



Thematic Section Editorial

## Ecology and the Economy

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*“The economy is a wholly owned subsidiary of the environment, not the other way around.”*

—Gaylord Nelson

Gaylord Nelson, former U.S. senator and governor from Wisconsin, is known as creator of one of most successful and influential public awareness campaigns ever undertaken on behalf of global stewardship: Earth Day. In 1970, Nelson established a day to demonstrate for a healthy, sustainable environment. Earth Day continues to be celebrated (and disparaged as “tree hugger day”) throughout the world. It will come, as always, on April 22nd of this year (a Thursday) in the form of millions of people proclaiming their fidelity to a viable economy based on sustainable ecology. But controversy continues to be evident in the gaps in understanding between the ecologists and the economists, the military/security community and the domestic sector.

On the occasion of the first Earth Day I was starting my professional career as an Associate Professor at Cornell University. As an ornithologist it did not escape my notice that my Department of Natural Resources was populated by one-tenth the professors and one-fifth the students as the Poultry Science Department just next door. Both departments studied birds. But in one case the birds lived, raised their young, and died in the wild, subject to the vagaries of the climate and the habitats, and in the other case they lived and died in an environment highly altered for profitable management of income produced by their population. These separate realms of study seemed to me to represent the gaps in world view on ecology and economy that are fostered by a market economy.

Since 1970, tremendous progress has been made in federal policy promoting the study and management of the human environment, with limited progress in policy directed toward renewable natural resources. During the decades of the 70’s, 80’s and 90’s, the nation’s, and the

world’s economy grew enormously by every measure. Certainly there were economic glitches (the 1973 oil crisis, and the 1997 devaluation of the Thai baht), and environmental crises (Exxon Valdez, the extinction crisis, hypoxia, and ozone holes) but for the most part a large percentage of the American population felt fat, dumb and happy. In terms of public policy, ecology and economics continued to inhabit separate and unconnected realms. But the year that this writer, by then a natural resource public policy wonk, chose to retire from federal government, unexpected and ominous changes began to appear in the economy.

The state of our nation’s economy first began showing signs of illness in 2007. By September of 2008 things really began to get interesting. In that month alone, Fannie Mae and Freddie Mac were placed in government conservatorship, Lehman Brothers Holdings Incorporated filed for Chapter 11 bankruptcy protection, and the Office of Thrift Supervision closed Washington Mutual Bank. At another time these events would have merely been another article in *The Washington Post*. But this time the biggest economic crisis since the great depression became headline news throughout the United States, and the world.

The media are now reporting that our economies may be facing a long recovery. Returning to business as usual may now mean forming a new understanding of the relationship between ecology and the economy, as attention is being paid to old and new ideas influencing a shift to a green economy.

In September of 2008, the Potomac Institute for Policy Studies (PIPS) held a seminar at the National Zoological Park, “The Color of our Economy: Why Green Resources Must be Valued in the Next Administration”. Later that year, PIPS participated in the 9th National Conference, “Science, Policy, and the Environment: Biodiversity in a Rapidly Changing World” held by the National Council

for Science and the Environment (NCSE). Policy recommendations from both meetings were provided to policy makers nationwide, including the incoming Obama Administration.

In January of 2009, the Potomac Institute for Policy Studies' Center for Environmental Economics and Ethics (CE3) hosted its inaugural event, a workshop entitled, "Alternatives to Neoclassical Economics for Business and National Security" in conjunction with the National Council for Science and the Environment conference, "The New Green Economy" held in Washington, DC. Once again, policy recommendations from the PIPS workshop and the NCSE conference will be shared with policymakers.

In this thematic section of *Synesis*, we explore the theme established at "The Color of our Economy: Non-Commodity Natural Resource Economics and Policy". Some renewable natural resources, like fresh water, fisheries, and timber, are treated as commodities. They are calculated in economic measures such as gross domestic product (GDP) and followed closely in the marketplace. But the majority of renewable natural resources- the birds and bees, flowers and trees- do not appear in the marketplace. Their unmeasured value simply is not valued in the market economy of nations.

Technological advances appear to have allowed a more effective and efficient utilization of resources, but the cost to non-commodity resources goes unmeasured and underreported. Economic growth, commonly defined as increase of per capita GDP or other measures of aggregate income, has become the standard measure of success. Students, like those 40 years ago at the Poultry Science Department at Cornell, are taught that growth, the quantity of goods and services produced, is the best and only true measure of an economy. But, this central precept of economics is increasingly being questioned, and the old issue of resource depletion is being discussed once again.

From the "Color of our Economy" seminar we draw on economic theory, market economy and the non-commodity economy with papers on the relationship between the economy and nature. Ecosystem services are represented by a paper on birds, and another on the non-native honey bee. At the 2008 seminar, speakers provided input in the form of a primer for the winners of the 2008 elections in an attempt to share their understanding of the value

of non-commodity resources to a healthy economy. This thematic section of *Synesis* continues that task.

From the 2010 "Alternatives to Neoclassical Economics" workshop, this thematic section explores our failure to incorporate non-commodity resources into the economy and examines alternatives for successful transition to a new green economy. These papers focus on the highly variable concept and definition of "The New Green Economy" by attempting to clarify and expand conventional thinking on the relationships of economy and ecology. Biologists, economists, and systems specialists discuss their work on sustainability, biological diversity, valuation of non-commodity resources and conventional views on the economy.

With this section of *Synesis*, and the program of CE3, the Potomac Institute for Policy Studies hopes to create an opportunity to bring ecologists and economists into the same room with the military and security communities in order to form a new alliance that recognizes and acts on a green economic future. Gaylord Nelson had a good idea in 1970: focus the debate on the successes of our national march to sustainability, and recognize the need for all of our citizens to work together as an example for the world's future.

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*None.*