
In The Wealth of Nature, Donald Worster, Distinguished Professor of History at the University of Kansas, writes about natural history and its interactions with human history. The book is a series of essays published over a number of years, so readers will sometimes find themselves weighing theory and fact over three scales of time. Fortunately, the depth of Worster's insights will reward their efforts.

Consider for instance what he has to say about the concept of the ecosystem and its place within the science of ecology. An earlier definition of ecology as the study of equilibrium, harmony and order in nature has now been challenged by the postmodern "ecology of chaos" theory, which describes nature as fundamentally erratic, discontinuous and unpredictable. Worster's early writings may have assumed the central importance of the concept of ecosystem, but in more recent essays, he has expressed the need to defend the idea.

One result of such theoretical shifts is the implication for preservation. Eugene Odum's view of nature as a series of balanced ecosystems, achieved, or in the making, led him to favor preserving the landscape in as nearly natural a condition as possible. This would mean substantial restraint on human activity and environmental planning on a rational, scientific basis. Other "ecological technocrats" have believed in managing or manipulating the planet for improved efficiency, particularly in the 1960s and early 1970s. Whereas Odum saw natural succession as the road to equilibrium, Drury and Nisbet, in a very influential 1973 article, wrote that ecological succession does not lead to stability, diversification of species, or even greater success in regulating the environment. According to Worster, they saw a forest as just "an erratic shifting mosaic of trees and other plants" (163). The notion of ecological climax was challenged as early as 1926, but many recent ecologists
(with population biology biases) find disturbances in nature (i.e. fire, wind, drought and other climatic variation), more the rule than the exception. Worster sees the return of Social Darwinism as a result of such science, along with a reluctance to criticize human impact on nature.

Worster argues that acceptance of the chaos theory would render scientific understanding of the world impossible. It would also alienate us from the world, as there would be nothing to love or preserve in a world of natural chaos. Moreover, Worster contends that billions of years of natural development have displayed "at every moment an order far more complicated and marvelous than any substitute we have been able to devise" (183). The author believes we should be stewards or guardians of the world's natural beauty. He also suggests that most of us are intuitively aware that technological power can be destructively chaotic and should be reasonably feared. With a nod to Marx, Worster describes modern industry as actively seeking disequilibrium since "the only way industrialists can use nature is to disorganize it" (179). He then calls for less reductive thinking and more aesthetic apprehension. In reference to Adam Smith (who inspired the book's title), Worster suggests that runaway population growth is connected to the creation of modern economic wealth, which is viewed by progressives and rationalists as necessary to maintain life's material comforts.

There is much more in this book. Worster includes essays on: historiography, agriculture, soil, water and rivers (including the Nile over the centuries), and the influence of Protestant thought on John Muir. Also included are an account of the history of public and private holding of land in the U.S. (40% is publicly owned in some way) and an argument that the notion of sustainability is suspect because it has never been made clear.

Some of Worster's connections and juxtapositions in this book are breathtaking. The Wealth of Nature is highly recommended.

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