ENVR E-161A: Land Conservation Practice in the United States and Around the World Fall 2016
Henry Tepper and Frank Lowenstein

Wednesdays 7:40-9:40 pm/ 1 Story Street, Room 306 Cambridge, MA 01238

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Office Hours: By appointment via Canvas Website

Course Description

This course will focus on the extraordinary growth and success of public and private land conservation in the United States and abroad during the past 150 years. We will delve into the origins of land conservation and its growth, in the context of the broader environmental movement, in the United States and around the world. Early lectures will review the first major trend in US land protection, which was the creation of public parks, forests and nature preserves, including landmark actions to create emblematic landscapes like the Boston Common, Yellowstone and Yosemite National Parks, and the Adirondack Forest. Our focus will then shift to what has become one of the best-kept secrets in conservation—the growth, effectiveness, scale, and practicality of private land conservation. We will discuss the range of practice of land trusts in the US, including public-private conservation partnerships, and we will address growing but under-recognized private lands conservation efforts outside the US. We will pay special attention to the building blocks of private and public land conservation, including: financial incentives; practical and flexible legal agreements and

instruments; financing mechanisms; entities to facilitate these projects, including land trusts; protection criteria; community values; land conservation in cities; and the growing importance of climate change issues in land protection.

An underlying theme of the course will be the inherent practicality and demand for results in private land conservation. The instructors will call on their experience as conservation practitioners, and the class will examine a diverse range of complex and interesting case studies, including the conservation of landscape-scale working forest blocs in northern New England and New York State; the protection of two 300,000-acre neotropical forest properties in the Calakmul Bioreserve in Mexico; the protection of private land in Chilean Patagonia; the conservation of land as part of the implementation of the European Union's Natura 2000 Framework, and saving smaller, scenic landscapes that are of critical to the fabric of local communities but also coveted for real estate development. We will ask class members to apply their new knowledge and ideas to practical conservation opportunities and challenges.

The course will include examination of the latest trends in conservation, including serving more diverse and urban communities. We will make the course's traditional lecture format more diverse and interesting by interspersing practical exercises in negotiation techniques and guest lectures by conservation leaders.

Course Logistics

Details to come. The course will be taught simultaneously as a lecture capture/distance learning course and via live, video recorded in-person lectures. In-person lectures will be from 7:40 to 9:40 p.m. every Wednesday at 1 Story Street, Room 306, Cambridge, MA 01238.

Final Project/Paper

Students may undertake either a traditional term paper on a current conservation topic, or analyze a case study in land conservation practice. For the case study option, in consultation with the instructors, students will determine the scope of the analysis and articulate its basic

components—opportunities, challenges, risks, etc. The challenge or opportunity could include a need for new institutional arrangements to advance land conservation or an on-the-ground land conservation project. Students will define public or private conservation strategies to include: desired outcomes; expected negotiating strategy or institutional framework; draft documents or legal instruments, fundraising or other financing strategy, communications plan, etc.

Writing and Reading Assignments

Weekly readings will be drawn from the texts or from articles posted on Canvas website and are indicated in preliminary form in this syllabus.

For each week's readings:

- 1. Provide a two-page (double spaced) assessment of what you found particularly interesting about this week's readings, key questions the readings raise, things you like or don't like about them.
- 2. Identify key elements from the readings which you would like to see addressed further in the upcoming class. This is your opportunity to guide the instructors on what might need further explanation, what is particularly relevant, provocative, etc.

For full credit, reading responses must be submitted via email to both instructors on the Monday before each week's Wednesday lecture. This will enable the instructors to review the students' assignments in advance and discuss them in class.

Grading & Class Participation

1) Attendance and participation including active participation in the reading discussions—10%. Our classroom has a technology feature called Zoom, which will permit students to participate in live video discussions during the scheduled class time on Wednesday evenings, US Eastern Standard Time. While remote students are not required to be present in person or live on line for every class, do require you to join the class live via Zoom *in at least three classes*. We will provide at least six choices for these classes, depending on the availability of the requisite technology support. Please let us know by Wednesday, September 7 which three classes you will be participating in live. Of course all students are encouraged to attend live or online in real time and participate in all discussions, but you will not be graded on your participation

beyond the three required classes. If live participation is a significant hardship due to connectivity, time difference, or other obligations please contact us and we will make reasonable accommodations.

