

IU Bloomington

Department of Economics

Spring 2017

**E724 -- Institutions and Governance of Natural Resources**

Section 13413

***T TH 9:30 – 10:45 am, Wylie 101***

Prof. Michael Alexeev, r. WY 241; e-mail: [malexeev@indiana.edu](mailto:malexeev@indiana.edu)

Office hours: Wednesday 1:30 pm - 2:30 pm and by appointment

Prof. Dean Lueck, r WY 202; e-mail: [lueck@indiana.edu](mailto:lueck@indiana.edu)

Office house: TBA

**Course Plan, Requirements and Grading**

The course will examine a wide variety of empirical applications in topics in natural resource economics such as resource scarcity, land use, water, oil and gas, biodiversity, fisheries, and forestry. There will be an emphasis on empirical studies and on contract theory, transaction costs/property rights, economics of law, and political economy. We will spend some time at the beginning of the course on the new institutional economics and standard models of renewable and nonrenewable resource use (dynamic methods will be used). In general each meeting will be conducted as a seminar with student presentations, though we will lecture on occasion. The *Handbook on the Economics of Natural Resources* 2015. Eds. Halvorsen and Layton (Edward Elgar) will be a basic reference. Students will be responsible for assigned readings and participation in the class discussion. The course requires each student to write a research paper on a topic approved by the instructor. The paper will account for 50% of the grade in the course. The students also will be required to review one of the assigned papers in class. This presentation will be judged on the understanding of the paper's substance, organization, clarity, and answering questions, and will contribute 40% to the student's grade. The remaining component of the grade will be class participation (10%).

**Topic Outline**

1. Introduction: Coase, North, & Williamson
2. Institutions and Economic Growth
3. Private and Public Ownership
4. Contracts and Contract Enforcement
5. Corruption
6. Optimal Resource Use: Depletion, Harvest and Conservation
7. Taxation of Natural Resources
8. The 'Curse' of Natural Resources
9. Open Access to Natural Resources
10. Establishing Resource Ownership
11. Aboriginal Use & Historical Use
12. The Institutions of Land
13. Governance and Regulation of Natural Resources
14. Wildfire & Natural Disasters

## Reading List

Specific articles will be identified for presentation during the semester.

### 1. INTRODUCTION TO INSTITUTIONS: COASE, NORTH, WILLIAMSON, AND ACEMOGLU

Coase, Ronald. 1937. "The Nature of the Firm," *Economica*, 4(6):386-405.

\_\_\_\_\_. 1960. "The Problem of Social Cost," *Journal of Law and Economics*, 3:1-44.

Djankov, Simeon, Edward Glaeser, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, "The New Comparative Economics," *JCE* 31(4): 595-619, 2003  
URL (NBER version): <http://ideas.repec.org/p/nbr/nberwo/9608.html>;  
Ungated JCE version:  
<http://elsa.berkeley.edu/~yqian/econ260b/Djankov%20New%20Comparative%20Economics.pdf>

Eggertsson, Thráinn, "Quick guide to New Institutional Economics," *JCE* 41: 1-5.

Farrell, Joseph. 1987. "Information and the Coase Theorem" *The Journal of Economic Perspectives*, 1(2):113-129.  
(Stable URL: <http://www.jstor.org/stable/1942984>)

Hayek, F. A. 1945. "The Use of Knowledge in Society," *American Economic Review*, 35(4):519-530.

North, Douglass C. 1991. "Institutions," *The Journal of Economic Perspectives*, 5(1):97-112.

Williamson, Oliver E. 2000. "The New Institutional Economics: Taking Stock, Looking Ahead," *Journal of Economic Literature*, 38(3):595-613.

### 2. INSTITUTIONS AND ECONOMIC GROWTH

Acemoglu, Daron, Simon Johnson, and James A. Robinson, 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review* 91(5): 1369-401.

Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi, 2008. "Governance Matters VII: Aggregate and Individual Governance Indicators 1996-2007," The World Bank, World Bank Policy Research Working Paper 4654.  
URL: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1148386](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1148386)

Kaufmann, Daniel, Aart Kraay, 2007. "Governance Indicators: Where Are We, Where Should We Be Going?" The World Bank, Policy Research Working Paper 4370.  
URL: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1019685](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1019685)

Glaeser, E. L., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer, 2004. "Do Institutions Cause Growth?" *Journal of Economic Growth* 9(3):271-303.

Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi, 2004. "Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development," *Journal of Economic Growth* 9:131-165.

