

Curriculum Vitae
Philip J. Nyhus

Address: Environmental Studies Program
Colby College
Waterville, Maine, 04901 USA

Tel: (207) 859-5358
Fax: (207) 859-5705
Email: pjnyhus@colby.edu

EDUCATION

- 1999 Ph.D. Land Resources, Institute for Environmental Studies, University of Wisconsin—Madison. Thesis Title: *Elephants, tigers, and transmigrants: Conflict and conservation at Way Kambas National Park, Sumatra, Indonesia*. (Advisor: M.S. Adams, Committee: J. Lin Compton, R Middleton, R. Guries, S. Temple).
- 1994 M.S. Land Resources, Institute for Environmental Studies, University of Wisconsin—Madison. Thesis Title: *Tenure, credit, and information constraints to conservation in upland Java, Indonesia*. (Advisor: H. Felstehausen).
- 1989 B.A. Biology, St. Olaf College, Northfield, Minnesota

PROFESSIONAL EXPERIENCE

- 2004-present Assistant Professor, Environmental Studies Program, Colby College, Waterville, Maine
- 2001-2004 Assistant Professor of Environmental Studies, Department of Earth and Environment, Franklin and Marshall College, Lancaster, Pennsylvania
- 2002-2003 Co-Chair, Environmental Studies Program, Franklin and Marshall College, Lancaster, Pennsylvania
- 1999-2001 National Science Foundation Award for the Integration of Research and Education Postdoctoral Fellow in Environmental Science, Colby College, Waterville, Maine
- 1997-1999 GIS and Remote Sensing Analyst, Sumatran Tiger Project, Minnesota Zoo
- 1998 Instructor, Environmental Studies Program and Biology Department, St. Olaf College, Northfield, MN
- 1995-1999 Research Assistant, Sumatran Tiger Project, University of Wisconsin—Madison and Minnesota Zoo
- 1993-1994 Planning Intern, Bureau of Property Management, Department of Natural Resources and University of Wisconsin—Madison
- 1990-1995 Teaching Assistant, Biology Core Curriculum (Biocore) and Department of

Botany, University of Wisconsin—Madison

1989-1990 Field Researcher, Compatible Technology, Inc., Bareilly, India

PUBLICATIONS

My scholarship in environmental studies is highly interdisciplinary, straddling the natural and social sciences. I have particular interest and expertise in tiger conservation, human-wildlife conflict, the human dimension of large mammal conservation, GIS, interdisciplinary approaches to wildlife risk assessment, and environmental policy. I strive to integrate my research and teaching, and I value and promote undergraduate scholarship.

Edited Books

Tilson, R. L., & Nyhus, P. J. (Eds.). (2009). *Tigers of the World: The Biology, Politics, and Conservation of Panthera tigris* (2nd ed.). New York: Elsevier/Noyes (in press).

Osofsky, S. A., Cleaveland, S., Karesh, W. B., Kock, M. D., Nyhus, P. J., Starr, L., & Yang, A. (Eds.). (2005). *Conservation and Development Interventions at the Wildlife-Livestock Interface*. Gland, Switzerland and Cambridge, UK: IUCN.

Book Chapters

Nyhus, P. J., & Tilson, R. (2009). *Panthera tigris* vs *Homo sapiens*: Conflict, Coexistence, or Extinction. In R. L. Tilson & P. J. Nyhus (Eds.), *Tigers of the World: The Biology, Politics, and Conservation of Panthera tigris* (2nd ed., in press). New York: Elsevier/Noyes.

Nyhus, P. J., & Tilson, R. (2009). The Next Twenty Years of Tiger Science, Politics, and Conservation. In R. L. Tilson & P. J. Nyhus (Eds.), *Tigers of the World: The Biology, Politics, and Conservation of Panthera tigris* (2nd ed., in press). New York: Elsevier/Noyes.

Nyhus, P. J., Tilson, R., & Hutchins, M. (2009). Thirteen thousand and counting: How growing captive tiger populations threaten wild tigers. In R. L. Tilson & P. J. Nyhus (Eds.), *Tigers of the World: The Biology, Politics, and Conservation of Panthera tigris* (2nd ed., in press). New York: Elsevier/Noyes.

Muntifering, J. R., Nyhus, P. J., Tilson, R. L., & Soulé, M. E. (2009). Tiger restoration and biodiversity refugia in Asia: “Picking up” the pieces. In R. L. Tilson & P. J. Nyhus (Eds.), *Tigers of the World: The Biology, Politics, and Conservation of Panthera tigris* (2nd ed., in press). New York: Elsevier/Noyes.