- 2) Reading response assignments (2 pages each) on each week's readings--20%. As this is a discussion class, doing the readings and participating in each week's classes is critical.
- 3) Final paper/project (as described above)-- 30%.
- 4) Mid-term exam in the form of a paper (3-5 page write-up of one book or alternatively a short research paper)-- 10%
- 5) Take home final exam-- 30%

If you have any questions about expectations, please ask.

Principal Texts:

Richard Brewer (2003), *Conservancy: The Land Trust Movement in America*. Hanover, New Hampshire: University Press of New England (majority of the book). A general history of the American land conservancy or land trust movement, including discussions of conservation organization and practice focused on the evolution of the larger players.

Thomas R. Wellock (2007), *Preserving the Nation: The Conservation and Environmental Movements, 1870-2000*. Wheeling, Illinois: Harlan Davidson, Inc. This is a good, recent, general survey of the broader conservation and environmental movement. It will be used primarily as a reference.

Additional readings to be provided as PDFs on the Canvas Website.

Learning goals:

- 1. A deep, global understanding of public and private land conservation—its origins, history, basic tools, future opportunities, and challenges.
- 2. Increased familiarity with land conservation organizations and the people who make them work.
- 3. A working understanding of the tools and strategies necessary to complete successful land conservation efforts.

Disabilities

The Extension School is committed to providing an accessible academic community. The Accessibility Office offers a variety of accommodations and services to students with documented disabilities. Please visit www.extension.harvard.edu/resources-policies/resources/disability-services-accessibility for more information.

Academic honesty, cheating and plagiarism

You are responsible for understanding Harvard Extension School policies on academic integrity (www.extension.harvard.edu/resources-policies/student-conduct/academic-integrity) and how to use sources responsibly. Not knowing the rules, misunderstanding the rules, running out of time, submitting the wrong draft, or being overwhelmed with multiple demands are not acceptable excuses. There are no excuses for failure to uphold academic integrity. To support your learning about academic citation rules, please visit the Harvard Extension School Tips to Avoid Plagiarism

(www.extension.harvard.edu/resources-policies/resources/tips-avoid-plagiarism), where you'll find links to the Harvard Guide to Using Sources and two free online 15-minute tutorials to test your knowledge of academic citation policy. The tutorials are anonymous open-learning tools.

About the Instructors

Henry Tepper is an independent consultant who has spent twenty-five vears as a conservation leader in both the United States and abroad. He has special expertise in land conservation, and has played a direct role in the protection of almost 1 million acres in the US and Latin America. Most recently, Henry served as the President of Mass Audubon, one of the largest and most prominent conservation organizations in New England. Prior to joining Mass Audubon, Henry served as Chief Conservation Officer and a Partner at Patagonia Sur, LLC, a company that invests in and protects large tracts of ecologically significant properties in Chilean Patagonia. At Patagonia Sur, Henry led a team that created a template for a conservation easement under Chilean Law, called the Servidumbre Voluntaria, and established one of Chile's first independent land trusts, the Tierra Austral Land Trust, on whose Board of Directors he currently serves. Henry has also helped advance Chile's first land conservation enabling legislation, the Derecho Real de Conservacion, which was passed into law by the Chilean Congress in

June, 2016. Henry spent thirteen years at The Nature Conservancy (TNC), where he served first as the State Director in New Hampshire and then the State Director in New York State. During his time at TNC, Henry launched and successfully led a series of landscape-scale forest conservation projects that protected more than 350,000 acres in the northern forests of New York. He also provided technical assistance and fundraising support to a range of international programs, from China to Mexico to Brazil.

Throughout his career, Henry has worked to advance the professional capacities of non-profit land conservation organizations. He is currently a member of the Land Trust Alliance's National Leadership Council, a member of the Board of US Friends of Canadian Land Trusts, a member of the Steering Committee of the International Land Conservation Network, and was a founding member of the Land Trust Accreditation Commission. Henry holds a B.A. from the University of Michigan and an M.A. and Admission to Doctoral Candidacy from Cornell University. He lives in Lincoln, MA.