Dixit, Avinash, 2009. "Governance Institutions and Economic Activity," *American Economic Review*, 99(1): 5-24.

### **3. PUBLIC AND PRIVATE OWNERSHIP**

#### ***The essence of property and the creation of property rights***

Cass, Ronald A. 2003. "Property Rights Systems And The Rule Of Law" Boston University School Of Law Working Paper Series, Public Law & Legal Theory Working Paper No. 03-06 (available at [http://ssrn.com/abstract\\_id=392783](http://ssrn.com/abstract_id=392783))

Klick, Jonathan, and Gideon Parchomovsky, "The Value of the Right to Exclude: An Empirical Assessment," Research Paper No. 16-8, Institute for Law and Economics, University of Pennsylvania.

Grossman, Hershel, 2001. "The Creation of Effective Property Rights," *The American Economic Review Papers and Proceedings*, 91(2):347-352  
Stable URL: <http://www.jstor.org/stable/2677786>

#### ***Property rights and firms***

Holmström, Bengt, and John Roberts, 1998. "The Boundaries of the Firm Revisited," *Journal of Economic Perspectives*, 12(4):73-94.

Holmström, Bengt, 1999. "The Firm as a Subeconomy" *Journal of Law, Economics, and Organization*, 15(1):74-102.

Klein, Benjamin, Robert G. Crawford, and Armen A. Alchian, 1978. "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process," *Journal of Law and Economics*, 21(2): 297-326.

#### ***Private vs. government ownership***

Hart, Oliver, Andrei Shleifer; Robert W. Vishny, 1997. "The Proper Scope of Government: Theory and an Application to Prisons," *Quarterly Journal of Economics*, 112(4):1127-1161.

Li, D., "Ambiguous Property Rights in Transition Economies: The Case of the Chinese Non-State Sector," *Journal of Comparative Economics*, **23**, 1:1-19, August 1996.

Shleifer, Andrei, 1998. "State versus Private Ownership," *Journal of Economic Perspectives*, **12**(4):133-50

Shleifer, Andrei, and Robert W. Vishny, 1994. "Politicians and Firms," *QJE*, **109**:995-1024

#### **4. CONTRACTS AND CONTRACT ENFORCEMENT**

Acemoglu, Daron, and Simon Johnson, 2005. "Unbundling Institutions," *Journal of Political Economy*, vol. 113(5), pages 949-995.

Chiappori, Pierre and Bernard Salanié. "Testing Contract Theory: A Survey Of Some Recent Work" in *Advances in Economics and Econometrics - Theory and Applications*, M. Dewatripont, L. Hansen and P. Turnovsky, ed., Cambridge University Press, Cambridge, 2003, 115-149. Working paper version:  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=318780](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=318780)

Hermalin, Benjamin E., Avery W. Katz, and Richard Craswell "The Law and Economics of Contracts", Polinsky & Shavell eds., *Handbook of Law and Economics*, forthcoming,  
<http://ssrn.com/abstract=907678>

Klein, Benjamin, Robert G. Crawford, and Armen A. Alchian, 1978. "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process," *Journal of Law and Economics*, 21(2): 297-326.

#### **5. CORRUPTION**

Aidt, Toke. 2003. "Economic Analysis of Corruption: A Survey." *Economic Journal*, 113: F632-F652. Stable URL: <http://www.jstor.org/stable/3590256>

Shleifer, Andrei, and Robert Vishny. 1993. "Corruption." *Quarterly Journal of Economics*, 108:3, 599-617.

Mauro, Paulo. 1995. "Corruption and Growth." *Quarterly Journal of Economics*, 110:3, 681-712.

Svensson, Jakob. 2005. "Eight Questions about Corruption," *Journal of Economic Perspectives*, 19(3):19-42. Stable URL: <http://www.jstor.org/stable/4134971>

Wei, Shang-Jin, 1997. "Why is Corruption So Much More Taxing Than Tax? Arbitrariness Kills," NBER Working Paper No. W6255,  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=268631](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=268631) .

Bardhan, Pranab, 1997. "Corruption and development: A review of issues," *Journal of Economic Literature*, **35**: 1320–1346.

Heckelman, Jac C., and Benjamin Powell, 2010. "Corruption and the Institutional Environment for Growth," *Comparative Economic Studies*, **52**:351-378.

Aidt, Toke, Jayasri Dutta, and Vania Sena, 2008. "Governance regimes, corruption and growth: Theory and evidence," *Journal of Comparative Economics*, **36**: 195-220.

