

Prof. M. W. Rossiter  
331 Rockefeller Hall  
255-2545 and mwr4@cornell.edu  
Office Hrs: Mon. 3:00-4:00  
and by appointment

Cornell University  
Fall 2009

### **AGRICULTURE, HISTORY, AND SOCIETY: FROM SQUANTO TO BIOTECHNOLOGY**

This is a one-semester survey of the history of the agricultural sciences from the 17th century to the present with emphasis on the United States in the 19th and 20th centuries with excursions to other countries as time permits. Its goal is to increase students' familiarity with past and current issues of food supply and consumption. The central organizing theme is that an efficient and profitable agriculture is a continuing struggle not only technically with nature (soil, water, "pests," and such) but also, and perhaps more importantly, politically with one's fellow humans (competition, government policy, rationing, tariffs, subsidies, etc). As the world's population continues to increase, these struggles should intensify in the years ahead. These are issues about which Cornell students should be well informed.

There are no prerequisites, although some knowledge of geography and history will be useful. The requirements are:

- midterm examination in class **October 2** (20 points)
- final examination (45 points)
- class participation (10 points)
- and, for an honor grade (A or B), a 10-12 page paper due on Wednesday  
**November 30** on a topic approved in advance (25 points).

The **FILMS** to be shown in class are also available at the Reserve Desk in **URIS** Library (up one flight). Viewing machines are in the basement of **OLIN** Library.

The following **BOOKS** and article constitute the required reading for the course. They are also on reserve (2 hour) at **MANN** Library (not Uris) and are available in the campus bookstore:

- Donald B. Kraybill, The Riddle of Amish Culture (rev. ed., 2001)
- Hal S. Barron, Mixed Harvest, The Second Great Transformation in the Rural North, 1870-1930 (1997)
- Michael Pollan, The Botany of Desire: A Plant's-Eye View of the World (2001)
- Virginia Jenkins, Bananas: An American History (2000)
- Ronald R. Kline, Consumers in the Country: Technology and Social Change in Rural America (2000)
- Marion Nestle, Food Politics (2002)

#### **Tentative Class Schedule:**

1. Fri. Aug. 28--Introduction, requirements, general concepts
2. Mon. Aug. 31--Indian agriculture, Squanto, the colonialists, and the Amish
3. Wed. Sept. 2--Gentlemen "improvers:" Washington, Jefferson, and Merino sheep
4. Fri. Sept. 4--**Discussion:** Religion, Agriculture and Technology: Donald B. Kraybill, The Riddle of Amish Culture (rev. ed., 2001), esp. chs. 1, 2, 5, and 7-9.

**[LABOR DAY BREAK]**

5. Wed. Sept. 9--New York State: From Hinterland to Markets and Information (Erie Canal, state fairs, and farm journals)
6. Fri. Sept. 11--"Worn out soil," Morrill Land-Grant Act (1862), agricultural colleges, esp. early Cornell
7. Mon. Sept. 14--Agricultural experiment stations, Hatch Act (1887), L. H. Bailey at Cornell
8. Wed. Mon. Sept. 16— Milk scandals, cattle nutrition, Wisconsin cheese, discovery of vitamins
9. Fri. Wed. Sept. 18-- **Discussion:** Hal Barron, Mixed Harvest, The Second Great Transformation (1997), chs. 1, 3 & 4.
10. Mon. Sept. 21-- Horticulture: Johnny Appleseed, Shakers, Luther Burbank, Mendel, and early genetics
11. Wed. Sept. 23-- Economic entomology: Dakota grasshoppers; USDA's Bureau of Entomology, California's "biological control," and crop-dusting
12. Fri. Sept. 25-- **Discussion** of Michael Pollan, The Botany of Desire: A Plant's-Eye View of the World (2001), chs. 1 and 4.
13. Mon. Sept. 28-- Tractors: John Deere, Henry Ford, and Harvey Firestone
14. Wed. Sept. 30-- G. W. Carver, "chemurgy," and utilization research
15. Fri. Oct. 2-- **Midterm Exam**
16. Mon. Oct. 5-- Animal diseases: Daniel Salmon ("salmonella"), foot-and-mouth-disease, hog cholera, CBW

17. Wed. Oct. 7-- Mother Russia--Vavilov, [Ukrainian Famine], and Lysenko
18. Fri. Oct. 9-- **Film** "Harvest of Despair" on Ukrainian famine of the 1930s

**[FALL BREAK]**

- 19 Wed. Oct. 14-- Big dams: the Mormons, irrigation and rural electrification
20. Fri. Oct. 16-- **Film**--Hoover Dam
21. Mon. Oct. 19-- Plant explorers, Japanese cherry trees, quarantines, and Plant Protection Act of 1930
22. Wed.. Oct. 21--Erosion, Depression, and the Dust Bowl; TVA; Soil Conservation Service
23. Fri. Oct. 23-- **Films**: "The Plow That Broke the Plains" and "The River" (1937)
24. Mon. Oct. 26-- Hybrid Corn: Improved Seeds (Germplasm) as Property
25. Wed. Oct. 28--World War II: Wonder drugs: penicillin, DDT, herbicides, fungicides
26. Fri. Oct. 30-- **Discussion**: Ronald R. Kline, Consumers in the Country: Technology and Social Change in Rural America (2000), introduction, chs. 3, 4, 7, 9, and conclusion.
27. Mon. Nov, 2-- World War II, cont.: Recommended Daily Allowance (RDA); rationing; enrichment/"fortification"
28. Wed, Nov. 4--Artificial insemination, Dairy Herd Improvement, and poultry science
29. Fri. Nov. 6-- **Discussion**: Virginia Jenkins, Bananas: An American History (2000)
30. Mon. Nov. 9-- Mechanical Harvesters vs. Farmworkers and Unionization ("Hard Tomatoes, Hard Times")
31. Wed. Nov. 11-- Food Science: Dorothy Gerber, Clarence Birdseye, frozen foods, and fast food franchises
32. Fri. Nov. 13-- **Film**: "Rachel Carson, Silent Spring" (1962)
33. Mon. Nov. 16—"Surplus Disposal:" Getting Rid of it All
34. Wed. Nov. 18--"Green Revolution:" The Rockefeller Foundation, Norman Borlaug, Mexico, and India

35. Fri. Nov. 20-- **Exhibit**--Mann Library--Rare Agricultural Books and Reference Help on Paper Topics
36. Mon. Nov. 23— **Film**: "Harvest of Shame" (Edward R. Murrow on migrant workers, 1960)
37. Wed. Nov. 25-- **Film**: "Harvest of Fear" (2001) on Biotechnology ("Gene Revolution": Déjà vû all over again?)

**[THANKSGIVING]**

39. Mon.. Nov. 30-- **Film, cont.** [Papers due]
40. Wed. Dec. 2--- **Discussion** of Marion Nestle, Food Politics (2002), chs. 1, 4-6, 8, (13), and conclusion..
41. Fri. Dec. 4--Review

**FINAL EXAM:** Date to be announced.