaders" into Ted Novis. Editor.

PLOACHING, ANYONE?

Would be poachers should consider that not all judges are softies. From the OUTDOOR NOTEBOOK of the Seattle Times."John S. Hul of Yakorn Island has been fined $2,000 and sentenced to a minimum of a year in jail for illegally netting three steelhead in the East Fork of the Lewis River.

"Clark County District Judge Kenneth Estland sentenced Gail to a year in jail for fishing, plus 30 additional days for each of the three steelhead. Gail will also lose his license, the net and a gun which were confiscated by state wildlife agents when they made the arrest in January."

A true sportsman will:

1. Be and act like a gentleman.
2. Think of the other fellow who wants to catch a fish as much as he does.
3. Not take advantage of either fish or other fishermen.
4. Not take more fish than he can use.
5. Remember it is more honorable to release a fish than to eat it.
6. Not go in the river close below or across from anyone fishing, nor cast his line near that of another fisherman.
7. Allow the fisherman who arrives at the hole first to finish fishing without interference.
8. Not be a HOLE HOG. He should not prevent another from fishing a hole for a long time. He can either (a) have the holder person join him, (b) tell him to pass through the fish below or (c) vacate the pool entirely in favor of the other fisherman.

HANFORD REACH STUDY

President Reagan has signed legislation authorizing a study of the Hanford Reach segment of the Columbia River in Washington state, to determine whether it should win permanent protection as part of the Wild and Scenic Rivers System.

The legislation provides certain interim protections for the river stretch during an eight year period.

The Hanford Reach in central Washington runs along the Hanford nuclear reservation. It is the last free-following stretch of the Columbia in the United States, and is considered valuable in its existing state for wildlife and migrating fish.
SMALL HOOK, BIG FISH

Lee Wulff

The Osprey heard intriguing rumors not too long ago. Lee Wulff had taken a good steelhead on a No. 28 fly. Just another fish story? We decided to find out and a phone call to Lee resulted in this sure-Enough account. Editor.

It had seemed close to impossible when I started. I'd been tying #28 flies in my fingers without a vice at each class in our fishing school and often getting the question "How big a fish can you catch on that tiny hook?" A few years ago I set out to see if I could catch an Atlantic salmon of ten pounds or better on a #28. After some learning experiences I landed a 12-pounder (in 20 minutes) a couple of years ago. Coming west to fish for steelhead last September I decided to catch a steelhead, too, just for fun.

Because we were working on a picture story I felt the need to catch a good fish in the conventional manner first. That took a day. We got the necessary pictures. Then I switched to a #28 and hooked three fish, only one of which I landed. One ran downstream through a rocky channel faster than I could follow (I'm no longer young and spry) and pulled the hook. The other failure came when the fish cut upstream into a fast current and broke the hook at the bend. (It takes as little as a half-pound pull to break a #28 on a twisting pull.) The one I landed gave me a great show of chasing and making the little skating fly half a dozen times or more before he got it and the hook bit into his jaw. He put on the usual gymnastic steelhead display and, of course, took a little more time than with stronger tackle and came in, as I recall in about eighteen minutes. He wasn't a big one, a nine-pounder, but he was quite active. I'd hoped to be able to hook into a few big ones and land one in the 20-pound class but the rains came and rivers were high and cloudy. Our fishing was over and we moved on. The picture story of that fish and others will appear in an upcoming issue of TROUT.

When hearing about my catches on #28 flies I'm almost always asked, "How strong was your leader?"

"It's immaterial," I reply. The hook is the challenge. It will break at a one-pound pull or under depending how it is set in the fish. A twist in one side or a pull against the point will break it easily. But a greater problem is to hook the fish in the first place. Care must be taken not to fill in the gap between shank and point with fly material to cut down the hook's bite.

The taking of big fish on such small flies emphasizes the point that it is not the pressure from the angler that tires a fish but rather the fish's own efforts to escape. Since 1936 I've been making fishing films and have learned what sort of pressure and what will cause fish to move this way or that, to leap, or to come closer. To explain all the techniques would take a long article but since one man can do it so can others. It will not be easy but it can be done.

The #28 fly is just to prove a point, to answer an angling challenge. Someday I hope to get an Atlantic salmon or a steelhead of 20 pounds or better on one. Bigger hooks make it much easier. I've taken a 27-pound Atlantic on a #16 and feel quite comfortable playing big fish on that size hook in most waters.

The advantages of using small hooks are many. Just as a deer can spot instantly the distinctive head and shoulders silhouette of a man so can a trout that has been caught half a dozen times in a catch-and-release area spot the tell-tale hanging bend of a hook point with normal size hooks and avoid them. Small hooks are much easier to disguise and the smaller and lighter the hook the better a fly will slide across the surface in swirling waters for those of us who love to fish steelhead and other fish with a surface fly.