

Daniel Spethmann, PhD

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Education

Doctor of Liberal Studies
Environmental Ethics
Georgetown University
May 2018

Doctor of Philosophy
Natural Resource Economics
Stephen F. Austin State
University – May 2008

Master of Science
Forestry
University of Wisconsin
Madison – May 1982

Experience

Teamwork

Early years

Current

Moral Foundations of Natural Resources Economics for the Ecozoic

The thesis of the book argues for expanding Earth Estate stewardship practices beyond market fundamentalism toward an ethical value proposition that includes intrinsic existential values of nature, as well as the anthropocentric instrumental values.

Regenerative economics argues for reincorporating the notions of classical political economics concerned with house-holding, how people make a living in the context of their community and humanity.

Economic Valuation of Riverine Wetland Functions

This dissertation builds the business case for wetlands and stream mitigation using GIS data analysis together with economic and financial modeling, including both public and private interests.

This is foundational to engaging private capital for the creation of public benefits - targeting risk adjusted market rates of return.

The Potential Remote Auctions Trading Electronically: Hogs, Logs & Cotton

Thesis precedes the personal computer, focusing on the software and hardware necessary for agricultural markets in an emerging digital age.

BS Biology – Fisheries Management
University of Wisconsin – Stevens Point 1977

Deep experience working in roles including servant leader, collegial team member, researcher, writer and presenter. Experience in the boardroom, classroom, factory floor, ag field, timberland, and streamside. ***Strong desire to work with a dedicated and bright team to make a lasting difference for a flourishing planet for all life.***

Childhood years - summers spent on Wisconsin family dairy farm.

Frigo Cheese - Italian Cheesemaker, plant superintendent, 1977-79

Bancroft Dairy - Grade A, plant superintendent, 1980-1982

Oak Farms Dairy - Grade A, plant superintendent, 1983-1985

Managed New York State Energy Development Authority (NYSERDA) grant to establish supply / distribution of Central New York agricultural products via import / export intermodal facility. 2015-2016

Manage EPA and Endowment for Community and Forest grants.
Sponsor Virginia legislation for the benefit of local communities and landowners – providing authority for Natural Capital investments.

Research
representative examples

Agricultural production, soil impacts, supply chain issues

Current projects include soil restoration using coal mine residues, rock flour, and bacterial / fungal inoculants to jump start degraded field soil ecology – saving restoration years. Participation developed from nutrient-rich organic farm leading to soil development breakthrough. Business case development underway with field trials accompanied by financial analysis prefiguring investment returns based on improved field capacity, organic crop yields, reduction in chemical, labor, and diesel inputs, and significantly increased CO₂ sequestration.

Healthy Watersheds – Chesapeake Bay Phase III

Grant #3 with the objective to implement the Bay Model TMDL requirements with legislative authority to create a Natural Capital Economic Development Authority to meet the need of scale for institutional investment by aggregating non-industrial forest landowners – providing access to carbon markets for forest retention.

Working Lands CIG – Abandoned Mine Lands Investment Thesis

“What stands between us and investing 60M in abandoned mine land restoration?” Project included GIS development done with Virginia Tech, accompanied by a financial analysis with a portfolio of properties and actual land uses marked to market. Risk-adjusted return profile exceeds expectations with public private partnership. Yale MS resulted.

Proficiency

Created and managed teams including Masters / PhD students, faculty, respected members of the NGO community, members of the USDA NRCS and USFS, and Working Lands professional staff. Qualitative and quantitative data is processed to develop information and communicate knowledge. Emphasis is focused on actionable results.

Communications
representative examples

Presentations have included a variety of audiences, including:

Professional Financial (investors)

- Harvard Management Company – 75M commitment
- Cornell University Endowment – 5M commitment
- High Net Worth Family Offices – 120M commitment

Bio-geophysical (scientists) & Universities

- Yale Graduate Course - Emerging Markets Eco Services
- Society of Wetland Scientists - 29th Annual Meeting, moderator
- Columbia Regional Geospatial Service East Texas regional GIS professionals. Hurricane Rita Loss Analysis

Governments & Agencies

- USDA Forest Service - Rocky Mountain Region Forestry Governance Council, Ecosystem Markets
- Peoples Republic of China State Forestry Administration and Ministry of Finance
- USACE & EPA invited participant to stakeholder forum to review proposed rules for mitigation banking
George Washington University

Business Development

Large Public Company
3.5B top line

Business development experience including multiple platforms

Manager Non-Timber Resources, Temple-Inland, Inc. 2003-2007

Responsible for new-business development in emerging markets capitalizing on 2.5M acre land base “*from aquifer to atmosphere.*”

Developed Forest Legacy grants, stream and wetlands mitigation banks, endangered species bank with Army Compatible Buffer program, Long Leaf restoration revenues, and more.

Managed GIS department, Applied R&D Group, Genetics and Nursery operations, reservoir ownership and emerging markets policy interface with state and federal legislative representatives.

Responsible for communications with board of directors for non-timber business development and all support staff operations.

Small Private Company
20M top line

CEO / President, Applied Ecological Services, Inc. 2015-2016

Responsible to lead 35-year-old consulting / construction / nursery operations and personnel through a period of financial instability and workout to solid footing. Teamwork resulted in successful reorganization - setting the stage for new leadership to prosper.

Management Buyout

Manager Investment Programs, New Forests, Inc. 2007-2008

Joined DC office subsidiary to Sydney HQ - buyout from Hancock.

Participated in development of Private Placement Memorandum raising 100M Eco Products Fund for ecosystem services investment.

Deployed capital into carbon, wetlands, water quality markets.

Startup

Managing Partner, Working Lands Investment Partners, LLC. 2008-now

Founded Working Lands, 30M AUM with project finance approach.

Engineered acquisition of 20k acre Texas mitigation bank.

Sponsored / mentored students, spawning a land stewardship firm.

Project Management & Organization

Founder and President – Strategic Controls Corporation, 1989-2001

Provided state of the art supervisory control and data acquisition systems (SCADA) for the natural gas industry.

Generated 6M in annual revenue: 30 employees.

Project Manager - Instrumentation & Controls, Moncon, Inc. 1986-1989

Instrumentation PM for Water and Wastewater plants, natural gas measurement facilities, and one hydroelectric dam.

Grant Development & Management

Forest Legacy, NAWCA, CIG, and NYSERDA grants have been awarded. Total value exceeds 1.2M

Grants have been completed pulling together teams of professionals, students, faculty, all working together with agencies. These grants have all involved land stewardship, sustainability and restoration.

Passions

See one, Do one, Teach one

Current academic activities include authoring a book entitled *Pathways to the Ecozoic*.

Building on Aldo Leopold's assertion that we are "mere members" of the community of life, and Thomas Berry's conception of the Ecozoic model for humanity to redefine the human-earth relationship – this book provides examples of actionable avenues with this intention. Models for rebuilding soils for the benefits of the small holder and the environment, economically viable restoration systems for landowners and stewards, and financial models with supporting policy providing mechanisms to engage public and private alignment to these ends.

The book culminates with the underpinning moral imperative common with these activities, and necessary for a flourishing earth for all life.

Professional Affiliations

Applied Ecological Services, Inc. Board of Directors

Verra – Landscape Standard Advisory

Union of Concerned Scientists (UCS)

Union for Radical Political Economics (URPE)

Association of Environmental and Resource Economists (AERE)

Environmental Law Institute (ELI)

National Mitigation Banking Association (NMBA)

Leadership for the Anthropocene - advocate

Adjunct Professor - Stephen F. Austin State University (SFASU)

References

Available on Request