Frank Lowenstein has served as an adjunct faculty member at Brandeis University and also serves as Deputy Director of New England Forestry Foundation, where his responsibilities bridge strategy, land protection, fundraising and communications. New England Forestry Foundation is a 70-year-old non-profit organization devoted to the conservation and sustainable management of New England forests. It holds more than a million acres of conservation easements and owns more than 25,000 acres of land in 140+ community forests. Prior to his work at NEFF, Frank served as a Senior Manager for The Nature Conservancy—the world's largest conservation non-profit. He led organizational initiatives at every scale from community-based conservation in Massachusetts to US national forest health to global climate adaptation, and also worked extensively in Latin America. He continues to serve as a senior fellow in the US State Department's Energy and Climate Partnership of the Americas. Frank received his M.S. in Botany, Field Naturalist Option from the University of Vermont and a B.A. cum laude in Geology from Harvard. He lives in Harvard, MA.

Henry and Frank will both be present for many classes, and will divide teaching and grading responsibilities collaboratively between them.

ENVR E-161A Course Schedule

Class 1: August 31, 2016 (Tepper and Lowenstein)—Purpose and Nature of the Course—Land conservation as an applied practical, dynamic, innovative, growing field. We have designed this course in part to directly address a fundamental disconnect between the practical success of land conservation and the dearth of available practical academic training. Our goals are to provide students with an understanding of the historical context and tools of land conservation, and a detailed grasp of the core components of successful land conservation transactions. In preparation for the course, please write a few sentences or a paragraph describing why you are taking the course, and a place that is particularly important to you and why. We will call on some students to share their thoughts on this.

Topics for Class 1: Our own professional biographies, what we consider our major accomplishments, our perspective on conservation. Discussion of fundamental themes that will run through the course. Issues and trends include strict preservation vs sustainable resource use; public and private conservation; micro/community scale vs. macro/landscape scale; rural and urban; pride about conservation success tempered with concern about ongoing loss, pressure on natural systems; changes in the social, economic and climate context that may be game-changing for the conservation movement as we know it. Also a discussion of the range and different missions of environmental organizations.

(Note—All readings are subject to change and refinement; these changes will be posted online on Canvas and the instructors will tell the class about them):

Reading (Text):

Preserving the Nation, "Introduction" pp. 1-11.

Reading (PDFs on Canvas):

Leopold, Aldo (1949), *Sand County Almanac*. London: Oxford University Press. "The Land Ethic", pp. 201-236.

Class 2: September 7, 2016 (Tepper and Lowenstein): <u>Historical</u> <u>underpinnings of land conservation in the US and abroad</u>-- Early emblematic conservation movements and protected landscapes, the history of global conservation in two hours(!), moving from ancient times to the present. Brainstorming on the next 100 years.

Readings (PDFs on Canvas):

Papanastasisa, Vasilios, et al (2010) "Environmental conservation in classical Greece." <u>Journal of Biological Research - Thassaloniki</u> (14: 123-135)

Ray, Rajasri, M.D. "Sacred Grove: Nature Conservation Tradition of the Ancient World". Banagalore: Centre for Ecological Studies, Indian Institute of Science. Pp 1-8

Nash, Roderick (1976). *Wilderness and the American Mind (Third edition)*. New Haven: Yale University Press. "Prologue: The Condition of Wilderness" and "Old World Roots of Opinion", pp. 1-22.

Fox, Stephen (1981). *The American Conservation Movement: John Muir and His Legacy* (Madison: University of Wisconsin Press). "The American Tradition: People and Politics", pp 334-357.

Class 3: September 14, 2016 (James Levitt, w/ Lowenstein and Tepper): The origins of conservation in the United States—Guest lecture on the Boston Common and its significance in land conservation by James Levitt from the Lincoln Institute for Land Policy and the Harvard Forest. The idea of setting aside land for the common good. Early visionary recognition of that need as exemplified the creation, use and protection of the Boston Common. The role and evolution of conservation groups such as The Trustees of Reservations.

Readings (PDFs/Video on Canvas):

Jim Levitt TED Talk (video clip)

Hardin, Garrett (1968). "The Tragedy of the Commons", pp. 3-16 (originally in the journal Science, December 13, 1968).

Feeney David and Birkres, Fiokret, et. al. "The Tragedy of the Commons, Twenty-Two Years Later", pp. 76-94.

Freyfogle, Eric T. (2007) "Correcting the Half Truths;" reprinted in *Planning and Environmental Law*, October, 2007 pp. 3-11.