## **6. OPTIMAL RESOURCE USE: DEPLETION, HARVEST AND CONSERVATION**

Scott Gordon, "Economics and the Conservation Question." *Journal of Law and Economics* 1 (1958):110-22.

John V. Krutilla. "Conservation Reconsidered" *American Economic Review* 57 (1967):777-87.

### ***Nonrenewable Resources: Theory of Depletion***

Hartwick, "Basic Economics of Nonrenewable Resource Use." 2015. in Halvorsen and Layton Eds.

Michael R. Caputo. "Chapter 1: Essential Elements of Continuous Time Dynamic Optimization," in *Foundations of Dynamic Economic Analysis* (Cambridge: Cambridge University Press, 2005).

Joseph E. Stiglitz, "Monopoly and the Rate of Extraction of Exhaustible Resources." *American Economic Review* Vol.66 (September 1976):655-661.

Merton Miller and C. W. Upton. "A Test of the Hotelling Valuation Principle" *Journal of Political Economy* Vol.93 (February 1985):1-25.

### ***Renewable Resources: Theory of Harvest***

Fenichel, Gopalakrishnan and Bayasgalsan, "Bioeconomics: Nature as Capital." 2015. in Halvorsen and Layton Eds.

Vernon L. Smith. "Economics of Production from Natural Resources" *American Economic Review* Vol.58 (1968):409-31.

Gardner Brown, "An Optimal Program for Managing Common Property Resources with Congestion Externalities." *Journal of Political Economy* Vol.82 (1974): 163-75.

Michael R. Caputo. "The Qualitative Content of Renewable Resource Models." *Natural Resource Modeling* Vol.3 (1989):241-59.

## 7. THE TAXATION OF EXHAUSTIBLE NATURAL RESOURCES

Daniel, Philip, Michael Keen and Charles McPherson, Editors. 2010. *The taxation of petroleum and minerals: principles, problems and practice*, IMF; Chapters 1-5 and 7-9.

Nellor, David, 1995. "Taxation of Mineral and Petroleum Resources," in Shome, P., Editor, *Tax Policy Handbook*, IMF, pp. 237-241.

Villamor Gamponia and Robert Mendelsohn. "The Taxation of Exhaustible Resources" *Quarterly Journal of Economics* Vol.100 (February 1985):165-81.

Conrad, Robert, Bryce Hool, and Denis Nekipelov, 2015. "The Role of Royalties in Resource Extraction Contracts," ERID Working Paper No. 195; available at SSRN: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2668253](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2668253)

## 8. THE CURSE OF NATURAL RESOURCES

Alexeev, M., and R. Conrad, 2009. "The Elusive Curse of Oil," *Review of Economics & Statistics*, **91**(3):586-598.

Mehlum, Halvor, Karl Moene, and Ragnar Torvik, "Institutions and the Resource Curse," *Economic Journal* 116:508:1–20.

Sala-i-Martin, X., and A. Subramanian 2003. "Addressing a Natural Resource Curse: An Illustration from Nigeria," NBER Working Paper No. 9804.

Egorov, Georgy, Sergei Guriev, and Konstantin Sonin, 2009. "Why Resource-poor Dictators Allow Free Media: A Theory and Evidence from Panel Data," *American Political Science Review*, **103**(4): 645-668.

Brückner, Markus, Antonio Ciccone, and Andrea Tesei, 2012. "Oil Price Shocks, Income, and Democracy," *Review of Economics and Statistics*, **94**(2):389-399.

Ross, Michael, 2015. "What Have We Learned about the Resource Curse?" *Annual Review of Political Science*, **18**: 239-259

Wright, Joseph , Erica Frantz and Barbara Geddes, 2015. "Oil and Autocratic Regime Survival," *British Journal of Political Science*, 45:287-306.

Kennedy, Ryan, and Lydia Tiede, 2013. "Economic Development Assumptions and the Elusive Curse of Oil," [\*International Studies Quarterly\*](#), **57**(4):760 - 771

Weinthal, Erika, and Pauline Jones Luong, 2006. "Combating the Resource Curse: An Alternative Solution to Managing Mineral Wealth" *Annual Review of Political Science*, 9:241-263

Surveys: Frankel: "The Natural Resource Curse: A Survey" (<http://ideas.repec.org/p/ecl/harjfk/rwp10-005.html>); van der Ploeg, "Natural Resources: Curse or Blessing?" (<http://www.economics.ox.ac.uk/members/rick.vanderploeg/wp-includes/js/tinymce/resource%20curse%20survey.pdf>)

Acemoglu, Daron, and James Robinson's blog (including references): <http://whynationsfail.com/blog/2013/6/27/resource-curse-and-institutions-getting-more-specific.html>

## **9. OPEN ACCESS TO NATURAL RESOURCES**

Frank Knight, "Some Fallacies in the Interpretation of Social Cost," *Quarterly Journal of Economics* 38 (1924):582-606.

