

Government 731
Comparative Political Ecology
Syllabus

Ronald Herring
W 2:30-4:25; McGraw 365/Sibley 211
Office Hrs: M 3:30-5; T 11-12 and by appointment
White Hall, 255-4060
Email: rjh5@cornell.edu

Political Ecology and Development. Political ecology has many definitions, but all converge on the political economy of nature. Ecological science introduced the conceptualization of interdependent systems in which there are threshold effects, fragility, resilience, cascading causation, indeterminacy. Since humans are parts of these systems, from a very local level to a global one, ecological change becomes dependent in part on human behavior – that is, becomes political – just as human behavior reflects ecological imperatives and limits. Purposive collective alteration of ecological systems is often covered by the contemporary concept of “development.”

What makes the political economy of nature distinctive is the ambiguity of both objective and subjective interests, both individual and collective. These interests are dependent on chains of inter-connectedness of ecological systems so subtle and complex as to be in practice unknowable by most individuals or legitimately contestable in an epistemological sense. Knowledge claims then become critically important for politics: of late, “local knowledge” confronts “Western science” or “imperialist science.” Political ecology is central to the continuing struggle -- at the level of meaning, politics and policy -- over "development." Karl Polanyi called the culmination of processes creating market society through the commoditization of land, labor and money "the great transformation." Much of the contest over forms and strategies of development concerns variable appropriation of benefits -- and distribution of costs -- of the conquest, transformation and commoditization of nature. Property is at the heart of these dynamics. Central to these disputes is the contested role of markets, states and communities in driving outcomes. These matters will form the substantive core of the course.

Theoretically we will be concerned with the causal connections between structures of social ecology and movements spawned within those structures, at various levels of analysis. The very interconnectedness stressed by ecological science renders analysis especially complex, as environmental dynamics respect no administrative boundaries. We take as central the theoretical problem of structure and human agency – that is, political behavior – and the tensions between political movements and state responses -- that is, policy. State responses frequently change structures, whether in major or minor, intended or unintended, ways, and thus set the stage for subsequent cycles set in a new structure. The structure-agency problem connects to current disputes over the claims for rational-actor and constructivist models of political behavior. The policy focus intersects with discussions of the conceptualization of the state itself -- actor or arena, instrument or autonomous agent. Focus on "development" policy opens the question of what sort of state, doing what, promotes ecological degradation, equilibrium or regeneration, and with what sort of social justice.

In practice, the literature of political ecology shows a rural bias. Victor Magagna (**Communities of Grain** 1991: 1) writes: "It is ironic that the late twentieth century has seen a renaissance of rural history. The march of industrial society continues to change the institutional fabric of every region on the globe; yet, intellectual interest in rural life has perhaps never been more pronounced." Interest in "peasant society" among elites was a cold-war phenomenon. But as fears of rural breeding grounds of communist insurrection subsided in the core, worries over decimation of landscapes increased, driven by the core understanding of ecology – interconnectedness within complex systems -- theorized largely in cities with grist from reports about people living in remote places. There is a history to this globalizing project, which we will explore.

Method: The course is meant to be a comparative enterprise. We will read some outstanding treatments of materials from different world areas to provide empirical richness. Several of these deal with North America and several are historical. The reason is that we need to counter the common, typically unstated, assumption that political ecology issues are "third-world" problems, or uniquely contemporary. We will try to draw out methodological assumptions across texts as we go, especially where explicitly addressed, as in the Introduction to Baviskar's book.

