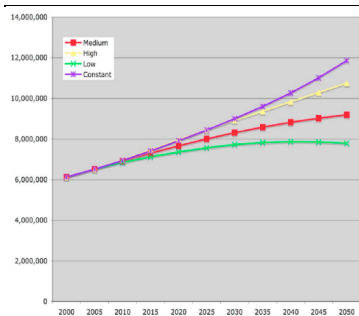


My aim as a Piedmont Project participant was to ask three interrelated questions: how many people will be on the Earth in 2050, can they be fed, and can this be done sustainably? After the Piedmont Project my thoughts on how I would attack these issues with my students shifted in three important ways. First, I expanded my notion of sustainability (i.e., the triple bottom line). This meant including issues such as workers rights, disease transmission, and equality along with more “traditional” definitions that focused on environmental impacts. Second, I had initially aimed to “simply” empirically assess the evidence underlying two competing claims in the literature on food, population, and environment. One set of claims argue argues that genetically modified crops and fossil fuel dependent agriculture do not explicitly take into account issues of sustainability. Others have countered that the world cannot be fed without these “technologies”. I had planned to briefly address these issues in my introductory class of 125 students. However, as I worked through the literature on the sustainable-food-population nexus I realized that these are provocative issues that would inevitably generate discussion and debate. To introduce these issues in such a large course would have been a tremendous disservice to the topic and to the students. I will not include these in a much smaller freshman seminar. Third, while researching the issue, I realized that much of the data used to make the calculations widely discussed in my readings were freely available on the Internet (e.g., FAO food balance sheets). I am now going to attempt to provide students with relevant data so they can see for themselves how estimates of future food production are generated. By doing this I hope students will come to appreciate the assumptions and guesses that go into these calculations.



THE PAST, PRESENT, AND FUTURE OF FOOD AND POPULATION

Anthropology 190
MWF 2:00-2:50
Dr Craig Hadley
ANTHRO 218D
Office Hours:

Is there enough food for everyone in the world? What is the relationship between food availability and population growth? How many people were on the earth 200,000 years ago? How many will be on the earth in 25 years? And, will there be enough food to feed us all?

In this freshman seminar we will examine these enduring questions about the global food supply, the number of people the earth can support, and the relationship between food and population. We will attempt to trace the links between food production and population size from 100,000 years ago to 100 years in the future. Along the way we will ask: how does nutrition affect the fertility of individuals? How does nutrition affect mortality rates? And, at the population level, what is the link between food availability and population growth? What role does famine play in regulating population size? We will also adopt an anthropological perspective that encourages looking back in time to understand what populations were like in prehistory. Along the way we will learn some basics of demographic research and analysis, theoretical perspectives from biological anthropology and population studies, and cover some basic information about the past, present, and future of the food supply and population. We will end the class by asking about the future of food and whether we can achieve a sufficient food supply with causing excessive harm to the environment.

Format

This is a seminar, which means that most of our classes are devoted to discussion of readings. We will strive to “work together as a community of scholars engaged in a common academic endeavor.”¹ Readings are taken from a variety of sources and you are expected to have read them before class. Each class session will have a designated seminar leader who is responsible for motivating the class discussion and ensuring the discussion moves forward in a productive fashion. At times we will use Microsoft Excel as a tool to learn about population growth. In most cases I will provide you with any data that is required for the exercises.

¹ <http://programs.weber.edu/tlf/POD/packet3/v8n1.html>

Reading

We will read 4 books in this class and a number of articles and book chapters. You are responsible for purchasing the books. The books are:

1. Health and the Rise of Civilization (Cohen)
2. The Population Bomb (Ehrlich)
3. Population and Nutrition (Livi-Bacci)
4. Meals to Come: A History of the Future of Food (Belasco)

All other course readings will be posted in PDF format on the class Blackboard site.

Black Board

All readings, course announcements, as well as other interesting items that are relevant to the course will be posted on blackboard.

Common Courtesies

Our goal as instructors is to promote an environment that encourages and supports those who wish to learn. To this end, we ask you to ensure you do nothing to interrupt or stall the learning experiences of others: do your readings because class discussions will assume you have, please arrive on time, no cell phones, and no unrelated activities or discussion during class.

Assessment

TBA

Honor Code

The Emory Honor Code will be in effect during all examinations and assignments for this class. Students are responsible for reading and understanding the material on the link:

http://www.college.emory.edu/current/standards/honor_code.html .