Tilson, R., Nyhus, P., Muntifering, J., & Dahmer, T. (2009). The Yin and Yang of Tiger Conservation in China. In R. L. Tilson & P. J. Nyhus (Eds.), *Tigers of the World: The*

- Biology, Politics, and Conservation of Panthera tigris* (2nd ed., in press). New York: Elsevier/Noyes.
- Tilson, R. L., & Nyhus, P. J. (2009). Tribe of Tigers: Introduction. In R. L. Tilson & P. J. Nyhus (Eds.), *Tigers of the World: The Biology, Politics, and Conservation of Panthera tigris* (2nd ed., in press). New York: Elsevier/Noyes.
- Tilson, R. L., & Nyhus, P. J. (2009). The biology and politics of Sumatran tigers: Crash of the conservation Garuda. In R. L. Tilson & P. J. Nyhus (Eds.), *Tigers of the World: The Biology, Politics, and Conservation of Panthera tigris* (2nd ed., in press). New York: Elsevier/Noyes.
- Tilson, R., Nyhus, P., Sriyanto, & Rubianto, A. (2009). Poaching and Poisoning of Tigers in Sumatra for the Domestic Market. In R. L. Tilson & P. J. Nyhus (Eds.), *Tigers of the World: The Biology, Politics, and Conservation of Panthera tigris* (2nd ed., in press). New York: Elsevier/Noyes.
- Nyhus, P. J., Osofsky, S. A., Ferraro, P., Fischer, H., & Madden, F. (2005). Bearing the costs of human-wildlife conflict: The challenges of compensation schemes. In R. Woodroffe, S. Thirgood & A. Rabinowitz (Eds.), *People and Wildlife: Conflict or Coexistence?* (pp. 107-121). Cambridge, U.K.: Cambridge University Press.
- Nyhus, P. J., Williams, J., Borovansky, J., Byers, O., & Miller, P. (2003). Incorporating local knowledge into population and habitat viability assessments: Landowners and tree kangaroos in Papua New Guinea. In F. Westley & P. Miller (Eds.), *Experiments in Consilience: Integrating Social and Scientific Responses to Save Endangered Species* (pp. 161-184). Washington, D.C.: Island Press.
- Nyhus, P., Tilson, R., & Franklin, N. (2001). Social and Administrative Guidelines for Field Conservation in Indonesia: Experiences from the Field. In W. G. Conway, M. Hutchins, M. Souza, Y. Kapetanacos & E. Paul (Eds.), *AZA Field Conservation Resource Guide* (pp. 198-207). Atlanta: Zoo Atlanta.
- Tilson, R., Manansang, J., Brady, G., Armstrong, D., Traylor-Holzer, K., & Nyhus, P. (2001). Training, Transferring Technology, and Linking In Situ and Ex Situ Tiger Conservation in Indonesia. In W. G. Conway, M. Hutchins, M. Souza, Y. Kapetanacos & E. Paul (Eds.), *AZA Field Conservation Resource Guide* (pp. 245-255). Atlanta: Zoo Atlanta.
- Tilson, R., Nyhus, P., & Franklin, N. (2001). Tiger restoration in Asia: Ecological theory vs. sociological reality. In D. S. Maehr, R. F. Noss & J. L. Larkin (Eds.), *Large Mammal Restoration: Ecological and Sociological Challenges in the 21st Century* (pp. 277-291). Washington, D.C.: Island Press.
- Nyhus, P., Sumianto, & Tilson, R. (1999). The tiger human dimension in southeast Sumatra, Indonesia. In J. Seidensticker, S. Christie & P. Jackson (Eds.), *Riding the Tiger: Tiger*

Conservation in Human-dominated Landscapes (pp. 144-145). Cambridge: Cambridge University Press.