Evaluation: Everyone will do a major project and a minor project. I suggest three modes of major project. For students who have read a good portion of the syllabus, a **research paper** might be most valuable. The research paper must be outlined in a proposal which sets the theoretical problematic, discusses evidentiary issues, and proposes some defined scope of work. Students with less background may want to write an **interactive syllabus review**. This exercise will be explained in class, but the basic idea is to write a critical review, in dialogue with the authors you are reading. This is a useful way to organize material for future use, and forces intellectual engagement. This course can also be used as a reading course, meaning that you will be allowed to take an **exam** (open-book, take-home) as the major project. Secondly, every student will be expected to be the point person for at least one class discussion. You will be required to write a two-page (or so) critical note for discussion of some particular author or analytical point. The idea is not to summarize the piece, but to core the argument, suggesting the most important points for discussion. Of special concern should be: the author's method, evidentiary base, theoretical take on causal power of ideas and interests. These papers should be distributed via email, through me. A good syllabus review could be a compilation of such mini-papers, integrated by themes.

Texts

Baviskar, Amita, 1995, **In the Belly of the River**. Delhi: Oxford University Press (available from Jerry Barrier, South Asia Books, 314-474-0116, FAX 314-474-8124, P.O. Box 502 Columbia Mo 65205)

Cronon, William, 1991, **Nature's Metropolis**. New York: W W Norton & Company

Cronon, William, 1983, **Changes in the Land: Indians, Colonists and the Ecology of New England**. New York: Hill and Wang.

Dryzek, John, 1997, **The Politics of the Earth**. New York. Oxford University Press.

Gold, Ann Grodzins and Bhoju Ram Gujar, 2002, **In the Time of Trees and Sorrows: Nature, Power, and Memory in Rajasthan**. Durham. Duke University Press

Grove, Richard H., 1995, **Green Imperialism**. Cambridge: Cambridge University Press.

Guruswamy, Lakshman D., and Jeffrey A. McNeely, 1998, **Protection of Global Biodiversity**. Durham. Duke University Press.

Peluso, Nancy, 1992, **Rich Forests, Poor People: Resource Control and Resistance in Java**. Berkeley. University of California Press.

Peluso, Nancy and Michael Watts, ed, 2001, **Violent Environments**. Ithaca. Cornell University Press.

Polanyi, Karl, 1944/1957, **The Great Transformation**. Boston. Beacon. [Originally published as *The Origin of Our Times*].

Recommended Optional Texts:

Guha, Ramachandra, 1989, **The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya**. Delhi. Oxford University Press.

Schama, Simon, 1996, **Landscape and Memory**. New York. Vantage.

Weiss, Edith Brown, and Harold Jacobson, 1998, **Engaging Countries: Strengthening Compliance with International Environmental Accords**. Cambridge. MIT Press

Arnold, David, 1996, **The Problem of Nature: Environment, Culture and European Expansion**. Oxford: Blackwell.

James C. Scott, 1998, **Seeing Like a State**. New Haven: Yale University Press 1998.

[Note: If biological terminology hinders your reading at any point, I recommend as a handy reference Michael Allaby, **The Concise Oxford Dictionary of Ecology**. Oxford. Oxford University Press, 1996.]

Course Schedule

Introduction:

September 3: Discussion of course logistics, student interests, definitions, syllabus overview.

The concept "political ecology" is ambiguous. My brief definition is that political ecology is the political economy of nature. Political economy, in turn, is the study of who gets what and how, or the dynamics of interests within structures. Agentless structures and structureless agents are equally inadequate as explanatory frameworks. "Interest," however, turns out to be more problematic than most social theory suggests, inevitably bringing the culture problematic into discussions of robust political ecology -- how nature is conceptualized, valued, understood as a dynamic system.

Markets and Nature: The Making of Commodities and “Natural Resources”

September 10: Karl Polanyi, **The Great Transformation**

[concentrate especially on pp 1-30; 43-55; 68-76; 130-219; 223-258]

William Cronon, **Changes in the Land: Indians, Colonists and the Ecology of New England.**

Ronald Herring, “State Property Rights in Nature (With Special Reference to India),” in John F. Richards ed., **Land, Property and the Environment**

Karl Polanyi’s rhetorical and difficult tract has been enormously influential for thinking about the meaning and dynamics of “market society.” Polanyi sets the tension between transformation of nature into use values and alternative modes of valuation and social movements spurred by economic and environmental change. The literature spawned by the political insights of the great-transformation framework has most prominently centered on the “moral economy” view of “peasant society” and explanations of peasant radicalism. “Defensive reactions” as motivation and mode of peasant collective action grew from Polanyi’s view of reactions to the making of market **society** (quite different from markets as bounded social phenomena). See James Scott, **The Moral Economy of the Peasant**. For theorizing in this line, see William Booth, "A Note on the Idea of the Moral Economy," **American Political Science Review** 87:4 (December 1993) pp 949-954 and "On the Idea of the Moral Economy," **APSR** 88:3 (September 1994) pp 653-667.

