

Finding a New Way for Wilderness: A Proposal

By David Chojnacky and Cindy Chojnacky

The May 2016 edition of the *Journal of Forestry* on wilderness reinforced our conclusion from past few years of work and observations on U.S. wilderness that a new approach is needed for wilderness management, research, and advocacy. The commentary by Cordell and other leaders in wilderness/recreation research nicely frames the problem: After 50 years, wilderness administration is not working well among the four federal land management agencies because of: (a) lack of consistent policy, (b) inadequate agency funding, (c) problems with wilderness science, (d) little wilderness management expertise, and (e) poor leadership by agencies and non-governmental organizations. Much of the content of this special edition directly or indirectly illustrates these themes.

In their Discussion paper, Fox (director, Aldo Leopold Wilderness Research Institute) and Hahn state that “science should inform wilderness stewardship...” but propose no new solutions to jump start wilderness research. Asserting a need for a strategic wilderness program with “...additional funds from diverse sources and greater commitment from [the four wilderness management] agencies” is not a new strategy or a new idea. In *A Sand County Almanac*, Aldo Leopold shared his observations and lessons from ecological systems without specific prescriptions for institutions; perhaps his namesake Institute should do likewise.

A lack of focused wilderness research leadership is illustrated by the disparate content of the edition: disjointed reviews, attempts to summarize past wilderness/recreation research as if it showed a logical progression, and subject-specific case studies. Missing is an evolving body of knowledge toward a focus benefiting or desired by wilderness managers and wilderness users.

Also prevalent in the special edition is work typical of wilderness research/management in the past few decades: studies on human impacts on wilderness, focused on heavily used campsites and trails in well-known areas such as the Boundary Waters Canoe Area Wilderness, the Great Smokies, or even non-wilderness (along the Appalachian Trail).

Nine articles use the word “untrammeled.” This is a word from the Wilderness Act which seems to have almost exclusively guided wilderness research and management over the past few decades. We call it a paradigm of “protecting wilderness from people.” Other key terms from the Act such as “visitor,” “outstanding opportunities for solitude” or “primitive and unconfined...recreation”



The Frank Church River of No Return Wilderness, in Idaho, is the largest wilderness in the continental United States at 2.3 million acres. Within the wilderness the Middle Fork of the Salmon River Frank Church is heavily used and managed with strict limits on float trip numbers and measures to protect the river shore from about 10,000 annual visitors. By contrast, the authors saw few people while hiking across the Salmon River Mountains for a week paralleling the Middle Fork, except on or near two cherry-stem roads extending into wilderness. Recent fires have rendered many trails almost impassable and have greatly challenged the Forest Service's ability to keep up with post-fire falling trees, brush, and erosion. With better trails and information, some seasonal Middle Fork use might be dispersed from the river to higher-elevation trails.

balance the concept of protecting the wilderness with the need to maximize wilderness user experience. The wilderness probably does not need people but people need wilderness.

Conversely, we have found in our work in wilderness areas across the US that from a total acreage perspective, most wilderness is highly underused by visitors—and overuse may be a function of agency management (more about this later). Another anecdotal point on the vanishing wilderness user was made by several speakers at the National Wilderness Conference on the 50th anniversary Wilderness Act, held in Albuquerque in 2014, who fretted over a lack of interest in wilderness from younger generations.

A survey of wilderness managers reported in this edition of the *JoF* indicated that most respondents (presumably wilderness managers) spend 20 percent or less of their time on wilderness and the rest on other agency priorities; hardly a strong cadre to manage wilderness even if funding and science leadership were improved.

One informative work was Naficy and others' paper on ecological intervention of wilderness management using fire, which indicated that the response to

fire in wilderness may be different from that of more heavily managed/logged lands. That the authors began with their own interpretation of Wilderness Act legislation illustrates the possibly weak policy framework for wilderness science.

