

Report on Fieldtrip to Riparian Zones in Sawtooth National Recreation Area and Vicinity, Idaho

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Condition of riparian zones is an issue whose time has finally arrived. Not that these critical areas haven't been recognized as important for their watershed, fisheries, and wildlife values before now, rather, finally sufficient concern prevails to force a review of their management. On the western rangelands, the issue is primarily the effect of grazing domestic livestock on these areas. Cattle are known to concentrate on areas near water and may damage streambanks and woody vegetation.

The issue was given more visibility as a result of a remark by Dr. Thomas Nelson of the U.S. Forest Service at the 1979 convention of the Society of American Foresters. The comment that conflicts between wildlife and livestock are generally local problems and the degree of conflict is low caused responses from the American Fisheries Society and The Wildlife Society to the effect that this is misleading and that the status of riparian habitat is indeed a serious issue across the West. Subsequently, R. Max Peterson, Chief of the U.S. Forest Service, proposed a fieldtrip to the Sawtooth National Recreation Area, with representatives of the Wildlife Society, (TWS) American Fisheries Society, (AFS) and other concerned parties.

The Sawtooth National Recreation Area (SNRA) was established by Public Law 92-400, on August 22, 1972. Located in central Idaho approximately 50 miles northeast of Boise, this 754,000 acre area contains some of the most important anadromous fish (steelhead trout, sockeye and chinook salmon) spawning grounds in Idaho. Headwaters of the Middle Fork, East Fork, and the main Salmon River occur within this area and produce approximately 28% of the wild salmon in Idaho. A primary objective of the SNRA is protection and conservation of the salmon and other fisheries (U.S. Forest Service 1975, General Management Plan, SNRA).

The following comments are based on experiences gained during the trip, 7-8 October 1980, to the SNRA.

1. Forest Service is relying entirely on restoring or maintaining riparian habitat by manipulation of grazing through rest-rotation or various deferred systems. These systems are designed to grow grass, not woody vegetation. They may help to restore herbaceous streambank vegetation and they may or may not reduce streambank sloughing. If woody vegetation is present, it may be retained by these systems. However, if woody vegetation is not present, or is in poor condition, these grazing systems should not be expected to restore woody plants without additional actions.
2. There is action in preventing smolt¹ loss to irrigation

systems. However, there is no action of consequence in restoring rearing habitat except by manipulating grazing, and this is inadequate. Small feeder streams which provide rearing habitat are especially vulnerable to damage.

3. There is experience in Oregon in restoring woody vegetation in riparian zones which should be assessed for its



A small stream in the Stanley Basin, Sawtooth National Recreation Area, which has overhanging banks and sufficient riparian vegetation to keep water temperatures low and retain its suitability as rearing habitat for salmon and steelhead. Photo by T. Bjornn, Idaho Cooperative Fisheries Unit, Univ. Idaho, Moscow.



A stream which has insufficient riparian cover and has been widened extensively through improper grazing. Water temperatures are too high and cover too low for suitable habitat for salmon and steelhead. Photo by T.C. Bjornn, Idaho Cooperative Fisheries Unit, Univ. Idaho, Moscow.

¹Authors are with the University of Idaho, Moscow, and the U.S. Fish and Wildlife Service, Boise.

¹Young salmon or steelhead that is about 2 years old and is assuming the adult's silvery color and is on its first descent from the river to the sea.

- value in Idaho areas. Plantings of willow and other native species coupled with temporary fencing should be tried.
4. There was no mention of any planning effort, directed at determining a priority for actions on a stream by stream basis. An assessment of condition of critical spawning areas should be made if it hasn't. A priority to schedule work on a stream by stream basis should be established, based on inventory and current knowledge of people in the area. The priority, if anadromous fish are indeed a high priority on the SNRA, should not be established on a basis of grazing interests but rather fisheries considerations. Areas we visited were receiving attention primarily through the research effort of the Intermountain Station rather than by initiative from the National Forest. Cooperation between all agencies involved is of course to be expected.
 5. Range conservationists currently have the primary lead in managing riparian vegetation. They should not be expected to evaluate and appraise riparian and stream habitat without the aid of a fisheries biologist. Range conservationists are expert in managing rangelands and are responsible for devising grazing systems. They are not expert in managing limnological² problems, except indirectly. There is a need for greater awareness that when fisheries values are involved, a fisheries biologist needs to be consulted very early in the planning process or when changes in management are contemplated. Grazing systems should not be modified merely to accommodate the rancher unless the other resources have been given adequate consideration.
 6. The research is directed entirely at meadow systems. There are important anadromous fish spawning and rearing areas which are not associated with meadow systems. These other streams should also be evaluated for their unique responses to grazing pressure.
 7. We were reminded that the higher elevation drainages were "forgiving." This implies that there has been some transgression that needs to be forgiven. It was probably meant to signify that the vegetation base recovers, but the effects on fisheries or wildlife are unknown. Natural deterioration of spawning and rearing habitat through drought may well be aggravated if grazing is not properly managed. The concern appears to center on accommodating the grazing operations while the other resources are not adequately considered. Plans for managing livestock during drought years should be developed which consider the potential impacts on other resources involved, especially the critical riparian zones.
 8. The AFS and TWS interest in these resources should not be fickle. Resource management agencies are notorious for responding to the current controversy at the expense of less controversial but often more important issues. If TWS and AFS deem it sufficiently important to urge more action now, they should earmark October 1985 for a follow-up to see what actions have been taken.
 9. AFS and TWS should urge more funding for woody plant restoration and streambank restoration. However, some redirection of effort and emphasis is also feasible. For instance, there is concern that establishing fish screens on streams with no rearing habitat is of little value. If so, then when a fish screen is established, the stream itself should be assessed for rearing habitat quality. Fish screens are expensive, and monies allocated for them could be more profitably used to systematically restore a stream at a time, complete with rearing cover. Also, the management agency very often neglects to evaluate results of activities leaving this to "research." Evaluation of the effects of a management activity is an integral part of the management program.
 10. Finally, it is well to remember that the rancher with long-term experience in this area has watched livestock numbers decline along with the anadromous fishery. He has witnessed higher deer populations at a time when there were many more cattle and sheep on the range than now. Direct correlation between grazing pressure and numbers of salmon or deer is obviously useless. This means that we should address the need of the rancher concurrently with fish and wildlife habitat needs. We need to distinguish between historical actions which affect current condition and the current grazing program and its effects. The real challenge is to devise means by which woody vegetation can be maintained and stream condition can be improved in the presence of livestock grazing. We should recognize that the good will and cooperation of the ranching community is important to the long-term conservation of these resources. ●

²Adjective for limnology meaning freshwater.



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