Secondary literature on Polanyi will be discussed in class; an excellent piece you may want to consult is Michael Hechter, "Karl Polanyi's Social Theory: A Critique," **Politics and Society** 10:4 1981. On specific applications to natural areas, see Eric Freyfogle, “The Construction of Ownership,” **University of Illinois Law Review** 1996:1, pp 173-187. Keep in mind that Polanyi published this work in 1944; his polemical style reflects not only deep schisms in philosophical reactions to economic theory, but also his view that “western civilization” had reached its nadir. One especially important question to keep in mind in reading Polanyi’s broad-brush critique is: are there conditions under which commoditization might work toward preservation rather than devastation of particular ecological systems, as believed by the bioprospecting advocates as well as “wise-use” theorists?

Transformations of Nature: Developmentalism

The association of economic growth with “development” is so pervasive that we often forget the profound differences, both in rigorous analytics and in common language. If you have not read much critical literature on the subject, see James Ferguson, **The Anti-Politics Machine** or selections from Wolfgang Sachs, **The Development Dictionary** for a subversive history of the

concepts. The tendency to equate development with economic growth, though attenuated in response to the distributional critiques and "basic-human-needs" approaches of the early 1970s, remains dominant. Growth-centric conceptualizations have confronted a more fundamental critique with the rise of ecological science in mainstream discourse. Unlike distributive outcomes, environmental externalities are unequivocally market failures. Moreover, environmental resources -- and perhaps more critically but less understood, environmental services -- are demonstrably necessary for economic activities: growth prospects depend on natural systems, however one values human health or biodiversity. One consequence of the conflict has been the emergence of the concept of "sustainable development." A foundational document is **Our Common Future** from the World Commission on Environment and Development [Oxford University Press, 1987].

September 17 William Cronon, **Nature's Metropolis**

R. Michael M'Gonigle, "Ecological Economics and Political Ecology: Towards A Necessary Synthesis," **Ecological Economics** 28 (1999) 11-26.

Further Readings: Manifest Ecological Destinies: Local Rights and Global Environmental Agendas, Special Issue of **Antipode**, 27:4, 1995, ed by Richard Schroeder and Roderick Neumann, some very interesting cases. See also Peet and Watts Ch 1 of **Liberation Ecologies** (Routledge 1996)

G. Peter Penz, 1992, "Development Refugees and Distributive Justice: Indigenous Peoples, Land, and the Developmentalist State," **Pacific Affairs Quarterly** Vol 6 No 1 January. Wendell Berry, **The Unsettling of America**

Interests in Nature:

The empirical science of natural systems continues to produce puzzles and has produced fodder for such divergent interpretations that interests are difficult to define. This difficulty presents an awkward challenge to a social science that deducts and explains politics in terms of interest, whether of the methodological individualism variety or the Marxian/structural variety. Constructivism extends beyond interpretations of systemic dynamics to identities of social groupings connected to particular ecologies.

September 24 Dryzek, **Politics of the Earth**, entire

Jon Elster, **Making Sense of Marx** (Cambridge 1985) Introduction, Ch 2

Further Reading: Peter Taylor and Frederick H. Buttel, 1992, "How Do We Know We Have Global Environmental Problems? Science and the Globalization of Environmental Discourse" **Geoforum**

Sequestering Nature: Conservation, State Interests, Resistance

One possible construction of nature is that it is endangered; this endangering is undesirable either because of services rendered by intact ecologies or because nature has value in and of itself (e.g. biodiversity, theological significance, cultural refuge from industrial life, etc.). One common response is to sequester tracts of land and remove them from the ambit of the market. States have

multiple motives in sequestering nature, not all of which have to do with ecology. Resistance to state sequestering because of material interests or attachments to place have produced intermittent and subterranean conflicts and sometimes large conflagrations.

