Abstract: Naturalness and wildness. The keys to what is most valuable about wilderness are directly threatened by current U.S. Forest Service wildlife and wilderness management policy changes with respect to stocking non-native fish species in wilderness waters and the introduction of non-native wildlife to wilderness lands.

As snow drifted through the sky on the edge of the High Uintas Wilderness in 1989, Tom Lyon, noted naturalist, longtime wilderness advocate, and professor of English at Utah State University, spoke these words at the fifth anniversary of the Utah Wilderness Act:

We suddenly realize that the world has nothing more precise, more worth saving, more worth fighting for, than the song of one hermit thrush, or the quick appearance and flowing disappearance of one marten, or the way the sunlight looks on the deep brown velvet of a moose's rack. These things are alive to us now, and uncannily potent in their wildness, because our wildness is coming alive. One of the great powers, one of the great gifts, of wild country is to restore this birthright attentiveness (Lyon 1989).

Roderick Nash (1973) notes the word “wilderness” literally translates into “a place of wild beasts.” Leopold (1949) wrote a benediction, often overlooked, but of profound importance, for the last grizzly shot in Arizona: “Mt. Escudilla still hangs on the horizon, but when you see it you no longer think of bear. It’s only a mountain now.”

Wildlife makes wilderness worth preserving. It reminds us in the plainest terms that we are living with, not at the expense of, other creatures. But managing wilderness (designated or not) let alone wildlife in wilderness, is a paradox. Such a concept implies forcing a modern and planned human system into a chaotic and untrammeled wild place. Controlling wilderness (wildness) is the purpose of management, precisely the arrogance that destroys wilderness (wildness). Maintaining naturalness and solitude should be the focus of wilderness management (Hendee, et al. 1990).

At the same time, wilderness does not exist in a vacuum. Songbirds head south, ungulates head down, wolves follow them, and native cutthroat trout swim up and down only to meet non-native rainbow or brook trout. And research has shown that few natural areas in the lower 48 states are large enough to singularly harbor wolverine, grizzly bear, and others within their boundaries (Newmark 1987; Newmark 1995; Noss and Cooperrider 1994; Noss, et al. 1996).

Wildlife Management in Wilderness
Thus the question becomes, “What kind of wildlife management in wilderness?” While direct habitat manipulation is largely prohibited in wilderness, game and fisheries management has escaped close inspection. Many of our wilderness areas are full of non-native trout raised in fish hatcheries and introduced to wilderness streams at the expense of native trout and amphibians that don’t compete well with the introduced species (Bahls 1990; Duff, 1995; Knapp 1996; Murray 1994). Hunting and trapping pressures vary, but often the focus is on hunter and angler success.

The Wilderness Act (TWA) (PL. 88-577, 1964) seems clear. Wilderness is defined as a place “where the earth and community of life are untrammeled retaining its primeval character and influence which is protected and managed so as to preserve its natural conditions affected primarily by the forces of nature.” Hunting and fishing authorized by state wildlife agencies are allowed, but not requisites. The overriding governance of the legislation is that wilderness must be untrammeled and human activities must be subordinate to the perceived natural life processes, Naturalness, primitiveness, and solitude dominate.

Unfortunately, most state wildlife agency programs require considerable human domination such as recreational-based non-native fish stocking, game production, introduction of non-native terrestrial species—such as mountain goat (Oreamnos americanus) in some Utah wildernesses—and predator control.

The purpose of wilderness should not be to maximize game management opportunities, but rather to secure wild environments for wild native species. Wildlife in wilderness should not...
be symbolic of our management prowess. Wilderness must be a refuge for wildlife where our efforts are directed at restraining our management and control. It is time to allow ourselves to be absorbed by wilderness and think like Leopold's mountain.

**Wilderness and Wildlife Policy-Undesirable Changes**

Regulations that implement wilderness and wildlife policy within the USFS, for example (see Hendee, Lucas and Stankey 1990, for a comparison of wilderness/wildlife regulations), have always set policy that recognizes state jurisdiction over wildlife, consistent with wilderness objectives that state “the forces of natural selection and survival rather than human actions determine which and what numbers of wildlife species exist” (USDA 1990).

While the idea that wildlife management must also protect wilderness values has always been espoused, it has not always been practiced. In fact, that policy seems to be unraveling. Many activities such as non-native fish stocking have literally evolved with the wilderness system and have helped promote the original context of wilderness as a primitive recreational resource. With growing recognition that wilderness also must play an important part in the preservation of ecological and biological diversity and integrity (Noss 1996), issues such as non-native recreational-based fish-stocking programs and big-game management have grown increasingly controversial.

In a dramatic change of policy the USFS emphatically stated in a September 6, 1996 memo from the chief’s office to regional foresters that because “states manage most resident fish and wildlife populations,” while the USFS “primarily manages habitats for wildlife and fish,” public wildlife policy decision making by the USFS will be confined only where a federal action will be met (USDA 1996).

