

THE ENVIRONMENTAL TURN IN NATURAL RESOURCE ECONOMICS: JOHN KRUTILLA AND "CONSERVATION RECONSIDERED"

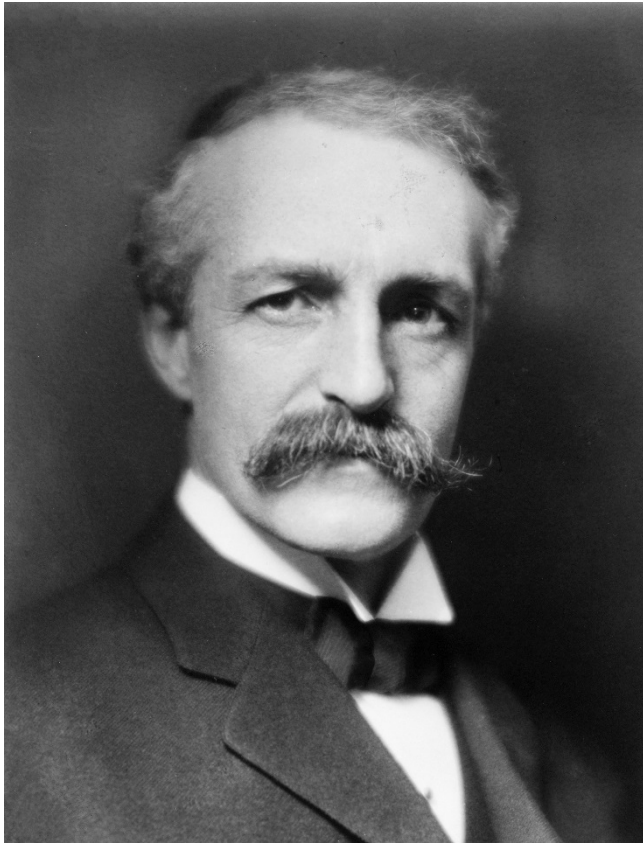
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Camp Resources XXIV
2017

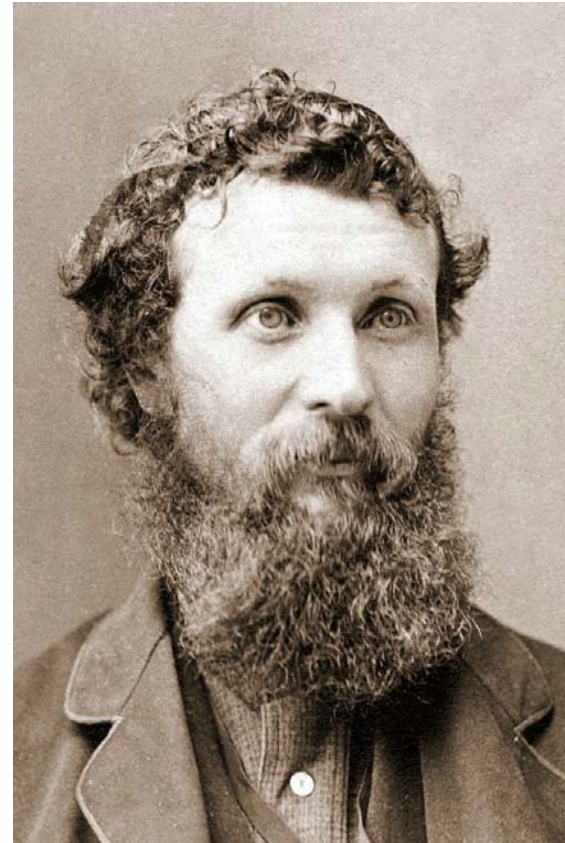
The Tellico Dam & the Snail Darter



Conservation v. Preservation



Gifford Pinchot
(1865-1946)

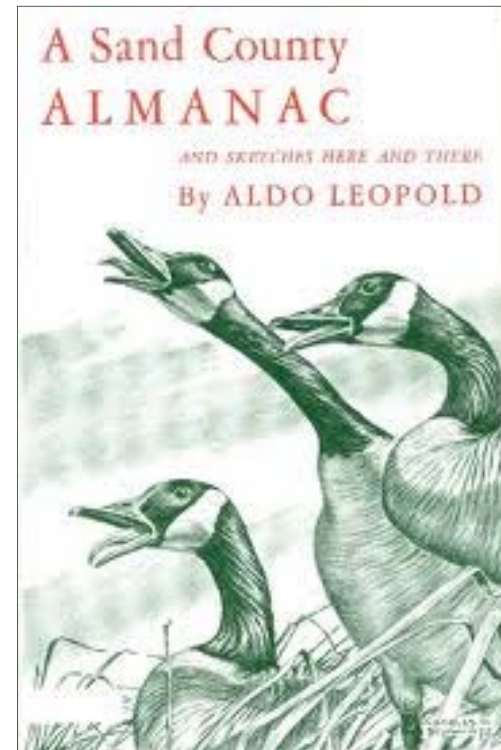


John Muir
(1838-1914)

Hetch Hetchy Valley in Yosemite



Aldo Leopold (1887-1948)



Aldo Leopold



Sometimes in June, when I see unearned dividends of dew hung on every lupine, I have doubts about the real poverty of the sands. On solvent farmlands lupines do not even grow, much less collect a daily rainbow of jewels. If they did, the weed control officer, who seldom sees a dewy dawn, would doubtless insist they be cut. Do economists know about lupines?

