

Govt/AMST 4102/6102_Spring 2014: Urban Ecology and Politics
Tu 2:30-4:25, Stimson Hall 119

Elizabeth Sanders (mes14) White Hall 314 (5-2305) Office Hours: Tues 4:30-6, Thurs, 1:30-3:30, and Wednesdays 1:30-3 when there are faculty meetings, or by appt.

In the world at large, over half the population (51%) live in cities. Eighty one percent of Americans live in cities; in California, the figure is 95%. If we are to be saved from the worse consequences of climate change and pollution, and provide healthy human habitats for growing, yet increasingly vulnerable populations, then government, and local collective action must cooperate to find, publicize, and implement best ecological practices. This course will focus on efforts by U.S. urban governments and social groups to achieve that goal. The variety of readings chosen, encouragement of lively discussion in class, collaboration in groups, and individual research on topics of your choice will all contribute to an enlightening semester in urban environmental politics.

There will be two-page weekly essays (with one late paper week, your choice) on the syllabus readings, with occasional group debates around the week's themes. There will also be a final research paper on a topic of your choice, in consultation with me, and drawing on course themes and concepts. The weekly essays will count for 30% of the grade, the final research paper (12-15pp) for 50%, and class preparation/participation will count for 20%. Aside from the book sections, other readings will be on Blackboard in the weekly folders. There will also be interesting, optional items at the Blackboard site indicated with "Opt." The three books used, in order of use (all available for purchase at the Campus Store, and will be on reserve at Uris) are:

- (1) Timothy Beatley, *Biophilic Cities: Integrating Nature into Urban Design and Planning*
- (2) Lisa Benton-Short and John Rennie Short, *Cities and Nature*, 2nd ed. 2013
- (3) Bernard Ross and Myron Levine, *Urban Politics: Cities and Suburbs...* Global Age, 8th ed

Opt: William G. Wilson, *Constructed Climates: A Primer on Urban Environments* (a few copies ordered. Interesting book, and some chapters can be substituted for syllabus readings)

Any class handouts or Blackboard items NOT on the syllabus are **strictly optional** reading, fyi. You are not required to read or use them in any way. Optional readings on BB are so labeled.

Week 1 Introduction to Broad Themes and Concepts

**Biophilic Cities*, chapters 3-6 [asterisks identify purchased books; other readings are on BB]

*Short and Short, "Urban Sustainability," in *Cities and Nature*, 436-81

Eric Klinenberg, "Adaptation," *New Yorker*, Jan 7, 2013, 32-37

Andrew Zolli, "Learning to Bounce Back," *NYT* Nov. 2, 2012, 1-4

N.B. Grimm et al., "Global change and the Ecology of Cities," *Science*, 319: 756-760

Leslie Roberts, "Population: 9 Billion?" *Science* (2011) 333:540-543

Mathis Wachernagel and William Rees, "What is an Ecological Footprint?"

Week 2 Introduction to Urban Ecology

World Bank, "Cities and Climate Change," 1-32 (PP) and Ed King, "World Bank Chief Backs Fossil Fuel Divestment Drive," *Responding to Climate Change*, Jan. 27, 2014

Mark McDonnell, "The History of Urban Ecology: an Ecologist's Perspective," in Jari Niemela, ed., *Urban Ecology*, 5-13

Wayne C. Zipperer et al., "Linking Social and Ecological Systems," in Niemela, 298-308

*Short and Short, *Cities & Nature*, 1-17, 57-93, 110-41, 229-60

P. J. Crutzen, "The Anthropocene." OR, read instead Elizabeth Kolberg, "The Lost World," *New Yorker*, December 23-30, 2013, 48-56

Peter M. Vitousek et al, "Human Domination of Earth's Ecosystems," *Science* 277: 494-499

Week 3 The Economics of Greener Cities

*Ross and Levine, *Urban Politics*, 3-22, 26-31, 47-67, 70-72, 219-228

Joan Fitzgerald, *Emerald Cities: Urban Sustainability and Economic Development*, 1-27