H. Scott Gordon. "The Economic Theory of a Common Property Resource: The Fishery." *Journal of Political Economy* Vol.62 (1954):124-42.

Steven N. S. Cheung, "The Structure of a Contract and the Theory of a Nonexclusive Resource." *Journal of Law and Economics* Vol.13 (April 1970):45-70.

Anthony Scott. "The Fishery: The Objective of Sole Ownership." *Journal of Political Economy* Vol.63 (1955):116-24.

Brooks, Robin, Michael Murray, Stephen Salant, and Jill C. Weise. 1999. "When Is the Standard Analysis of Common Property Extraction under Free Access Correct? A Game-Theoretic Justification for Non-Game-Theoretic Analyses." *Journal of Political Economy* 107: 843-58.

Bohn, H., and R. T. Deacon, (2000), "Ownership risk, investment, and the use of natural resources," *American Economic Review* 90: 526-49.

Stavins, R. N. 2011. The problem of the commons: Still unsettled after 100 years. *American Economic Review*, 101(1), 81-108.

## **10. ESTABLISHING RESOURCE OWNERSHIP**

### ***Legal Institutions***

*Peirson v. Post*, 3. Cal. R. 175, 2 Am. Dec. 264 (Sup.Ct. of N.Y. 1805), known as the fox case).

*Haslem v. Lockwood*, 37 Conn. 500 (1871), known as the dung case.

D. Lueck and T. Miceli, 2005. "Property Rights and Property Law" in *Handbook of Law and Economics*, eds M. Polinski and S. Shavell.

Dean Lueck. "The Rule of First Possession and the Design of the Law" *Journal of Law and Economics* 38 (1995):393-436.

***Contracting for Property Rights***

Harold Demsetz, "Toward a Theory of Property Rights." *American Economic Review* Vol.57 (May 1967):347-59.

Gary D. Libecap and Steven N. Wiggins. "Contractual Responses to the Common Pool: Prorating of Crude Oil Production." *American Economic Review* Vol.74 (March 1984):87-98.

Ronald Johnson and Gary Libecap. "Contracting Problems and Regulation: The Case of the Fishery." *American Economic Review* Vol.72 (December 1982):1006-1022.

Wilson, Bart J; Jaworski, Taylor; Schurter, Karl E; Smyth, Andrew. 2012. "The Ecological and Civil Mainsprings of Property: An Experimental Economic History of Whalers' Rules of Capture." *Journal of Law, Economics, and Organization*. 28: 617-656.

Grainger, Corbett A; Costello, Christopher. 2016. 'Distributional Effects of the Transition to Property Rights for a Common-Pool Resource.' *Marine Resource Economics* 31: 1-26.

***Common Property***

Ostrom, Elinor. *Governing the Commons: The Evolution of Institutions for Collective Action* Cambridge: Cambridge University Press, 1990.

Bergstrom, Theodore. 2010. "The Uncommon Insight of Elinor Ostrom." *The Scandinavian Journal of Economics* 112: 245-261

Acheson, J.M. (1988), *The Lobster Gangs of Maine* (Hanover, NH: University Press of New England).

Clark, Gregory. 1998. "Commons Sense: Common Property Rights, Efficiency, and Institutional Change." *Journal of Economic History* 58: 73-102.

Walker, James M., Roy Gardner, Andrew Herr and Elinor Ostrom. 2000 "Collective Choice in the Commons: Experimental Results on Proposed Allocation Rules and Votes," *Economic Journal* 110: 212-234.

Daniel T Kaffine. 2009. Quality and the Commons: The Surf Gangs of California. *Journal of Law and Economics* 52 (4): 727-43.



## **11. ABORIGINAL USE & HISTORICAL USE**

Vernon L. Smith. "The Primitive Hunter Culture, Pleistocene Extinction, and the Rise of Agriculture" *Journal of Political Economy* Vol.83 (1975):727-55.

Martin J. Bailey. "Approximate Optimality of Aboriginal Property Rights" *Journal of Law and Economics* Vol.35 (April 1992):183-198.

