



In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Craig Thomas

Will defend his dissertation

Naturalizing Sustainability Discourse: Paradigm, Practices and Pedagogy of Thoreau, Leopold, Carson and Wilson

Abstract

Understanding complex and adaptive socio-ecological systems (SES) to deal with our most challenging and overlapping problems such as global climate change, biodiversity loss, and rising consumption rates requires sustainability theory that is commensurate with these SES problems' size and complexity. The received United Nations-based sustainability framework aims to achieve a balance among three pillars—economics, environment and social equity—for today and for future generations. Yet, despite over a quarter of a century spent applying this sustainability framework, the Earth is *less* sustainable, not more. Theoretical trade-offs between environmental conservation and economic growth have often reinforced business-as-usual practices and educational paradigms, and emphasized economic values over ecological limits.

How can the principles of foundational naturalists help clarify, enhance, and advance sustainability discourse? I propose that the principles of Henry David Thoreau (1817-1862), Aldo Leopold (1887-1948), Rachel Carson (1907-1964), and Edward O. Wilson (1927-), express a worldview that captures and integrates a range and depth of historical, normative, economic, ecological, scientific, and social values for a viable and applicable discourse of sustainability.

This analytical study relies on (i.) text analysis and interpretation of four key naturalists and humanists, (ii.) secondary sources which illuminate their proto-ecological and sustainability principles, and (iii.) interviews with leading sustainability scholars. Because of the integration of science and ethics, natural history and philosophy, ecology and society, and environmental and economic

problems within a holistic worldview, in this dissertation they are termed *systems naturalists*. Their worldview of one coupled system, economics within environmental limits, and transdisciplinarity links important values from the natural sciences and the humanities. The writings and examples of systems naturalists provide historical sustainability principles that can help solve our most challenging SES problems. This research can also help to further synthesize the broad range of knowledge in the sciences, social sciences, and the humanities for the sustainability paradigm, practices, and pedagogy.

Friday, April 10th, 2015

2:00 PM

Wrigley Hall, Room 401

Faculty, students, and the general public are invited.

Supervisory Committee:

Dr. Ben Minter, Chair

Dr. Christopher Boone, Member

Dr. Paul Hirt, Member

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