Mike Alberti, "But everybody does it," *Cities and states soliciting for corporate location*

Roger Keil, Mark Whitehead, "Cities and the Politics of Sustainability," *OHUP*, 520-41

Elizabeth Rosenthal, "Life after Oil and Gas," *NYT* March 23, 2013

Jacobson, Howarth, Ingraffea et al, *Examining the Feasibility of Converting New York State's All-Purpose Energy Infrastructure to One Using Wind, Water, and Sunlight*

(Opt) Felicity Barringer, "Grand Experiment to Rein in Climate Change," *NYT* 10-13-12

(Opt) Texas and the dangers of weak industrial regulation for human well-being (4 arts.)

(Opt) Cornell Faculty Senate Divestment Resolution, passed Dec. 9, 2013

Week 4 Ecosystem Services

*Short and Short, "Urban Political Ecology," 229-60"

Johan Colding, "The Role of Ecosystem Services in Contemporary Urban Planning," 228-37 in Niemela. ed

William Wilson, *Constructed Climates*, ch. 2, 28-43 (on BB) (Opt: read on to 65)

Richard Harris, "As Temperatures Rise, Cities Combat 'Heat Island' Effect," *NPR GA*

April Reese, "Forests: Ecosystem Services at Risk from Suburban Development," *EENewsnet*, August 19, 2010 (6pp)

Jim Robbins, "With Funding Tight, Cities are Turning to Green Infrastructure," *Yale Environment* 360, August 23, 2012

Lisa Foderaro, "To Tackle an Invasive Weed, Bringing In the Hooved Pros," *NYT* 9-21-12

Week 5 The Governmental Context I: Local and National Structures and Policies

That Affect Environmental Outcomes

- Melissa Powers, "Municipal Climate Plans: What Role Will Cities Play in Climate Change?"
*Ross and Levine, *Urban Politics*, 77-126, 136-52, 158-76
Benjamin J. Richardson, ed., *Local Climate Change Law*, introduction, pp. 12-17
Rodney Hero and Marion Orr, "Social Capital," *OHUP*, 295-305

Week 6 Governmental Context II: National Laws and Agencies

- *Short and Short, *Cities and Nature*, 265-80
Norman J. Vig and Michael E. Kraft, eds., *Environmental Policy*, ch. 1, pp 1-29
Walter A. Rosenbaum, "Improving Environmental Regulation...Balancing Politics, Policy, & Science," ch 8 in Vig and Kraft, *ibid*, 169-89
Gernot Wagner, "Making the Case for the Value of Environmental Rules," *Yale Environment* 360, Nov. 14, 2011
Mary C. Wood, Susan O'Toole, "How to Sue for Climate Change: The Public Trust Doctrine," 1-3; Patrick Rowe, Sussman Shank, 14-17. *All in Outlook*, Oregon State Bar
Oliver Gutfreund, *20th Century Urban Sprawl*, 1-23, 54-59
Eric Toder, "Eliminating Tax Expenditures with Adverse Environmental Consequences"
Diane Cardwell, "Tax Credit in Doubt, Wind Power is Withering," *NYT*

(Opt) Theda Skocpol, "Naming the Problem: What it will take to Counter Extremism and Engage Americans in the Fight against Global Warming" *Harvard*, January, 2013

(Opt) Coral Davenport, "The Scary Truth About How Much Climate Change is Costing You: While policymakers fiddle, the threat of economic harm posed by rising sea levels, devastating storms, and drought is growing every day," *National Journal*, Feb. 8, 2013.