Brander, J.A., and M. Scott Taylor, "The Simple Economics of Easter Island: A Ricardo-Malthus Model of Renewable Resource Use," *AER*, 88(1) March 1998, 119-138.

Ronald N. Johnson and Gary D. Libecap. "Efficient Markets and Great Lakes Timber: A Conservation Issue Reexamined." *Explorations in Economic History* Vol.17 (1980):372-85.

Matthew J. Baker. "An Equilibrium Conflict Model of Land Tenure in Hunter-Gatherer Societies." *Journal of Political Economy* 111 (2003):124-173.

## **12. THE INSTITUTIONS OF LAND**

Terry L. Anderson and Peter J. Hill. "The Evolution of Property Rights: A Study of the American West." *Journal of Law and Economics* Vol.18 (1975):163-75.

Allen, Douglas W. 1991. "Homesteading and property rights; or, how the West was really won." *Journal of Law and Economics* (34):1-

Libecap, Gary D. and Dean Lueck 2011. "The Demarcation of Land and the Role of Coordinating Property Institutions," *Journal of Political Economy* 119 (3):426-467.

Akee, Randall. 2009. Checkerboards and Coase: The Effect of Property Institutions on Efficiency in Housing Markets. *Journal of Law and Economics* 52(2): 395–410.

Lee J. Alston, Gary D. Libecap, and Robert Schneider. "The Determinants and Impact of Property Rights: Land Titles on the Brazilian Frontier," *Journal of Law, Economics, and Organization* 12 (1996):25-61. OR Alston, Lee J., Gary D. Libecap and Bernardo Mueller, "Land Reform Policies, the Sources of Violent Conflict, and Implications for Deforestation in the Brazilian Amazon". *JEEM* Vol. 35 (2000) 162-188.

Hornbeck, Richard. 2010. "Barbed Wire: Property Rights and Agricultural Development." *Quarterly Journal of Economics*, 125 (2): 767–810.

## **13. GOVERNANCE AND REGULATION OF NATURAL RESOURCES**

### ***Oil & Gas, Minerals***

*Barnard v. Monongehela* 216 PA. 362 (1907).

*Hammonds v. Central Kentucky Natural Gas Co.*, 75 S.W.2d 204 (Ky. App. 1934) (Supp.)

*Phillips Petroleum Co. v. Cowden*, 241 F.2d 586 (5<sup>th</sup> Cir. 1957).

Dean Lueck and Philip Schenewerk. "An Economic Analysis of Unitized and Non-Unitized Production," in *Proceedings of the 1996 Society of Petroleum Engineers Annual Technical Conference* (1996):67-76.

Kunce et al. "Effects of Regulation in the Oil and Gas Industry" *American Economic Review* 92 (2002):1588-1593.

Boomhower, Judson. 2016 "Drilling Like There's No Tomorrow: Bankruptcy, Insurance, and Environmental Risk." Working paper.

### **Water**

*Coffin et al., v. Left Hand Ditch Co.* 6 Colo. 443 (1882).

*Huber v Merkel* 62 L.R.A 875 (Supreme Ct of Wisconsin 1903)

*Montana Coalition for Stream Access v. Curran*, 682 P. 2d 161.

Grafton and Wheeler, "Water Economics." 2015. in Halvorsen and Layton Eds.

Ronald N. Johnson, Micha Gisser and Michael Werner. "The Definition of a Surface Water Right and Transferability." *Journal of Law and Economics* Vol.24 (October 1981):273-88.

Terry L. Anderson and Ronald N. Johnson, "The Problem of Instream Flows." *Economic Inquiry* Vol.24 (October 1986):535-54.

Brian Leonard and Gary Libecap. 2016. "Collective Action by Contract: Prior Appropriation Property Rights and the Development of Irrigation in the Western United States." Working paper.

Donald H. Negri. "The Common Property Aquifer as a Differential Game." *Water Resources Research* 25 (1989):9-15.

Troesken, Werner, and Rick Geddes. 2003. "Municipalizing American Waterworks, 1897-1915." *Journal of Law, Economics, and Organization* 19: 373-400.

Hornbeck, Richard and Pinar Keskin. 2014. "The Historically Evolving Impact of the Ogallala Aquifer: Agricultural Adaptation to Groundwater and Drought" *American Economic Journal: Applied Economics* 6: 190-219.

Duflo, Esther, and Rohini Pande. 2007. Dams. *Quarterly Journal of Economics*, 122(2): 601-46.