Class 4: September 21, 2016 (Tepper, Lowenstein): National Parks and Forests in the US and Abroad— Creating public protected areas in the US in the late 19th and early 20th century; the visionary work of John Muir, Gifford Pinchot and President Theodore Roosevelt; National Parks and landscape preservation; National Forests and multi-use landscapes, including the Adirondack State Park; The beginning of wilderness conservation and the Wilderness Act; Top-down and bottom-up—Protected areas at multiple scales and for multiple purposes—national, regional, community; The international experience. Exercise— in-class debate on Preservation vs. Multi-use conservation approaches.

Readings (Text):

Conservancy, "History", pp. 1-29.

Preserving the Nation, "Introduction" pp. 1-13[skim] and "Roots and Progressive Area Conservation", pp 13 -78.

Readings (PDFs on Canvas):

Muir, John (1897) "The American Forest". The Atlantic Monthly

Branson, I.R. (1909) "Yosemite Against Corporation Greed", pp 1-5.

Stegner, Wallace. (1960) "Wilderness Letter" A submission to the Outdoor Recreation Resources Review Commission, published in his anthology *The Sound of Mountain Water*, 1969.

Class 5: September 28 (Lowenstein) The Evolution of the Environmental Movement and Its Implications for Land Conservation Critical events (e.g. DDT); Links to other social movements— civil rights, antiwar, feminist, etc.; Galvanizing events; Leaders and their books and philosophies—Aldo Leopold, David Brower, Rachel Carson. The first Earth Day.

Readings (PDFs on Canvas):

Introduction to Silent Spring.

Encounters with the Archdruid, Chapter on David Brower.

Leopold, Aldo (1949), *Sand County Almanac*. London: Oxford University Press. "The Land Ethic", pp. 201-236.

Shabecoff, Philip (1993). *A Fierce Green Fire: The American Environmental Movement* (New York: Hill and Wang). "The Awakening", pp. 43-76. Skim for an entertaining progressive view of the roots of American environmental conservation.

Class 6: October 5 (Tepper)-- Introduction to the Private Lands
Conservation Movement in the US — Historical implications of the
Boston Common and the Trustees of Reservations to the development
and growth of land trusts throughout the US. Critical components that
have enabled private land conservation to thrive in the US: financial
incentives, including enabling tax savings and public and private funds
for outright purchase; Legal framework, including flexible legal
agreements—conservation easements; Landowners committed to
conservation; A tradition of philanthropy; Development of processes
for assessing land protection priorities; and land trusts.

Reading: (Text)

*Conservancy, "*Who Will Save the Land", pp. 78-96. "Choosing the Land to Save" and "How to Save Land", pp. 97-114 and 139-162 only.

Readings (PDFs on Canvas):

Land Trust Alliance (1990). *Starting a Land Trust*. Alexandria, Virginia: Land Trust Alliance. "Getting Started" and "Board of Directors", pp. 1-24. [This book, now out of print, is still an excellent primer for organizing almost any non-profit organization.] [TO BE POSTED AT A LATER DATE]

Elizabeth Byers and Karin Marchetti Pont (2005). *Conservation Easement Handbook*. Washington, D.C.: Land Trust Alliance. "Conservation Easements: The Context"

Connecticut Land Conservation Council (2014), "Model Conservation Easement and Commentary". Please read the commentary and review cursorily the structure of the actual model document; we'll peruse it in some detail in class.

Cheever, Federico. (1996) "Public Good and Private Magic" *Denver Law Review*

Ancillary Readings (PDFs on Canvas--for those interested in digging more deeply):

Bray, Zachary (2010). "Reconciling Development and Natural Beauty: The Promise and Dilemma of Conservation Easements". Harvard Environmental Law Review 34, pp. 119-177.

Catanzaro, Paul, et al (c 2010). *Your Land, Your Legacy: Deciding the Future of Your Land to Meet the Needs of You and our Family"*, pp. 119-177. Highland Communities Initiative and North Quabbin Regional Landscape Partnership. Review this pamphlet, a good example of land trust marketing and education, written for a landowner audience.

