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2009 : January 2009 - Hew Hot Papers : James Boyd

NEW HOT PAPERS - 2009

November 2009



James Boyd talks with ScienceWatch.com and answers a few questions about this month's New Hot Paper in the field of Economics & Business.



Article Title: What are ecosystem services? The need for standardized environmental accounting units

Authors: Boyd, J;Banzhaf, S

Journal: ECOL ECON

Volume: 63

Issue: 2-3

Page: 616-626

Year: AUG 1 2007

* Resources Future Inc, Energy & Nat Resources Div, 1616 P St NW, Washington, DC 20036 USA.

* Resources Future Inc, Energy & Nat Resources Div, Washington, DC 20036 USA.

* Georgia State Univ, Atlanta, GA 30303 USA.

SW: Why do you think your paper is highly cited?

It asks and answers a basic (though complicated) question being asked by many people.

SW: Does it describe a new discovery, methodology, or synthesis of knowledge?

It describes and advocates a method (a framework for thinking and ways to measure things). The key thing about the method is that it provides a roadmap to unite disparate disciplines, basically ecology and economics. But also areas within economics, like accounting theory and natural resource economics.

SW: Would you summarize the significance of your paper in layman's terms?

What is happening to nature—are things getting better or worse—and what does that mean for our well-being? This is a fundamental question facing humanity right now. The thing is it's very difficult to answer these questions. One reason is that we don't have standard ecological measures that we can track over time. Our market economy has very convenient measures—the number of things bought and sold and the prices paid for them. These measures are used to judge the health of our economy (GDP).

But we need to also know about the economy of nature. What units, i.e., what quantities of natural things and qualities, should we count in order to track the health of nature and its implications for the health of our economies and communities? The paper asks that question and attempts to answer it.

SW: How did you become involved in this research, and were there any

"...a core objective of this research is to develop credible yardsticks by which our governments and other decision-makers can be held

problems along the way?

accountable."

Several fundamental questions (see above) drove the research. As well as a sense that existing approaches—actually a confusion of approaches—is inhibiting the power of science in this area.

SW: Where do you see your research leading in the future?

To more effective coordination of the biophysical sciences (ecology, hydrology, atmospheric science, soil ecology) and economic sciences. To a greater and needed focus on intuitive biophysical outcomes as the key to progress. To a future ability to develop measures of our nation and globe's natural economy.

A GDP-like measure that tracks not only the health of the market economy, but also the gains and losses suffered in the natural economy. The natural economy is the whole basket of ecosystem goods and services on which everything else depends, but that are public goods and thus difficult to measure.

SW: Do you foresee any social or political implications for your research?

Socially, the paper is part of a broader movement in economics and ecology to make our dependence on natural goods and services more "apparent" to all decision-makers. Losses in natural goods and services are all too easy to miss.

Politically, a core objective of this research is to develop credible yardsticks by which our governments and other decision-makers can be held accountable. What gets measured gets managed. We don't manage nature's economy very well because we haven't quite figured out yet how to consistently and comprehensively measure what's going on.

James Boyd

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Resources for the Future

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Keywords: ecology and economics, accounting theory, natural resource economics, coordination of the biophysical sciences and economic sciences, natural economy, ecosystem goods and services.



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