Week 7-8 City Air and Transportation

- EPA, *History of the Clean Air Act* (7 pp)
*Short and Short, *Cities and Nature*, 265-80, 317-50
OR replace last segment w. Wilson, *Constructed Climates*, ch. 4, "Emissions and Urban Air"
Congressional Research Service (CRS), *Clean Air Issues in the 112th Congress*, 1-20
CRS, "EPA Regulations: Too Much, Too Little, or On Track," Oct. 5, 2012
EPA soot rules, Dec. 2012-Jan 2013 (two articles from *The Hill*, and *Reuters*)
"House Passes Bill to Address Threat of Climate Change" *NYT* June 26, 2009 (3 pp)
http://www.nytimes.com/2009/06/27/us/politics/27climate.html?_r=1&hp

Theda Skocpol, "Why has Climate Legislation Failed?" *Washington Post* interview, 1-16-13)
<http://www.washingtonpost.com/blogs/wonkblog/wp/2013/01/16/why-has-climate-legislation-failed-an-interview-with-theda-skocpol/>

John Broder, "E.P.A. Chief Set to Leave; Term Fell Shy of Early Hope," *NYT* Dec. 27, 2012
"Generation Toxic," *OnEarth Magazine*, 1-12

Andre Tvinnereim & Nives Dolsak, "Urban Climate Change Policies in Transportation" (APSR)
Matt Flegenheimer, "Turning the City's Wheels in a New Direction," *NYT* December 29, 2013

Atlanta, The Sprawling Metropolis, in Nirmala Rao, Cities in Transition
C.C. Reynolds et al, The impact of Transportation Infrastructure on Bicycling Injuries & crashes.
Sally McGrane, “Commuters Pedal to Work on Their Very Own Superhighway” (Copenhagen)
“How the Dutch Got Their Cycle Paths” (and watch video)
Jane Brody, “The Hidden Costs of Commuting,” NYT Oct. 28, 2013
Edward Wong, “As Pollution Worsens in China, Solutions Succumb to Infighting,” NYT
Mar 21, 2013; and “Pollution Rapidly Changing Childhood in China’s Cities,” NYT 4-22-13

(Opt) Jeffrey Seyler, “Lung Assn. Expresses Concern Over Air Pollution from Fracking”
(Opt) “America’s Best Bike City: Portland, OR”
<http://www.bicycling.com/news/advocacy/americas-best-bike-city-portland-oregon>

Week 9 Water, and Danger

*Short and Short, 281-315
CRS, Water Quality Issues in the 112th Congress, 1-23
Jim Dwyer, “In a Flood-Troubled City, a Refreshing Argument About Climate Change,” NYT
“Cities Under Water” NYT Sunday Review
“Can Cities be Both “Resilient” and “Sustainable?” David Biello, Slate

Rosenberg, “Green Roofs in Big Cities”
HTML photo: green roofs for San Francisco public housing
EPA stormwater management requirements (Handout)
Seattle Rain Garden saga (powerpoint)

Andrew Revkin, “Flaws in Chemical Laws...West VA Spill,” NYT Jan. 14, 2014
Diane Rehm interview, “The Aftermath of Oil Spills in Michigan and Arkansas,” NPR, 8-19-13

(Opt) Ian Lovett, “Slaking a Region’s Thirst While Cleaning its Beaches,” NYT April 7, 2013

Week 10 Urban Agriculture: How Much Food Can Be Produced Locally?

History: “Victory Gardens in WWII” (two articles)
Jennifer Cockrall-King, Food and the City, 283-314
Giles Billen, J. Garnier et al, “Localizing the Nitrogen Imprint of the Paris Food Supply”
Joseph Hanania, “Duel at the Old Fulton Fish Market,” NYT Jan. 24, 2014
Kate Murphy, “For Urban Gardeners, Lead is a Concern,” NYT May 13, 2009
Mark Hertsgaard, “Harvesting a Climate Disaster,” NYT Sept. 12, 2012 (The Farm Bill)

(Opt) Kaid Benfield (NRDC), “World’s second-largest rooftop farm takes root in Boston,”
March 7, 2013

(Opt) Biosphere Harvesting (Science, March 15, 2013)

(Opt) Jonathan Latham, [How Millions of Farmers are Advancing Agriculture For Themselves](http://www.biosciencesource.org)
Biosciencesource.org, December 3, 2012 (describing Norman Uphoff’s work on SRI)
To hear Uphoff describe it on video, see <http://www.guardian.co.uk/global-development/audioslideshow/2013/feb/15/india-rice-revolution-audio-slideshow>

(Opt) Mark Bittman, two articles about food quality and production systems.

