NYU GALLATIN SCHOOL OF INDIVIDUALIZED STUDY
History of Environmental Sciences before Darwin
IDSEM-UG1566
Fall 2015
Monday and Wednesday, 9:30-10:45
Gallatin, Room 527

Course twitter account: @HistsciNYU

Instructor: Prof. Peder Anker
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Office hours: Tuesdays 9:30-11:30.
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Course Description
This seminar will provide an overview of the history of the environmental sciences from ancient times to Charles Darwin’s The Origin of Species. We will explore ways in which naturalists and lay people came to know the environment and in what ways nature could mobilize social and moral authority. With a focus on the history of the European environmental problems from the ancient Greeks, Middle Ages, to colonial and Modern experiences, we will survey different ways of knowing nature. Where did the idea of nature as “designed” come from? How did natural historians and philosophers unveil nature’s secrets? What role did scientists play in the colonial experiences? How could Modern scholars imagine “improving” the face of the Earth? These broad questions will guide us in our readings of a series of primary sources, including great and not-so-great books by Hippocrates, Plato, Aristotle, Pliny, St. Francis, Evelyn, Grew, Bacon, Linnaeus, Buffon, Jefferson, Rousseau, Malthus and Darwin, as well as largely forgotten texts by anonymous authors and colonial explorers.

Course Objectives
The objective of this course is to learn something about the entangled history of our relationships to the natural world from ancient times to the work of Charles Darwin.

Required Texts/Online Resources


Anonymous, The Book of Beasts, Terence H. White (trs.).

Aristotle, On the Parts of Animals, William Ogle (trs.).

Francis Bacon, New Atlantis, 1626, any edition.


Plato, *Critias*, Benjamin Jowett (trs.).

Pliny the Elder, *Natural History*, John Bostock and H.T. Riley (trs.) 1855.

Katherine Wentworth Rinne (et.al.), *Aquae Urbis Romae: The Waters of the City of Rome*.


Theophrastus, *Enquiry into Plants*.

**Required Assignments**
There will be three 10 page papers due October 1, October 29, and December 12. The papers have to engage primary sources discussed in class. Late papers are not accepted.

**Other Course Requirements**
This is a zero-footprint “green” course. All papers must be submitted electronically.
Grading
Mandatory attendance
25 % Course participation
25 % 1st paper “The Ancient Paper”
25 % 3rd paper “The Modern Paper”

Statement on Academic Integrity
"As a Gallatin student you belong to an interdisciplinary community of artists and scholars
who value honest and open intellectual inquiry. This relationship depends on mutual respect,
responsibility, and integrity. Failure to uphold these values will be subject to severe sanction,
which may include dismissal from the University. Examples of behaviors that compromise the
academic integrity of the Gallatin School include plagiarism, illicit collaboration, doubling or
recycling coursework, and cheating. Please consult the Gallatin Bulletin or Gallatin website." 1

Session by Session Details:

Sept. 2  Wednesday: Introductory meeting
        No readings

Sept. 7  Labor Day: No classes

Sept. 9  Wednesday: Ancient Environments: Hippocrates

Sept. 14 Monday: Ancient environments: Plato
        Plato, Critias, entire.

Sept. 16 Wednesday: Ancient environments: Aristotle

Sept. 21 Monday: Ancient environments: Theophrastus
        Theophrastus, Enquiry into Plants, book 1.

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Sept. 23  Wednesday: Ancient Environments: Pliny
Pliny the Elder, *Natural History*, selections (geography)

Sept. 28  Monday: Ancient Environments: Pliny
Pliny the Elder, *Natural History*, selections (animals and plants)

Sept. 30  Wednesday: Ancient Environment: Waters of Rome
1st paper due! “The Ancient Paper”
Rinne (et.al.), *The Waters of the City of Rome* (website)

Oct. 5  Monday: Medieval Environments

Oct. 7  Wednesday: Medieval Environments: St. Francis of Assisi
Lynn White Jr., “*The Historical Roots of Our Ecological Crisis*,” *Science* 155 (March 1967), 1203-1207.
St. Francis of Assisi, “Sermon to the Birds” and “Canticle of the Sun”

Oct. 12  Fall Recess

Oct. 13  Tuesday: Legislative day, classes will meet according to Monday schedule: Medieval Environments: Natural History
Aberth, *An Environmental History of the Middle Ages*, Part 3.

Oct. 14  Wednesday: New Environments: West India
Anonymous, *Histoire Naturelle Des Indes*, 16th century (late), entire

Oct. 19  Monday: Early Modern Environments: Forestry


Oct. 21  Wednesday: Early Modern Environments: Bacon


Oct. 26  Monday: Early Modern Environments: Grew


Oct. 28  Wednesday: Rare Library Visit

2nd paper due! “The Medieval/Early Modern Paper”

The Fales Library and Special Collections, Bobst 70 Washington Square South, 3rd Fl.

We will look at:
- Pliny, *Naturalis historia*, (Rotterdam, 1668-69).

Nov. 2  Monday: New Environments: New England

Cronon, *Changes in the Land*, entire.

Nov. 4  Wednesday: New Environments: Buffon

Buffon, *Natural History*, 1781, selections


Nov. 9  Monday: New Environments: Jefferson


Nov. 11  Wednesday: Modern Environments: Linnaeus


Nov. 16  Monday: Modern Environments: Lamarck

Jean-Baptiste Lamarck, Zoological Philosophy or Exposition: Of the considerations relevant to the natural history of animals; to the diversity of their organic structure and of the faculties which they derive from it; to the physical causes sustaining life in them and producing the movements which they carry out; finally, to those causes which produce feeling in some and intelligence in others endowed with it, 1809, part I: chapter 5 and 7.

Nov. 18  Wednesday: Romantic Environments: Rousseau

Rousseau, Letters on the elements of botany. Addressed to a lady, 1787, xiii-xxv (contents), 1-32 (introduction, letter 1 and 2).

Nov. 23  Monday: Modern Environments: Animal Rights

Anonymous [Taylor], A Vindication of the Rights of Brutes, 1792.

Daggett, The Rights of Animals, 1792.

Nov. 25  Wednesday: Thanksgiving recess! No class.

Nov. 30  Monday: Modern Environments: Paley

Paley, Natural Theology, 1809, chapter 1-2.

Dec. 2  Wednesday: Modernity: Malthus


Dec. 7  Monday: Evolutionary Biology: Charles Darwin

Browne, Darwin's Origin of Species, 1-57.

Darwin, The Origin of Species, 1859, selections.

Dec. 9  Wednesday: Evolutionary Biology: Charles Darwin

Browne, Darwin's Origin of Species, 57-117.

Dec. 14   Monday: Summary/Last day of Class

3rd paper due! “The Modern Paper”