On the surface this policy seems not so dramatic—there has always been a recognition that states managed wildlife activities such as hunting and fishing (Wilkinson 1985). The USFS has upped this context to mean wildlife, not necessarily wildlife management activities, but the resource itself. Because fish stocking, for example, is not generally a federal action, the agency may allow state wildlife agencies to continue stocking non-native fish in wilderness waters without the requisite analysis of the impacts of this long-term activity on indigenous aquatic species—not to mention the biophysical impacts upon wilderness environments resulting from intensive fishing pressure.

This emphasis comes at a particularly troubling time because of increasing concerns over recreational-based fish stocking. Management bias toward a recreational fishery over other indigenous aquatic species comes as no surprise. But the willingness of the USFS to disregard, as a matter of policy, the connection between the critters and habitat is disconcerting. This disconnection at a policy and management level flies in the face of the often stated goals of ecosystem management: it defers meaningful issues to state wildlife managers who often have vastly different public input and review processes and management objectives. Though this policy does call for consultation and cooperation, and allows conflicts to be moved up through the USFS bureaucracy, it is important to realize that this new direction came from higher levels, raising questions and suspicions as to how conflicts will be resolved at local levels.

**Fish Stocking and Naturalness**

In Utah, for example, this issue prevails on the High Uintas Wilderness and surrounding roadless lands. As in most western states, the majority of high mountain lakes in places like the High Uintas were historically fishless (Bahl 1992). Most major lakes in the Uintas have in recent times been stocked with rainbow and eastern brook trout, both nonindigenous, as well as hatchery-raised cutthroat trout. Under USFS regulations (USDA 1990), those species are now considered native as they have survived (with incredible help from fish stocking programs) in their new environments. Conservationists have long complained about this process, citing heavy recreational use by anglers in many lake basins, and more recently about concerns over nonindigenous fish stocking as it affects the inherent biologic diversity of these aquatic systems.

In 1993, conservationists led by the Utah Wilderness Association proposed a Colorado River Cutthroat Trout Refugium consisting of the Yellowstone River drainage on the south slope of the High Uintas Wilderness (Utah Wilderness Association 1993). This proposal consisted of about 100 square miles of alpine, subalpine, and densely forested spruce and lodgepole pine drainages and basins. Some pure Colorado cutthroat trout populations have already found hiding places within this huge area (Shiozawa 1993).
though the area is routinely stocked by state wildlife managers. The proposal outlined fishing regulations that would have prompted the removal of non-native fisheries over a ten-year period and, because native Colorado cutthroat trout are sensitive to angling pressure, future fishing regulations would have focused on “see and release” or the more traditional “catch and release” policy. While many in the USFS privately supported this concept, the agency argued that it was up to the Utah Division of Wildlife Resources (UDWR), which noted the proposal went too far too fast (Salt Lake Tribune 1993).

Concurrent with this proposal, the two national forests managing the High Uintas Wilderness (Wasatch-Cache and Ashley) initiated a wilderness management planning process called Limits of Acceptable Change (LAC). (For a discussion on opportunity classes and the Limits of Acceptable Change see McCoy, et al. IJW, December 1995). Conservationists pursued the cutthroat trout refuge proposal through this effort with no success. The Utah Division of Wildlife Resources objected strenuously to that strategy, noting fisheries are the sole purview of state wildlife managers: “it is no secret that several members of the LAC committee openly desire to eliminate active management of fish and wildlife in the wilderness area. The LAC process is a tool being used by these individuals to attempt to diminish the divisions management authority, and thereby accomplish their desires” (UDWR 1993). The USFS response? The draft environmental impact statement for High Uintas Wilderness management refused to entertain the cutthroat trout refuge concept, noting it was a state wildlife management issue requiring the preparation of a (yet-to-be-completed) memorandum of understanding between the USFS and the UDWR. In essence, this process sets wildlife policy for wilderness on federal lands and affects habitat therein, largely directed by the more narrowly focused state wildlife management agency, and is not subject to public scrutiny or involvement.

**Mountain Goats and Wilderness in Utah**

This issue is not confined to fisheries. The introduction of mountain goats into a number of high elevation landscapes in Utah has become exceptionally controversial. Most available scientific literature suggests goats are not native to Utah (Chapman and Feldhamer 1982; Johnson 1977; Rideout and Hoffman 1975; Zeveloff 1988). The UDWR acknowledged that while mountain goats were not found in Utah during the Holocene, Pleistocene mountain goats did exist in what is referred to as Utah. And existing habitats appear to be adequate for mountain goat survival (UDWR 1995). Aside from the “Pleistocene argument,” the forest service and UDWR cite a USFS district ranger’s diary from the early 1900s in which he notes mountain goats were seen in the Uintas. However, additional corroboration, archaeological evidence, and oral history, including hunting stories, of mountain goats in the Uintas or elsewhere in Utah are notably lacking.