Mid-term paper due October 12

<u>Class 7: (October 12) (Tepper, Lowenstein)—Conservation</u>
<u>Easements, Part 1</u>-- Nuts and bolts of conservation easements as the transformative tool of private land conservation. Basic explanation—"bundle of sticks" description of property ownership in English Common Law. Core components: No transfer of title—property remains private; Perpetual; Tax savings; Permit sustainable land uses.

Readings (PDFs on Canvas):

Connecticut Land Conservation Council (2014), "Model Conservation Easement and Commentary". Please read the commentary and review cursorily the structure of the actual model document; we'll peruse it in some detail in class.

Cheever, Federico. (1996) "Public Good and Private Magic" *Denver Law Review*

Class 8: October 19 (Tepper and Lowenstein): Conservation

Easements, Part 2 -- The evolution from species-scale conservation

to landscape-scale conservation— Conservation of biodiversity and of
working landscapes (forests, farmland, rangeland); Case study or
studies— Forest projects in the Adirondacks and Maine and the
Calakmul Bioreserve in Mexico.

Readings (PDFs on Canvas):

Brian Donahue (1999). *Reclaiming the Commons: Community Farms and Forests in a New England Town*. "Reclaiming the Commons", pp. 279-308.

Foster, David R., et al (2010) *Wildlands and Woodlands: A Vision for the New England Landscape*. Petersham, Massachusetts: Harvard Forest, Harvard University, pp. 2-33 [Review this example of a conservation vision for a regional landscape.]

Perschel, R. 2006. *Working Forest Conservation Easements.* Forest Guild, 48 pp.

Donahue, Brian et al (2014) *A New England Food Vision*. Food Solutions New England. [Skim this example of holistic thinking about alternatives to the industrial agriculture system]

Perschel et al (2014) *Path to Sustainability.* New England Forestry Foundation, 32pp.

Draft of final paper due

Class 9: October 26 (Lowenstein and Tepper): <u>Land conservation and</u> <u>climate change</u>— The concept of resiliency and how to plan for it; explanation and discussion of the climate change goals and strategies of Mitigation and Adaptation. Case studies of land trusts adopting and implementing these goals on-the-ground.

Readings (PDFs on Canvas) (Additional readings to come):

Heller and Zavaleta-Biological Conservation America's Climate Choices Chapter 9, pp. 271-290.

Class 10: November 2 (Bill Ginn w/Lowenstein and Tepper)-- Guest Lecture on impact investing and conservation- Bill Ginn, the Director of NatureVest, The Nature Conservancy, will speak to the class-- During the past 25 years, there have been numerous attempts to marry conservation with forprofit businesses. These focus on properties that are protected with conservation easements that allow sustainable land uses, including forestry, agriculture, grazing, and limited development. A new generation of these businesses are being formed under the term "impact investing." We will hear from one of two of the most experienced and successful impact investment leaders in the US.

Readings (PDFs on Canvas):

Tercek, Mark R and Johnathan Adams. 2013. The Business Case for Nature. *Sustainability, Issue 72, pp. 1-3.*

Worster, Donald (1993). *The Wealth of Nature: Environmental History and the Ecological Imagination*. New York: Oxford University Press. "The Shaky Ground of Sustainable Development", pp. 142-155.

Class 11: November 9 (Mark Anderson, with Lowenstein and Tepper)—Guest lecture on forest landscape-level conservation planning— Mark Anderson, Ph.D, Regional Landscape Ecologist, The Nature Conservancy, Boston, MA. For the past 20 years, Mark Anderson has played a critical and nationally influential role in guiding land conservation practitioners inside

and outside The Nature Conservancy in setting goals for forest conservation at the landscape scale. We are lucky to have him deliver a guest lecture on the methodology he has developed to determine the size, scale and location of forest conservation priorities in New York, New England and beyond. He will address key challenges and opportunities, including how to balance ecological preservation with accommodating forestry, and the impact of climate change of forest conservation.

Readings (PDFs on Canvas):

Anderson, M.G., M. Clark, and A. Olivero Sheldon. 2011 Resilient Sites for Species Conservation in the Northeast and Mid-Atlantic Region. The Nature Conservancy, Eastern Conservation Science. 122pp. Pages 19-45.