The primary **normative** argument for the very existence of states is market failure: the inability of self-seeking individuals to provide the level of public goods they individually desire. States are in one sense the solution to the collective action problem. Yet states have interests that derive from the logic of state-ness itself -- reproduction of systems of power. Authority to govern nature runs up against resistance by those whose livelihood routines are criminalized by conservation policy. There is suspicion in the villages that states' claims of special expertise and disinterested concern for public goods ring false.

[**Note:** The Cornell Environmental Film Festival runs on campus Oct 3-10. In particular, there is a film on the Narmada valley on October 4, 4 pm, that would be especially appropriate. This would be the place to read Baviskar if the text arrives in time; it was moved back because of book availability problems.]

October 1 Peluso, **Rich Forests and Poor People...** entire

October 8 Peluso and Watts, **Violent Environments...** Chapters 1, 3, 4, 6, 8, 9, 13, 15.

F.H. Buttel, "Environmentalization: Origins, Processes, and Implications for Rural Social Change," **Rural Sociology**, 57, 1, 1992, pp 1-27.

Further Reading: Subir Sinha, Shubhra Gururani, and Brian Greenberg., 1997, "The 'New Traditionalist' Discourse of Indian Environmentalism," **The Journal of Peasant Studies**, Vol. 24, No. 3, April 1997, pp.65-99

Authority

All solutions to nature/development conflicts, or claims to public-goods provision, presuppose some system of legitimated power, or authority, the basis for governance. This is true whether we are talking about a village commons or an international regime. The roots of authority are tangled in worldviews of nature, the state, right livelihoods and social organization. The literature on resistance understandably concentrates on large-scale events; the reality of resistance is constrained by powerlessness and absence of conditions for collective action, more often a matter of what Jim Scott calls "everyday" modalities: foot-dragging, non-compliance, anonymous acts of sabotage, arson, etc. (**Weapons of the Weak**, Yale, 1985). These political strategies of the rural poor undermine state authority. Gold and Gujjar track evolution of authority and moral economy across the transition from colony to nation-state in a sub-national state in India. Schama treats the interaction of authority and state interests in pre-industrial England and France.

October 15 Gold and Gujjar, **In the Time of Trees and Sorrows**, entire.

Simon Schama, **Landscape and Memory**, Introduction, Prologue, Chapter Three (The Liberties of the Greenwood).

Further Reading: Ramachandra Guha, 1990, "Toward a Cross-Cultural Environmental Ethic," **Alternatives** XV 1990 pp 431-447.

Donald Worster, "Seeing Beyond Culture," **Journal of American History**, 76, 4, 1990, pp 1142-1147.

Raghunandan, D., 1987, "Ecology and Consciousness," **Economic and Political Weekly** XXII:13 March 28 pp 545-549.

Paul Sillitoe, 1996, **A Place Against Time: Land and Environment in the Papua New Guinea Highlands**, Chapters 13, 14.

Ashish Kothari, Saloni Suri and Neena Singh, "People and Protected Areas," **The Ecologist** September/October 1995.

Social Movements and Collective Action

The theoretical world is divided between those who take collective action to be normal and unproblematic – the reification of community, eg -- and those who find it difficult to explain except under limited conditions. Much of the community-based-solution literature on conservation -- widely attacked for romanticization -- is rooted in idealized narratives of "little traditions" of effective cooperative control of natural resources. The treatment of Gold and Gujar reminds us that communities have trouble forming themselves, as do collective enterprises in general. Robert Wade's **Village Republics** succinctly treats the problem of collective action and finds empirical results problematic for the communitarian consensus. For more on this important debate, see Albert Hirschman's **Getting Ahead Collectively**; Michael Taylor's **Rationality and Revolution**; Victor Magagna, **Communities of Grain** Ch 1, 9; Norman Uphoff, **Gal Oya** Ch 13.