Mountain goats were introduced into many Wasatch Front areas in the late 1960s, long before this was even perceived as an issue. However, with passage of the Utah Wilderness Act in 1984, a number of the areas now harboring goats and proposed for goat introductions were designated as wilderness, thus subject to Wilderness Act guidance and USFS regulations, which note wilderness is to harbor indigenous species. Simultaneously, the concern over wilderness as a refugium for natural processes and biodiversity was growing.

While observing the prohibition against placing nonindigenous species directly into designated wilderness, the USFS in 1988 allowed the UDWR to introduce mountain goats in an area adjacent to the High Uintas Wilderness, the first controversial mountain goat introduction. It was opposed by conservationists, and it was widely acknowledged that these goats would migrate into the more suitable high elevation habitat of the High Uintas Wilderness. The goats came from Olympic National Park, with a warning to the USFS about introducing mountain goats in habitats and designated wildernesses in which they are not indigenous (Olympic National Park 1993). This warning was not heeded.

After years of often heated discussion, the USES in 1994 finally agreed that a significant environmental analysis should be completed on the goat introductions in cooperation with UDWR and}

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them to the Mt. Nebo Wilderness. An environmental assessment analyzing the impacts of helicopters on wilderness values will be completed, but it will not focus on the real issue of concern—the translocation and introduction of nonindigenous mountain goats to wilderness.

A separate study has been proposed by the USFS to study the environmental impacts of the mountain goat populations introduced in 1967 on Lone Peak (designated as wilderness in 1978) and into uses of wilderness and are legally allowed in areas administered by the USFS and the Bureau of Land Management. However, the U.S. view of wilderness is changing. The reorientation from a utilitarian view of wilderness resources to a broader recognition that wilderness represents a living and changing ecosystem is altering our view of the world. Should wildlife and fisheries be managed for crop production within wilderness? The answer to this question raises additional questions such as: “Should salamanders be as important as rainbow trout?”; and “Should cougars be as important as elk?”

Guidance is offered by existing USFS policy and established wilderness management principles. Those principles remind us that “natural processes must operate freely” that human benefits are secondary to “preserving wilderness character,” and that “wilderness dependent activities” must be favored (Hendee, Lucas, and Stankey 1990; USDA 1990; USFS 1987). In wilderness, wilderness matters.

Summary and Conclusions
Recent policy changes by the USFS, transmitted in a letter from the chiefs office to regional foresters (USDA 1996), directed that because “states manage most resident fish and wildlife populations,” while the USFS “primarily manages habitats for wildlife and fish,” public wildlife policy decision making by the USFS will be confined to where a federal action will be met. This, combined with new USFS direction that dictates it is the state’s responsibility to determine whether species are indigenous—thus where they should be transplanted or introduced (USDA 1995)—empowers western wildlife agencies who favor fish and wildlife stocking of non-native species to support recreational fishing and hunting. In Utah, the translocation of mountain goats to wilderness and adjacent areas where they are not native, long a contentious issue, seems a fait accompli.

Naturalness and wilderness, seemingly mandated by TWA, and the key to what is most unique and valuable about wilderness, are directly threatened by stocking non-native fish species in wilderness waters and the introduction of non-native wildlife to wilderness lands. Questions about what is and is not native should be referred to qualified scientific committees for resolution, not to local managers responsive to hunting and fishing clientele. Management policy for federal lands should remain in federal control for the benefit of all Americans, and not be deferred to local state wildlife agencies who are most responsive to local consumptive constituencies.

Wilderness should be a refugium for wildlife without the penalties so often dealt by human insistence on controlling wilderness. Only then will we begin to understand the real difference between tame wilderness and the meaning of wilderness.

Dick Carter founded the High Uintas Preservation Council in 1996. For 17 years he served as coordinator of the Utah Wilderness Association, which he founded in 1979. He was the Utah/Nevada representative for The Wilderness Society from 1975-1979 and earned a B.S. in forest science from Utah State University in 1974. Contact Dick at the High Uintas Preservation Council, PO. Box 72, Hyrum, Utah 84319, USA. Telephone: (801) 245-6747; e-mail: carterpettis@mtwest.net.

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Mt. Timpanogos in 1981 (designated as wilderness in 1984). This would be the first systematic study of mountain goat impacts on any Utah transplant sites. Studies were not proposed for the Mt. Nebo Wilderness or High Uintas transplant sites. By way of a memorandum of agreement (Ashley National Forest/UDWR 1996) for the Uintas introduction, the USFS has pledged to initiate habitat studies with the huge caveat, “as funds are available.” The USFS has also suggested a scientific review in cooperation with the UDWR and independent biologists to determine whether mountain goats are indigenous to Utah. Unfortunately, the mountain goat is now becoming an icon of a myopic view of wilderness that embraces the introduction of non-native species.

Wilderness Hunting and Fishing
Recreational hunting, fishing, and trapping have long been considered integral questions such as: “Should salamanders be as important as rainbow trout?”; and “Should cougars be as important as elk?”

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REFERENCES