-*A Sand County Almanac*
(1949)

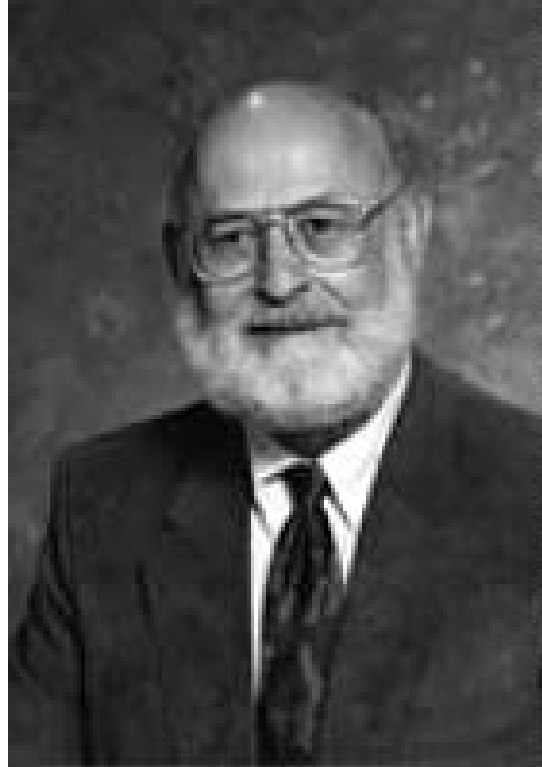
Aldo Leopold cont'd

One basic weakness in a conservation system based wholly on economic motives is that most members of the land community have no economic value. Wildflowers and songbirds are examples. Of the 22,000 higher plants and animals native to Wisconsin, it is doubtful whether more than 5 per cent can be sold, fed, eaten or otherwise put to economic use. Yet these creatures are members of the biotic community, and if (as I believe) its stability depends on its integrity, they are entitled to continuance.

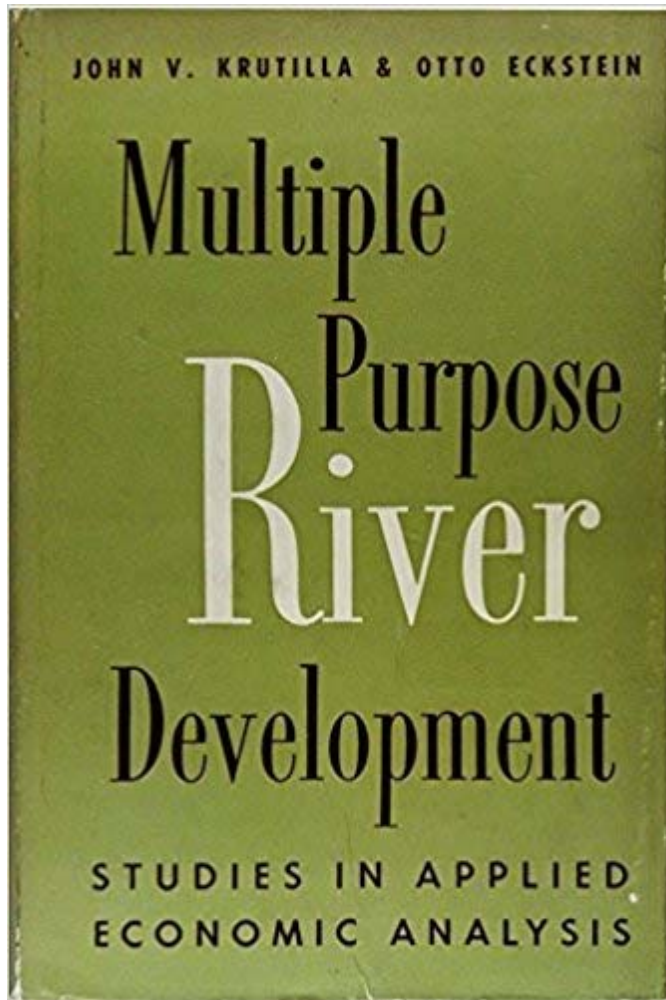
When one of these non-economic categories is threatened, and if we happen to love it, we invent subterfuges to give it economic importance. At the beginning of the century songbirds were supposed to be disappearing. Ornithologists jumped to the rescue with some distinctly shaky evidence to the effect that insects would eat us up if birds failed to control them. The evidence had to be economic in order to be valid.

--Sand County Almanac

John Krutilla (1922-2003)



Multiple Purpose River Development (1958)



Hells Canyon Dam – Snake R.

Conservation Reconsidered (AER 1967)

"The traditional concerns of **conservation** economics—the husbanding of natural resource stocks for the use of future generations—may now be outmoded by advances in technology. On the other hand, the central issue seems to be the problem of providing for the present and future the amenities associated with un-spoiled natural environments."

