

Call for Contributions,
Intersections - Interdisciplinary Studies in Early Modern
Culture

Oeconomia naturalis

**Pre-histories of Ecological Awareness and Sustainability (ca.
1500-1850)**

Johannes Müller, Karl Enenkel and Paul J. Smith

Before the large-scale exploitation of fossil resources and the advent of industrial fertilizers, European societies were more directly connected to and dependent on natural food webs and ecosystems. Agricultural systems largely depended on local nutrient cycles, and energy resources were primarily derived from freshly harvested biomass. As a result, early modern societies had to function within tight energy budgets and continuously needed to anticipate scenarios of scarcity. This demanded both practical skills and theoretical knowledge but also the effective application of that understanding. Long before the emergence of modern ecological thought, early modern Europeans recognized the interconnectedness of human societies with their natural environment, and their dependence on its conditions.

This volume explores these “pre-histories” of ecological thought in early modern Europe and relates (new and traditional) theoretical knowledge to the practices by which early modern societies exploited their natural environments in ways that could be destructive but also ecologically sound and sustainable. It investigates how early modern Europeans conceptualized the interconnectedness of organisms within stratified food webs and the metabolic relationships between humans and the ecosystems they depended on. While many of the major environmental shifts in early modern European history are well-studied, the development and circulation of a more conceptual ecological understanding is far less understood. An additional lacuna is the open question about the relationship and the mutual influences between forms of scholarly and theoretical knowledge and a practical approach regarding natural processes.

In order to address these questions, we welcome contributions from different fields, ranging from cultural, economic, and environmental history to the history of science, historical ecology, historical sociology, the history of literature, philosophy and the arts, including architecture and horticulture. Topics that would be welcomed in particular include:

- early modern ideas about metabolic interactions between human and non-human organisms (food webs, nutrient cycles, resource harvesting and its seasonal and annual cycles)
- ideas about the resilience of natural and cultured ecosystems (productivity of fishing ground, soil fertility, natural regeneration of woodlands)
- early modern ideas about scarcity and abundance
- emerging concepts of “sustainability” (e.g., the concept of “Nachhaltigkeit” in early modern German forestry literature)
- communal forest and land management and its ecological impact
- early modern economic ideas about the use of nature and natural resources
- ideas about demographic developments and its consequences with respect to the limitation of the exploitation of natural resources
- use of plant, animal, and fossil resources as fuel (e.g., firewood, whale oil, peat, etc.)
- the awareness of the role of pernicious or harmful species in food webs (e.g., insects, birds, predators, etc.)
- early forms of the mathematization of natural processes (e.g., regarding population growth, epidemic diseases, long term prospects of agricultural productivity)
- adaptive processes in fisheries (e.g. exploration of new fishing grounds and stocks)
- reactions on and consequences of colonial expansion and the globalization of the resource circulation
- practices of adaptation to new food sources (e.g. potatoes and other New World crops in Europe), and the cultural reflections about these processes
- anthropogenic ecological niches and their transformation through agricultural innovations

Sources that deserve special attention in the context of the question of early modern ecological awareness include:

- printed works on “natural history” (*Naturalis historia*) which comprise a wide spectrum from nature encyclopedias such as Gessner’s zoologies or Rembertus Dodonaeus’ *Stirpium historiae pentades* to more detailed treatises on specific organisms (e.g. insects, fishes or certain types of plants etc.)
- ethnographical and geographical (“chorography”) works on various regions and parts of the earth such as Olaus Magnus’s *Historia de gentibus septentrionalibus*, André Thevet’s *Les singularitez de la France antarctique* and similar accounts
- early modern “statistics” – descriptions of states, empires and towns which included economy, natural resources, organization of social and political life, geography, habits of the population etc. (as collected, e.g., in the so-called Dutch “*Republics*”)
- Apodemic treatises (*Artes apodemicae*), 16th – 18th centuries
- *laudes urbium*: the Praise of specific towns in poems or prose treatises (e.g., of the Dutch or the Hanseatic towns)
- diplomatic reports (e.g., of Venice, Florence or the French kingdom)
- correspondences of members of the Republic of Letters
- reports of learned societies
- diaries and chronicles, e.g. the digitized editions of the *Chronicling Novelty* project (<https://kronieken.transkribus.eu/>)
- encyclopedic writings in Latin and the vernacular languages
- works on agriculture in the tradition of the ancient Roman literature (Cato, Columella), on crop cultivation, horticulture and animal farming in general, and the successful organization of an agricultural *enterprise* in particular
- treatises on hunting (*De venatione*) and fishing, in Latin and in the vernaculars
- “husbandry”: economic instructional literature on the organization of private households, such as Leon Battista Alberti’s *Della famiglia* (1433/4) or the Lutheran German *Hausväterliteratur*, e.g. Johannes Coler’s *Oeconomia ruralis et domestica oder Haußbuch*
- cookbooks and collections of cooking recipes