Class 12: November 16 (Brigitte Griswold, w/Lowenstein and Tepper): Guest lecture on emerging trends in land conservation—diversity, **community conservation and social justice** — Brigitte Griswold, Director of Youth Program for The Nature Conservancy's LEAF Initiative will speak to the class. Brigitte will exciting growing efforts to engage a more diverse constituency in environmental experiences and conservation action. These initiatives are an overdue response to long-standing criticism of the environmental movement in the US and abroad is that it is elitist and dominated by wealthy Caucasians who focus on strategies and projects that ignore the needs of people of color, people who are economically disadvantaged, and who often live in cities, without access to either parks and open space or transportation to get to these amenities. Critics also note that environmentalists seldom took action against a pervasive pattern of government agencies siting noxious infrastructure projects—power and sewage treatment plant, waste dumps, etc. in communities with disenfranchised residents who couldn't fight back. Brigitte Griswold to will speak to all of these issues, and will talk about dynamic and effective new work and organizations that have as their core goals to include and serve more diverse communities.

Reading (Text):

Conservancy, "A Diversity of Local Land Trusts", pp. 269-289.

Reading (PDFs on Canvas):

Enderly, Emily (2007). *Diversity and the Future of the U.S. Environmental Movement*. (New Haven: Yale University Press). "Action: The Next Step Toward Achieving Diversity and Inclusivity in the U.S. Environmental Movement, pp. 227-244.

Atencio, Ernie, Forbes, Peter, et al (2013). "Land Conservation and the Public Trust: The Case for Community Conservation". Center for Whole Communities, commissioned by the Land Trust Alliance. [For this class, review this "manifesto" for community stewardship —reflecting the views of Peter Forbes, founder of the Center for Whole Communities in Vermont.]

NO CLASS NOVEMBER 23—Thanksgiving Break

Class 13: November 30 (Tepper and Lowenstein)-- <u>International land</u> <u>conservation, Part 1</u>-- Public protected areas strategies; challenges to land protection in developing countries—poverty, indigenous communities, land tenure and title, paper parks, land exploitation. Increased private land conservation outside the United States. Recent efforts by the European Union, and challenges to conservation of old growth forest reserve in Poland.

Reading (PDFs on Canvas):

Joppa and Pfaff (2009). "High and Far: Biases in Locations of Protected Areas," *PlosONE* 4(12): e8273. doi:10.1371/journal.pone.0008273

Johnson, Laura. 2014. An Open Field: Emerging Opportunities for a Global Private Land Conservation Movement. Lincoln Institute of Land Policy Working Paper WP14LJ1. 26 pp.

Brown, Jessica et al, eds. (2005), *The Protected Landscape Approach: Linking Nature, Culture, and Community*. Gland, Switzerland and Cambridge, UK: IUCN. Nora Mitchell et al, "Conclusions: Conservation for a Sustainable Future", pp. 231-244.

Agrawal A, and K. Redford. Conservation and Displacement: An Overview. Conservat Soc 2009; 7:1-10

Dowie, M. 2006a. The hidden cost of paradise: Indigenous people are being displaced to create wilderness areas, to the detriment of all. Stanford Social Innovation Review Spring: 28-36.

Conservation, Part 2-- Case study— The Chilean Private Lands
Conservation Initiative-- The context-- Why Chile? Why Private Lands
Conservation? Why now? Components of the initiative: Private sector leadership; Development of a Chilean Conservation Easement, the Servidumbre Voluntaria; forming a Chilean land trust, Fundacion Tierra Austral; protecting properties—Valle California; passing land conservation enabling legislation—the Derecho Real de Conservacion. Private-Public National Parks in Chile and Argentina, the Tompkins Conservation Phenomena.

Readings (PDFs on Canvas):

Henry Tepper and Victoria Alonso Chapter on the Chilean Private Lands Conservation Initiative, in James Levitt, Editor, "Conservation Capital in the Americas."

Materials on the Servidumbre Voluntaria Chilean Conservation Easement and the new Derecho Real de Conservacion legislation.

Class 15: December 14 (Tepper and Lowenstein)— <u>So you wanna be a land conservationist?</u>: The professional practice of Conservation— What it means to work at a land trust—local, regional, national, international. Science criteria vs. "Bucks & Acres." Science, GPS, fundraising, operations, negotiation, innovative finance, land stewardship, etc. Final thoughts on the course.

Readings-- TBD

Final take-home exam issued, due during finals period

Final paper due