Finally, McCool and Freimund utilize an adaptive cycle model to indicate that society's relationship with wilderness is dynamic, not static. In reviewing wilderness policy/management history through four cycles, the authors conclude that “the relationship between wilderness and American society is clearly in a state of change” that will require new information and organizational needs. And that leads to our suggestion.

Observations

First, a little background on our wilderness experience. After Forest Service careers respectively in research and staff/line (the latter at all agency levels and divisions, several regions and headquarters, and stints in regional and national wilderness management) we built on a lifelong interest in hiking wilderness: we visited or revisited 39 wilderness areas during past five years to develop research proposals and write on wilderness exploration, ecology and issues.

Although our recent field experience is only with five percent of the vast number of US wilderness areas, it's a diverse mix: some of the smallest as well as largest; oldest and newest; desert, coastal, wild, and scenic river; major western and eastern forest types; and heavily used rock/ice/lake basin terrain (likely the most common view of “wilderness”). In our lives we've also explored other wilderness in western and eastern states, missing only the interior South and upper Midwest. We observe. We have seen:

- Heavy overuse of wilderness in popular areas (iconic high-mountain lake basin wilderness such as the Sawtooth Wilderness, near popular trails such as the Appalachian, or close to urban trailheads such as Superstition or Saguaro wilderness near Arizona cities); even then, overuse is on select trails and/or of select lake basins.
- From a total acreage perspective, most wilderness is highly underused by visitors; and underuse seems correlated with poor trails and poor visitor information for access, camping and water (in dry areas).

- Many “legacy trails”—old mining, grazing, or early Forest Service access trails built years before the Wilderness Act—are being lost through lack of trail maintenance, particularly exacerbated by recent fires in West.
- Agency focus on “untrammelled” management may indirectly contribute to overuse. For instance, in the heavily-used Sawtooth Wilderness, the Forest Service is quite zealous about removing fire circles and other human-added facilities that might distract from the appearance of a pristine wilderness but rarely creates additional campsites, channeling campers into a few overused areas by necessity. The Park Service often limits wilderness camping to designated sites; the few campsites in the Saguaro Wilderness (Arizona) and Cumberland Island Wilderness (Georgia), for example, are quite overused (“trammelled”) although the problem could be very simply alleviated by creating a few more campsites.
- Finally, management agencies—for various reasons—are not very engaged with or concerned about enhancing or promoting wilderness visitation to public. (This does not negate the heroic efforts of many field people we know, but most are underfunded and unsupported by agency management direction. Management culture/distractedness is unique for each agency and another topic area too complex to explore in this limited space).

A Proposal

A new national wilderness entity is needed to (1) interpret the Wilderness Act and define policy, (2) consistently manage wilderness across four agencies with jurisdiction over lands, (similar to how state agencies manage wildlife game over all lands in a given state regardless of ownership), and (3) actively promote, lead, and manage competitive “extramural” wilderness research (done outside the wilderness entity), as it would be a conflict of interest for the entity to do its own research.

Next steps?

Just as *A Sand County Almanac* ended philosophically on themes of conservation and wilderness, we end with the concept of a new approach to wilderness, leaving next steps to others. Expertise from public administration/political science fields of inquiry such as coalition building or organization development could be tapped for designing a new entity. We realize the complexity of vetting such a proposal across Congressional committees, federal agencies, and interest groups. However, the very success of the Wilderness Act and subsequent state-fo-

cused wilderness enactments (including a successful Republican-sponsored 2015 bill adding four new Idaho wilderness areas—a topic debated for more than 30 years!) demonstrates that with concerted effort from individuals who care about wilderness, almost anything is possible in our chaotic, complex but open democratic society.

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has (Margaret Mead).

It would take much effort and collaboration to define the new wilderness entity—whether public, private, NGO, or some combination, but it seems futile to spend more time and effort on initiatives to induce the four existing management agencies to better work together and somehow establish leadership and priorities for wilderness. All these agencies “inherited” wilderness management long after they were established for other goals and purposes. The four-agency management model was tried for 50 years; maybe it's time for something new.