October 22: Sidney Tarrow, 1993, "Modular Collective Action and the Rise of the Social Movement," **Politics and Society** Vol 21, No. 1 March. Pp 69-90.

Sidney Tarrow, 1996, "States and Opportunities: The Political Structuring of Social Movements," in Doug McAdam et al, eds, **Comparative Perspectives on Social Movements**. Cambridge University Press.

Sidney Tarrow, 1999, "Studying Contentious Politics: From Event-ful History to Cycles of Collective Action," in Dieter Rucht et al, eds, **Acts of Dissent: New Developments in the Study of Protest**. Rowman and Littlefield.

Ramachandra Guha, **The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya**, pp 168-196 [if you are not familiar with this classic work, you may want to read it completely].

Richard Peet and Michael Watts, ed., **Liberation Ecologies: Environment, Development and Social Movements**, Chapters 1, 12 and areal choices.

Margaret Keck and Kathryn Sikkink, **Activists Beyond Borders** (Ithaca: Cornell University Press, 1998), Chapter 4

Note: Much of the literature on resistance focuses on poor people in poor places. Political ecology affects exotic places. To correct this distortion, consider not only the historical work above, but also, e.g., David Helvaarg's **The War Against the Greens**, on violence against environmental NGOs and state officials in the United States, or the compendium John Echeverria and Raymond Booth Eby, **Let the People Judge: Wise Use and the Private Property Rights Movement** (Island Press 1995). On the environmental movement in the United States, you may

want to consult Philip Shabecoff, 1993, **A Fierce Green Fire: The American Environmental Movement** (New York: Hill and Wang).

Globalization: Ideas and Interests, Values and Valuation

Woven throughout the readings is one of the most contentious issues in social science: the causal power of ideas and interests, and inter-relationships. Among the most radical of ideas is one of a global interest in planetary ecological integrity, the imagination of an “international community.” Simultaneously, globalization provides new niches for protest and collective action, new institutional conundra. Investigating the origins of contesting ideas of the natural world as these have intersected with the interests of colonial expansion, globalization of conservationist discourses and economic projects of the powerful is the intent of Richard Grove’s *magnum opus*. Grove traces the connections between ideas about colonized people and landscapes to early recognition of **limits** in natural systems. Limits were recognized quickly because of the scale of transformation in small bounded ecosystems on islands, where colonial thinking identified first “tropical edens” and then human-induced devastation. Grove provides an early history of the concept of epistemic communities in his treatment of actors on colonial nature policy.

The most important feature of ecological systems for the analyst of states and institutions is that boundaries seldom coincide. Most obviously, planetary interests in particular values such as biodiversity or climate change have ramifications in remote localities, unconnected institutionally or inter-subjectively. It may well be that recognition of common interests will be more spurred by a defensive reaction to the globalization of pathogens (see Pimentel et al below); other posited collective values are more contested. One contemporary conflict in protecting planetary ecological integrity is the rift in ideational structure between a “deep ecology” and a sustainable development with social justice notion of “social ecology.” On early thinking self-consciously constituting itself as “deep ecology,” see Bill Devall and George Sessions, 1985, **Deep Ecology** (Layton: Gibbs Smith). Divergent interests and ideologies between “North and South” on issues of the global commons are now so extensively treated in the literature as to be almost cliches. If the background is unfamiliar, see the handy texts by Jacqueline Switzer (**Environmental Politics: Domestic and Global Dimensions** St. Martins, 1994) or the reissued classic by William Ophuls, **Ecology and the Politics of Scarcity Revisited** (Freeman, 1992). A more systematic treatment of interests and politics in global soft-law regimes concerning the environment is Gareth Porter and Janet Welsh Brown, **Global Environmental Politics** (Westview 1996). Nation states mediate between local environmental interests, policy and global dynamics. Scott’s critique of “high modernism” in the hubris of nationstate planning attacks the notion that states are the solution. The biological revolution, considered below, as a potential source of resolving some obdurate developmental conflicts, depends on emergent systems of property rights in biological materials, and the consequent critique of “biopiracy.”