Kremer, Michael, Jessica Leino, Edward Miguel, and Alix Peterson Zwane. 2011 "Spring Cleaning: Rural Water Impacts, Valuation, and Property Rights Institutions." *Quarterly Journal of Economics* 126 (1): 145-205.

**Forests**

Amacher, "The Forest Harvesting Problem." 2015. in Halvorsen and Layton Eds.

Peter Berck. "The Economics of Timber: A Renewable Resource in the Long Run." *The Bell Journal of Economics* Vol.10 (1979):447-62.

Tomislav Vukina, Dean Lueck, and Christiana E. Hilmer. "A Hotelling-Faustmann Explanation of the Structure of Christmas Tree Pricing." *American Journal of Agricultural Economics* Vol. 83 (August 2001):513-525.

Peter Berck and William R. Bentley. "Hotelling's Theory, Enhancement and the Taking of Redwood National Park." *American Journal of Agricultural Economics* 79 (1997): 287-298.

Deacon, R. T. 1999. "Deforestation and Ownership: Evidence from Historical Accounts and Contemporary Data", *Land Economics*.

**Marine Fisheries**

Arthur F. McEvoy. *The Fisherman's Problem* Cambridge: Cambridge University Press, 1986.

Jonathan M. Karpoff, "Suboptimal Controls in Common Resource Management: The Case of the Fishery." *Journal of Political Economy* Vol.95 (February 1987):179-94.

Homans, Frances R. and James E. Wilen. 1997. "A Model of Regulated Open Access Resource Use." *Journal of Environmental Economics and Management* 32: 1-21.

Costello, Christopher, S. D. Gaines, and J. Lynham. 2008. Can Catch Share Prevent Fisheries Collapse? *Science* 321: 1678-81.

Deacon, R., D. Parker and C. Costello, 2012. "Overcoming the Common Pool Problem through Voluntary Cooperation: The Rise and Fall of a Fishery Cooperative" *Journal of Law and Economics*. XXXX

**Wildlife**

Dean Lueck. "Ownership and the Regulation of Wildlife" *Economic Inquiry* Vol.29 (April 1991):249-60.

Dean Lueck. 2002. "The Exploitation and Conservation of the American Bison," *Journal of Legal Studies*.

Taylor, M. Scott. 2011. "Buffalo Hunt: International Trade and the Virtual Extinction of the North American Bison." *American Economic Review* 101: 3162-3195.

***Endangered Species***

Michael Kramer and Charles Morcom. "Elephants." *American Economic Review* 90 (2000): 212-234.

Brown, Gardner M., and Jason F. Shogren, 1998. "Economics of the Endangered Species Act," *JEP* Vol. 12(3) (Summer 1998) 3-20.

Lueck, Dean, and Jeffrey A. Michael. 2003. Preemptive Habitat Destruction under the Endangered Species Act. *Journal of Law & Economics* 46(1): 27-60.

***Environmental Agencies***

Ando, Amy Whritenour. 1999. Waiting to be Protected under the Endangered Species Act: The Political Economy of Regulatory Delay. *Journal of Law and Economics* 42(April): 29–60.

Metrick, A., and M. L. Weitzman, "Patterns of Behavior in Endangered Species Preservation." *Land Economics*, 72(1) Feb. 1996, 1-16.

Lueck, Dean and Dominic Parker. 2016. "The Organization and Evolution of Environmental Agencies." Working paper.

**14. WILDFIRE AND NATURAL DISASTERS**

Jonathan Yoder. 2004. "Liability, Regulation, and Endogenous Risk: Incidence and Severity of Escaped Prescribed Fires in the United States" *Journal of Law and Economics* 51:297-325.

Lueck, Dean and Jonathan Yoder. 2015. "The Economic Evolution of Wildfire Suppression Organizations." *Journal of Forestry* 113:291-297.

Merrill, Thomas. 2012. "Wildfire Law" in Bradshaw and Lueck eds. *Wildfire Policy: Law and Economics Perspectives*.

Boustan, Leah Platt, Matthew E. Kahn, and Paul W. Rhode. 2012. "Moving to Higher Ground: Migration Response to Natural Disasters in the Early Twentieth Century." *American Economic Review* 102:238-244.

Kahn, Matthew E. 2005. The Death Toll from Natural Disasters: The Roll of Income, Geography and Institutions." *Review of Economics and Statistics* 87:271-284.

**THE LAST PAPER**

Douglass North, Gardner Brown, and Dean Lueck 2015. "A Conversation with Douglass North." 2015 *Annual Review of Resource Economics* 7:1-11.