Among the calls for more (or less) wilderness designation, stricter protection of wilderness, reductions of visitor impacts, and now to “put more kids in the woods,” we have not heard any discussion of this idea. To our knowledge, establishing a new wilderness entity is a new idea for the management of the 765 wilderness areas in the United States. We wait to be corrected. **FS**

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Author Cindy Chojnacky stands on ridgetop of Stone Mountain Wilderness in far west corner of Virginia on the Jefferson National Forest.



The American Softwoods (AMSO) booth, which is made of a variety of North American softwoods, at the Sylva Wood Show in Shanghai, China, in June.

US Wood Showcased in China

According to American Softwoods (AMSO), nearly 400 people toured its exhibit at the Sylva Wood Show in Shanghai, China, in June. AMSO is a promotional partnership formed by three major US softwood trade associations—the Southern Pine Council (Southern Forest Products Association and Southeastern Lumber Manufacturers Association), the Softwood Export Council, and APA—the Engineered Wood Association.

The Southern Forest Products Association's (SPFA) in Chinese-language publication, “Southern Pine Lumber,” which provides an overview of Southern pine's mechanical properties and design values, reportedly was a popular handout.

SPFA distributed Spanish-language versions of several publications at trade shows in Guadalajara, Mexico, and Bogota, Colombia, this year.

In the first half of this year, exports of US Southern pine lumber increased by 11 percent when compared with the first half of 2015, according to the USDA's Foreign Agricultural Service.

NE Lumber Shipments Up

According to the Northeastern Lumber Manufacturers Association (nelma.org), both eastern white pine and dimension lumber shipments from its member mills reached 10-year record levels for the first six months of 2016, when comparing data from 2007. A total of 471.7 million board feet of lumber was shipped during the first six months of 2016, including 251.3 mmbf of dimension lumber (primarily Spruce-Pine-Fir South) and 220.4 mmbf of eastern white pine. When compared with 2015, the previous high mark for both wood groups, dimension lumber was up 3.9% and eastern white pine increased by 8.4%.

US Softwood Lumber Production

US softwood lumber production the first six months of 2016 increased to more than 16.6 billion board feet, up by 4.4 percent from the same period in 2015, according to the Western Wood Products Association. Production in the West through June was up 1.6 percent over the same period last year; Southern production was up 6.9 percent.

Canadian softwood lumber production of 14.3 bbf during the first half was

8.4 percent higher than in the same period in 2015.

Exports to Asia Down

The value of logs and lumber exported from North America to Asia fell by 33 percent from 2013 to 2015, with the 2016 export value on pace to reach the lowest level since 2010, according to the *Wood Resource Quarterly*, a publication of Wood Resources International LLC.

The major wood products exports from the US Northwest (logs) and British Columbia (lumber) to Asia fell in value by 18% during the first half of 2016. The biggest decline was in softwood lumber from BC to China, which is on pace to be down by 50% in 2016 as compared to 2014, a decline due in part to an increase in exports to the “healthy US market.”

“The two neighboring regions, British Columbia and the US Northwest (the states of Washington and Oregon), have chosen two quite different paths regarding the mix between logs and lumber exports to Asia. The US has exported mostly softwood logs valued at about 77% of the total value of shipped logs and lumber the past few years, while Canada's major export product has been softwood lumber, accounting for just over 75% of total exports in 2015 and 2016,” reports the quarterly (see www.woodprices.com).

New Bioadhesives

Scion, the maker of an environmentally friendly bioadhesives technology, was awarded Biotechnology of the Year at NZBio's annual conference in September. Scion is a New Zealand Crown Research Institute that specializes in research, science and technology development for forestry, wood product, and wood-derived materials (www.scionresearch.com). NZBio is an organization that represents the New Zealand biotechnology sector.

“The technology is a game-changer for wood panel manufacturers,” said Will Barker, chief executive of NZBio.

Scion's new bioadhesives, which are designed for engineered wood products, are made from natural sources, such as forestry and agricultural waste, have very low formaldehyde emissions, and can be made and used in existing manufacturing operations.