October 29 Richard Grove, **Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860**.

Further Reading: David Arnold, **The Problem of Nature: Environment, Culture and the European Expansion**.

Richard Grove, 1992, “Origins of Western Environmentalism,” **Scientific American**, July

PP 42-47.

Clarence J. Glacken, **Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century**. University of California Press, 1967.

November 5 Brown Weiss and Jacobson, ed, **Engaging Countries** ... Chapters 2, 4, 5, 13. Sample the country studies from an area you know well.

James C. Scott, **Seeing Like a State**, Chapters 1, 7, 8, 9, 10.

David Pimentel et al, "Ecology of Increasing Disease," **BioScience** 48:10 (October) 1998:817-826.

November 12 Amita Baviskar, **In the Belly of the River: Tribal Conflicts over Development in the Narmada Valley**.

Further Reading: Peter Haas, Robert O. Keohane and Marc A. Levy, eds **Institutions for the Earth** MIT Press. 1994.

Nazli Choucri, ed, **Global Accord**. MIT Press 1995.

Herman E. Daly and Kenneth N. Townsend, ed, **Valuing the Earth: Economics, Ecology, Ethics**

The Nature of the Unnatural: Fallout from the Genomics Revolution

There are continuities between historical struggles for definition and control of nature and contemporary social protests around transgenic organisms. Yet there are also some genuinely new developments: the potential for creation of property at ever-smaller scales, for breeding new organisms across the lines of species – even kingdoms – and the possibilities for environmental change in unanticipated ways that frighten many. Bioprospecting promises that new science could lay the base for a pro-poor development strategy that benefits local people and validates local knowledge; biopiracy is the term deployed by opponents viewing the same institutional arrangements. The landscape of social movements and developmental options has been altered. The intersection of new biological possibilities with pressures for harmonization of intellectual property rights through the WTO, WIPO and bilateral pressure produces new questions in a globalized political ecology.

November 19 Guruswamy and McNeely, ed., **Protection of Global Biodiversity: II** Horsch and Fraley, pp49-65; III Simpson, Sedjo and Reid, pp129-149; IV Toenniessen pp 190-201; Gupta 180-199; VI Yvonne Cripps, p 316-331; Sagoff 331-350.

Charles Weiss and Thomas Eisner, "Partnerships for Value-Added Through Bioprospecting," **Technology in Society** 20 (1998) 481-498.

Ronald J. Herring, "Miracle Seeds, Suicide Seeds and the Poor: Mobilizing Around Genetically Modified Organisms in India," forthcoming in **Social Movements and Poverty in India**, Raka Ray and Mary Fainsod Katzenstein eds

Further Reading: If these questions interest you but you are not up on biological science at the small scale, you might want to read: Mark L. Winston, 2002, **Travels in the Genetically Modified Zone**, Harvard University Press. On biopiracy and the threats of transgenics, Vandana