- treatises on medicine, especially dietetics
- agricultural and forestry regulations issued by civic or territorial authorities
- travel literature such as Sigmund von Herbersteins *Rerum Moscoviticarum comentarii*, Jean de Lery's *Histoire d'un voyage faict en la terre du Brésil*
- trade records and correspondences of merchants regarding the trade in natural products (e.g. grain, wood, fur, etc.)
- early modern paintings that address the use of natural resources such as the Netherlandish kitchen, market, butchery etc. scenes, "genre" scenes in a broader sense, depictions of peasant life such as the ones in the so-called *Monatsbilder* or paintings of the four seasons
- emblems that address the use of natural resources in printed emblem books and applied emblematics in various arts
- depictions of the labours of the months or of the seasons in engravings, paintings (including wall paintings), books of hours, and the applied arts etc.

Timeline

Proposals (including title, abstract of 150-200 words, and academic affiliation) should be submitted to the editors before **June 1st 2026** (email to j.m.muller@hum.leidenuniv.nl). The contributors will be notified about the acceptance of their submissions before **July 1st 2026**.

Final contributions are due on **March 31th 2027**. The final contributions should have a length of about 7,000 words (including footnotes, but excluding bibliography). Depending on funding, a colloquium is planned to take place in Leiden in early 2027.

Further reading

Bertram, B. (2018). *Bestial oblivion: War, humanism, and ecology in early modern England*. Routledge.

Bruce, S. (2010). *Ecologies and economies in medieval and early modern Europe: studies in environmental history for Richard C. Hoffmann*. Brill.

Egerton, F. N. (2012). *Roots of ecology: antiquity to Haeckel*. University of California Press.

- Knoll, M. & Reith, R. (2004). *An environmental history of the early modern period. Experiments and perspectives*. LIT Verlag.
- Knoll, M. (2004). Hunting in the eighteenth century. An environmental history perspective. *Historical Social Research/Historische Sozialforschung*, 9-36.
- Knoll, M. (2013). *Die Natur der menschlichen Welt: Siedlung, Territorium und Umwelt in der historisch-topografischen Literatur der frühen Neuzeit*. transcript Verlag.
- Remien, P. (2017). Oeconomy and ecology in early modern England. *PMLA*, 132(5), 1117-1133.
- Richards, J. F. (2003). *The unending frontier: an environmental history of the early modern world*. University of California Press.
- Szabó, P. (2010). Why history matters in ecology: an interdisciplinary perspective. *Environmental Conservation*, 37(4), 380-387.
- Tello, E., Martínez, J. L., Jover-Avellà, G., Olarieta, J. R., García-Ruiz, R., de Molina, M. G., ... & Koepke, N. (2017). The onset of the English agricultural revolution: climate factors and soil nutrients. *Journal of Interdisciplinary History*, 47(4), 445-474.
- Warde, P. (2006). *Ecology, economy and state formation in early modern Germany*, Cambridge University Press.
- Warde, P. (2011). The invention of sustainability. *Modern Intellectual History*, 8(1), 153-170.
- Warde, P. (2018). *The invention of sustainability: Nature and destiny, c. 1500–1870*. Cambridge University Press.
- Winiwarter, V., Haidvogel, G., Hohensinner, S., Hauer, F., & Bürkner, M. (2016). The long-term evolution of urban waters and their nineteenth century transformation in European cities. A comparative environmental history. *Water History*, 8, 209-233.