The Emory Honor Council holds that ignorance of this document or these definitions is not a legitimate excuse for committing academic misconduct

Students With Disabilities

Emory University complies with the regulations of the Americans with Disabilities Act of 1990 and offers accommodations to students with disabilities. If you are in need of a classroom accommodation, please make an appointment with me to discuss this as soon as possible. All information will be held in the strictest confidence. For more information please visit: <http://www.ods.emory.edu/>

Detailed Schedule

	Date	Topic	Reading
FRI	8/28/09	Introduction, what is a seminar?, What is the topic or problem we will address?, Course aims and objectives and assessment	
MON	8/31/09	How do populations grow? (In theory)	<i>"Things that grow exponentially"</i>
WED	9/2/09	How do populations grow? (In theory).	<i>Basic Excel</i> <i>Belasco "deep structure to the debate"; Malthus chapters 1-3</i>
FRI	9/4/09	Malthus and others	
MON	9/7/09		
		Carrying capacity. Cohen's 8 measures of carrying capacity. Modeling homework.	<i>Logistic growth; carry capacity chapter in Cohen</i>
WED	9/9/09	Modeling Malthus.	
FRI	9/11/09	How do populations grow in theory?	
		A brief history of the world's population - how do they grow in practice?	Cohen Pages 25-75
MON	9/14/09		
		The agricultural transition and the first demographic transition (hunter gathers to agriculture - when why and how?)	
WED	9/16/09		<i>Cohen Chapters 1-2</i>
		The agricultural transition and the first demographic transition	
FRI	9/18/09		<i>Cohen chap 3 -4</i>
		The agricultural transition and the first demographic transition	
5MON	9/21/09		<i>Cohen Chapter 5</i>
		The agricultural transition and the first demographic transition	
WED	9/23/09		<i>Cohen Chapter 6 - 7</i>
FRI	9/25/09	If farming is so bad, then why do it?	<i>Diamond chapters 5,6,9</i>
		Demographic transition and the European demographic expansion	<i>Paper on demographic transition theory</i>
6MON	9/28/09		
		Demographic transition and the European demographic expansion	
WED	9/30/09		<i>Livi Bacci Chapter 1</i>
		Demographic transition and the European demographic expansion	
FRI	10/2/09		<i>Livi Bacci Chapter 2</i>
		Demographic transition and the European demographic expansion	
7MON	10/5/09		<i>Livi Bacci Chapter 3,4</i>
		Demographic transition and the European demographic expansion	
WED	10/7/09		<i>Livi Bacci Chaps 5,6</i>
		The population boom of the late twentieth century	
FRI	10/9/09		<i>Cohen pp 76-106.</i>
8MON	10/12/09		
WED	10/14/09	Population bomb	<i>Ehrlich chp 1,2</i>

The Past, Present, and Future of Food and Population. Hadley. Anthropology. July 2009

FRI	10/16/09	Population bomb	<i>Ehrlich chp 3,4</i>
9MON	10/19/09	Population bomb	<i>Ehrlich 5,6</i>
WED	10/21/09	No population bomb?	<i>Simons - select chapters</i>
FRI	10/23/09	No population bomb?	<i>Simons - select chapters</i>
10MON	10/26/09	Famine - what is famine?	<i>Famine theories and their role in demographic theory.</i>
WED	10/28/09	Does famine play a large role in determining the rate of population growth?	<i>Watkins + modeling exercise</i>
FRI	10/30/09	No, but it does play a role in suffering- discussion of readings	<i>Sen - Chp 1 and 2 from Poverty and Famines</i>
11MON	11/2/09	No, but it does play a role in suffering- discussion of readings	<i>Davis</i>
WED	11/4/09	How much food does the world need right now?	<i>On calculating human energy requirements, Smil pp 188-210</i>
FRI	11/6/09	Is there enough food for everyone?	<i>On calculating production, Smil pp 211-248</i>
12MON	11/9/09	Dietary transitions and meat; The Meat Question	<i>Smil</i>
WED	11/11/09	Answering the question: Do we need a bigger pie, fewer forks, or better manners?	<i>Class discussion.</i>
FRI	11/13/09	The future of food and population: 1) Will there be enough food? 2) How many people will there be? 3) Can they be fed in a sustainable way?	<i>Belasco - Futures chp 4,5</i>
13MON	11/16/09	Some futures of food	<i>Belasco 6,7,8</i>
WED	11/18/09	Some futures of food	<i>Belasco 6,7,9</i>
FRI	11/20/09	Movie - Solyent green?	
14MON	11/23/09	Why does it matter how many hungry people there are? (Readings on failed states, extremism, health, economics)	<i>Readings TBA</i>
WED	11/25/09	What are the estimates of the global hungry population	<i>Ending hunger in our lifetime, intro + chp1</i>
FRI	11/27/09	Can we end hunger sustainably?	<i>Ending hunger in our lifetime, chp 3; Roberts essay in MoJo</i>
15MON	11/30/09	Fertilizers	<i>Roberts (The long run)</i>
WED	12/2/09	Water shortages as a contrast on food production	<i>Smil;</i>
FRI	12/4/09	Genetically modified crops (pros/cons)	<i>Stone: BothSidesNow; Barrett: GMO exchange</i>
MON	12/7/09	The 2008 Food Crisis	<i>Selected readings</i>

Sustainability focused Readings:

1. Vaclav Smil, Feeding the World: A Challenge for the Twenty-First Century.
2. Ford Runge, C., et al. Ending Hunger in our Lifetime: Food Security and Globalization.
3. Spoiled: Local and organic are so 2008. Paul Roberts. Mother Jones.
4. Both sides now. Glenn Stone. Current Anthropology
5. GMO: Benefit or Boondoggle? Anthropology News.
6. Has the World Given Up on Sustainable Development? Parsons. Share the World's Resources.
7. The End of Food. Paul Roberts.