Shiva, **Biopiracy: The Plunder of Nature and Knowledge**, 1997, South End Press. For a much more sophisticated debate on the questions, see the debates on <http://www.foodfirst.org/progs/global/ge/altieri-11-99.html> and <http://www.agbioforum.org/v2n34/v2n34a04-mcgloughlin.htm> and <http://www.agbioforum.org/v2n34/v2n34a14-altieri.htm> and <http://www.pbs.org/wgbh/harvest/interviews/mcgloughlin.html>. The developmental case for transgenics as part of a remedy for the externalities of the “green revolution” in concert with other agroecological innovations is made in broad strokes in Gordon Conway, 1997, **The Doubly Green Revolution**, Penguin or Cornell University Press. Also, United Nations Development Programme, 2001, **Human Development Report: Making Technologies Work for Human Development**. New York. On the emerging politics, see Per Pinstrup-Andersen and Ebbe Schioler, 2000, **Seeds of Contention: World Hunger and the Global Controversy over GM Crops**, Johns Hopkins University Press and Robert Paarlberg’s **The Politics of Precaution: Genetically Modified Crops in Developing Countries**. On public goods and property, see Stephen Hilgartner, 2002, “Acceptable Intellectual Property.” **Journal of Molecular Biology** 319, 943-946 and Steven R. King et al, “Biological Diversity, Indigenous Knowledge, Drug Discovery and Intellectual Property Rights: Creating Reciprocity and Maintaining Relationships,” **Journal of Ethnopharmacology**,” 51, 1996 pp 45-57.

Rethinking the Tragedy of the Commons: Disaggregating States and Actors

A second powerful strand connected to the Polanyi worldview is “the commons” and its presumed tragedy -- that is, the atomization of interests that theoretically generates the tragedy dynamics is rooted in market dissolution of organic solidarities that restrained individualism. The commons is debated in part as the residual of pre-market society, and as a source of alternative societal vision in some of the literature, as a source of "tragedy" elsewhere.

December 3 Garrett Hardin, “The Tragedy of the Commons,” **Science** 1243-48

Elinor Ostrom et al, 1999, “Revisiting the Commons: Local Lessons, Global Challenges,” **Science** Vol 284 9 April pp 278-282.

Robert Wade, 1988, **Village Republics: Economic Conditions for Collective Action...** Chapters 1, 10, 11

Elinor Ostrom, “Scales, Polycentricity, and Incentives,” in Guruswamy and McNeely **Protection...** 149-167.

Jack Kloppenburg, Jr. and Daniel Lee Kleinman, “Seed Wars: Common Heritage, Private Property, and Political Strategy,” **Socialist Review** 95 (Sept-Oct) 1987 pp 7-41.

December 10: Bina Agarwal, “The Gender and Environment Debate: Lessons from India,” **Feminist Studies**, 18, 1, 1992, pp 119-158.

Blaikie and Brookfield, **Land Degradation and Society** Chs 1, 2

Madhav Gadgil and Ramachandra Guha, **Ecology and Equity: Introduction**, Chs 1, 2

Ronald Herring, “Authority and Scale in Political Ecology: Some Cautions on Localism,” in Louise Buck, et al, ed, **Biological Diversity...** CRC Press 2001.

Further Reading: William Cronon, ed, **Uncommon Ground: Toward Reinventing Nature**, Norton 1995, esp pp 69-91 and 269-298.

Ronald Herring, "Resurrecting the Commons: Collective Action and Ecology," **Items** (Newsletter of the Social Science Research Council) 44:4 (1990).

Subir Sinha and Ronald Herring, "Common Property, Collective Action and Ecology," **Economic and Political Weekly**, July 1993.

The best starting point for commons analysis is Elinor Ostrom, **Governing the Commons: The Evolution of Institutions for Collective Action**. For poverty consequences of commons decline, see, N.S. Jodha, "Population Growth and the Decline of Common Property Resources," **Population and Development Review** 11:2 1985; also Ronald Herring, "Politics of Nature: Interests, Commons Dilemmas and the State," Harvard Center for Population and Development Studies, Working Paper Series No. 7, 1991; Arun Agrawal, "Community in Conservation: Beyond Enchantment and Disenchantment," working paper, Workshop in Political Theory and Policy Analysis, 8-22-97. On the communitarian and participatory critique of state solutions to environmental problems, you might want to read Mahmood Mamdani's **Citizen and Subject** (Princeton University Press 1996), pp 35-137 on "decentralized despotism." Pressures of globalization for convergence of property systems around commoditized and individuated land can be pursued in Michael Goldman, ed., **Privatizing Nature: Political Struggles for the Global Commons** (London, New Brunswick: Pluto and Rutgers University 1998).