Peer-reviewed Research Articles

- Nyhus, P. J., Lacy, R. C., Westley, F. R., Miller, P. S., Vredenburg, H., Paquet, P. C., & J. Pollak. (2007). Tackling biocomplexity with meta-models for species risk assessment. *Ecology and Society*, 12(1), 31 [online]: www.ecologyandsociety.org/vol12/iss1/art31.
- Nyhus, P. J., & Tilson, R. (2004). Agroforestry, elephants, and tigers: Balancing conservation theory and practice in human-dominated landscapes of Southeast Asia. *Agroforestry, Ecosystems, and the Environment*, 104, 87-97.
- Nyhus, P. J., & Tilson, R. (2004). Characterizing tiger-human conflict in Sumatra, Indonesia: Implications for conservation. *Oryx*, 38(1), 68-74.
- Tilson, R., Defu, H., Muntifering, J., & Nyhus, P. J. (2004). Dramatic decline of wild South China tigers: Field survey of priority tiger reserves. *Oryx*, 38(1), 40-47.
- Nyhus, P. J., Fisher, H., Madden, F., & Osofsky, S. (2003). Taking the bite out of wildlife damage: The challenges of wildlife compensation schemes. *Conservation in Practice*, 4(2), 37-40.
- Nyhus, P. J., Sumianto, & Tilson, R. (2003). Wildlife knowledge among migrants in southern Sumatra, Indonesia: Implications for conservation. *Environmental Conservation*, 30(2), 192-199.
- Nyhus, P. J., Tilson, R. L., & Tomlinson, J. L. (2003). Dangerous animals in captivity: *Ex situ* tiger conflict and implication for private ownership of exotic animals. *Zoo Biology*, 22(6), 573 - 586.
- Nyhus, P. J., Westley, F. R., Lacey, R. C., & Miller, P. S. (2002). A role for natural resource social science in biodiversity risk assessment. *Society and Natural Resources*, 15(10), 923-932.
- Nyhus, P., Sumianto, & Tilson, R. (2000). Crop-raiding elephants and conservation implications at Way Kambas National Park, Sumatra, Indonesia. *Oryx*, 34(4), 262-275.
- Tilson, R., & Nyhus, P. (1998). Keeping problem tigers from becoming a problem species. *Conservation Biology*, 12(2), 261-262.
- Tilson, R., Siswomartono, D., Manansang, J., Brady, G., Armstrong, D., Traylor-Holzer, K., Byers, A., Christie, P., Salfifi, A., Tumbelaka, L., Christie, S., Richardson, D., Reddy, S., Franklin, N. & Nyhus, P. (1997). International co-operative efforts to save the Sumatran tiger *Panthera tigris sumatrae*. *International Zoo Yearbook*, 35, 129-138.

Mehra, S. K., Nyhus, P. J., & Upadhyya, M. D. (1990). Village level processing of sweet potatoes. *Journal of Root Crops* (Special), 284-290.

Pedagogy Publications (* designates student co-author)

Nyhus, P. J., Cole, F. R., & Firmage, D. H. (2007). Tigers, wolves, and moose, Oh My: Challenges and opportunities for promoting undergraduate research in Environmental Studies with GIS. *Council on Undergraduate Research (CUR) Quarterly*, 27(3), 97-102.

Nyhus, P. J., Cole, F. R., Firmage, D. H., Tierney, D., Cole, S. W., Phillips, R. B., and Yeterian, E. H. (2007). Environmental Studies: Interdisciplinary research on Maine lakes. In D. Sinton & J. Lund (Eds.), *Understanding Place: GIS and Mapping Across the Curriculum* (pp. 187-198). Redlands, CA: ESRI Press.

Nyhus, P. J., Cole, F. R., Firmage, D. H., & Yeterian, E. H. (2004). Teaching fellows: An innovative approach to facilitate the integration of research and education at Colby College. In L. Kauffman & J. Stocks (Eds.), *Reinvigorating the Undergraduate Curriculum: Lessons from the Integration of Research and Education*. http://www.cur.org/publications/aire_raire/toc.asp. Council of Undergraduate Research: Washington, D.C.

Nyhus, P. J., Cole, F. R., Firmage, D. H., & Lehmann, P. S.* (2002). Enhancing education through research in the environmental science laboratory: Integrating GIS and project-based learning at Colby college. *Council on Undergraduate Research (CUR) Quarterly*, (September), 34-40.

Nyhus, P. J., Cole, F. R., Firmage, D. H., & Yeterian, E. H. (2002). Developing and implementing an interdisciplinary undergraduate research symposium at a small liberal arts college. *Council on Undergraduate Research (CUR) Quarterly*, (September), 16-23.

Burgess, A. D., Dehring, P., Nyhus, P., & Carlson, G. (1995). *Biocore Style Manual*. Madison, WI: Biology Core Curriculum, University of Wisconsin (unpublished).

Other Professional Publications

Nyhus, P. (2008). *Panthera tigris sp. amoyensis* (South China Tiger). In 2008 IUCN Red List of Threatened Species. Gland, Switzerland: IUCN. <www.iucnredlist.org>.

Nyhus, P.J. and R. Tilson. (2008). Can private owners help save a species? *Natural History Magazine* blog <http://www.naturalhistorymag.com/gottlieb/03-15-08.html>

Breitenmoser, U., Tilson, R., & Nyhus, P. (2006). Reintroduction of the Chinese Tiger. *Cat News*, 44, 15.