"When the existence of a grand scenic wonder or a unique and fragile ecosystem is involved, its **preservation** and continued availability are a significant part of the real income of many individuals," [namely] "the spiritual descendants of John Muir, the present members of the Sierra Club, the Wilderness Society,..., and others to whom the loss of a species or the disfigurement of a scenic area causes acute distress and a sense of genuine relative impoverishment."

*Key issue: Presence of opportunity costs

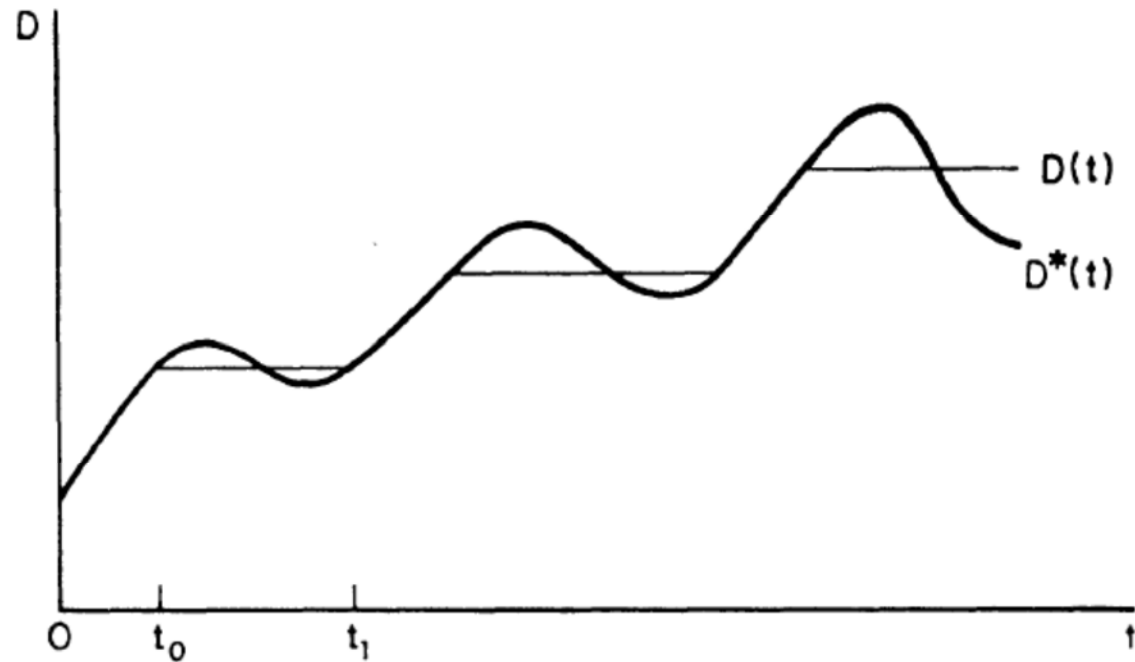
Hells Canyon (reprise)

Udall v. Federal Power Commission (1967)



Krutilla Testifies to FPC

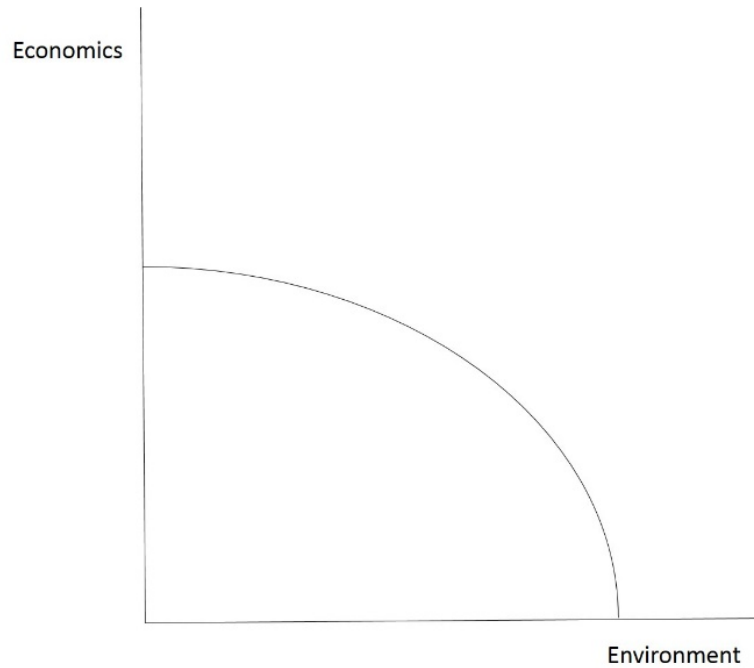
Fisher, Krutilla, Cicchetti (AER 1972)



1958 vs 1967

- New post-war environmental politics (Hays 1982)
 - Environment as consumption good vs. productive input
 - New bureaucratic management of preservation
- New definition of economics as opportunity costs (Backhouse & Medema 2009)

Economics vs. the Environment



Economics of the Environment