Week 11

Urban Ecology and Health

Wilson, *Constructed Climates*, 148-85 (on BB)

“Eric Svendsen, et al, “Integrating Grey and Green Infrastructure to Improve the Health and Well-Being of Urban Populations,” *CATE*, v. 5, #1

Anne C. Lusk, “Promoting Health and Fitness Through Urban Design,” in Platt, ed., *The Humane Metropolis*, 87-101

Gretchen Reynolds, “Easing Brain Fatigue with a Walk in the Park,” *NYT* March 27, 2003

Ryan Jaslow, “Pesticides in Tap Water Linked to Food Allergy Risk,” *CBS News*, 12-3-12

(Opt) M. Antoniou et al, “Teratogenic Effects of Glyphosate-Based Herbicides: Divergence of Regulatory Decisions from Scientific Evidence,” *J Environ Anal Toxicol*, 2012 S:4

(Opt) Tom Philpott, “Syngenta Makes a Killing on Pesticides While Feds Snooze,” *Mother Jones*, Wed. July 27, 2011

Week 12

Plants and (Wild) Animals in Cities

Cilliers and Siebert, “Urban Flora and Vegetation: Patterns, Processes” in Niemela, ed.

Felicity Barringer, “A Grand Experiment to Rein in Climate Change” *NYT* 10-13-12

Michael Pollan, “Why Mow? The Case Against Lawns,” *NYT Magazine*, May 28, 1989

Adams and Lindsey “The Influence of People on Urban Wildlife Populations,” in Niemela, ed., 116-128

Sadler et al, “Building for Biodiversity: Accommodating People and Wildlife in Cities,” In Niemela, ed. 286-297

Seth Bensel and Elizabeth Sanders, “In the Dark About Light,” *In These Times*, 2013

Coyotes and now “Coywolves” in Cities (4 articles)

(Opt) “American Forests Names the 10 Best U.S. Cities for Urban Forests,” BB and <http://www.americanforests.org/newsroom/american-forests-names-the-10-best-u-s-citiesfor-urban-forests/>

Week 13

Building Green (City Architecture)

Brenda and Robert Vale, “Principles of Green Architecture,” from Wheeler and Beatley, eds., *Sustainable Urban Development Reader*, 7 pp

Michael C. Houck, “Respecting Nature’s Design in Portland OR, 75-86

Mireya Navarro, [Energy Use in Buildings], *NYT* August 2, 2012

Energy Infrastructure (Todd Miller, interview w. Jeremy Rivkin in SFGate)

Bright Roofs, Cool World, *Science Now*, April 12, 2012

Boulder, NYC, and Dallas: Three examples of city codes encouraging green buildings

(Opt) Tom Zeller, Jr., “Can We Build in a Brighter Shade of Green?” *NYT* September 25, 2010

(Opt) Seattle’s Greenest Building

(Opt) Bird-Friendly Building

Note: Class attendance is required in seminars. If you are ill and cannot come to class, get a record of Gannett visit to confirm that. You must do all the weekly essays on time in order Not to have a final exam (with the exception that you get one “late paper” week. Tell me when you are taking your late week, and get the paper to me within a week. Naturally, you should write your papers before reading those of your classmates.

If there is any situation that is interfering with your attendance or effort in the course, come and talk to me in confidence. If I don't answer your email in 24 hours, feel free to call me at home for any urgent situation. I want you to do well in the course. Let me know if there is a problem.