- Tilson, R., & Nyhus, P. (2005). Zoos, private ownership, and accreditation: "The right thing to do". *Communiqué*, December, 34.
- Nyhus, P. J., & Tilson, R. (2003). The conservation value of privately-owned tigers. In E. Doherty & K. Girton (Eds.), *AZA ANNUAL Conference Proceedings 2003* (pp. 55-59). Silver Spring, MD: American Zoo & Aquarium Association.
- Nyhus, P. J., Tilson, R., Franklin, N., Bastoni, Sriyanto, Yunus, M., & Sumianto. (2000). Tigers, cameras, and satellites: Interdisciplinary efforts to map the habitat and threats to the last Sumatran tigers. In *Proceedings of the ESRI International User Conference 2000*. San Diego: ESRI.
- Tilson, R., Nyhus, P., Jackson, P., Quigley, H., Hornocker, M., Ginsberg, J., Phemister, D., Sherman, N., & Seidensticker, J. (2000). *Securing a Future for the World's Wild Tigers*. Washington, D.C.: Save The Tiger Fund, National Fish and Wildlife Foundation <http://si-pddr.si.edu/dspace/handle/10088/6653>.
- Borovansky, J., Byers, O., Miller, P., Nyhus, P. J., & Williams, J. (1999). Facilitating local participation in a conservation planning workshop. *TRI News (Yale University)*, Spring 1999, 12-16.
- Nyhus, P., Sumianto, & Tilson, R. (1999). People, politics, and village-level conservation in Sumatra, Indonesia. In *Proceedings of the 1999 AZA Annual Conference, Minneapolis, MN*. Bethesda, MD: AZA.
- Tilson, R., Franklin, N., Nyhus, P., Bastoni, Sriyanto, Siswomartono, D., & Manansang, J. (1996). *In situ* conservation of the Sumatran Tiger in Indonesia. *International Zoo News*, 43(5), 316-324.
- Tilson, R., Nyhus, P., & Franklin, N. (1997). Steps in the forest: Efforts to protect the last Sumatran tigers. *Minnesota Zoo Magazine*, 13-14.
- Atkinson, S. R., & Nyhus, P. J. (1996). Local participation in biodiversity conservation in South and Southeast Asia. In K. L. Hickey & D. Kantarelis (Eds.), *Our Natural Environment: Concepts & Solutions*. (Vol. June 15-19, 1996). Newport Rhode Island, USA: Proceedings of the Second International Interdisciplinary Conference on the Environment, .
- Nyhus, P., & Adams, M. (1995). *Biosphere Reserves of the World: Principles and Practice*. Madison, Wisconsin: University of Wisconsin and Institute for Environmental Studies (unpublished, used as class text in two courses at UW-Madison).
- Nyhus, P. (1994). Tenure and information constraints to conservation in upland farming systems in Java, Indonesia. In W. A. Hamel (Ed.), *Proceedings of the Ecol-Environ-Management*

Group: The Association of Management 12th Annual International Conference, August 10-13, 1994. Dallas, TX: Association of management.

Submitted and In Preparation (*designates student co-author)

Harris, T., Nyhus, P. J., Tilson, R., & Willis, K. (submitted). Reconsidering the value of privately owned tigers for conservation management programs. *Zoo Biology*.

Larson, C.*, & Nyhus, P. (in preparation). Separating people and carnivores: Zoning as a tool to mitigate human-wildlife conflict. *Human Dimensions of Wildlife*.

Nyhus, P. J., Dufraim, C.*, Becker, S.*, & Cole, F. R. (in preparation). The past, present and future of wolves in Maine: Implications for restoration of large carnivores in the Northeast USA.

Nyhus, P. J., Tilson, R., Muntifering, J., Dahmer, T. J., Jun, L., Qing, C., C. Larson*, & C. Carroll*. (in preparation). Restoring south China tiger populations: Implications for large carnivore restoration in Asia.

Selected Reports and Significant Documents from the South China Tiger Office

I am significantly involved in collaborations with the Government of China, the Minnesota Zoo, and other agencies and organizations to evaluate the feasibility of reintroducing the critically endangered South China tiger back into the wild. The following reports describe the results of many trips to China and reflect the steady and significant progress my collaborators and I, as the “South China Tiger Office”, have made in advancing South China tiger research and conservation in China. This work is part of a long-term research program.

South China Tiger Office. 2008. *Management, Fences and Finances, Changsha (Hunan Province) and Wuhan (Hubei Province), People’s Republic of China, December 8-18, 2008.* (Tilson, R., P. Nyhus, T. Harris, and T. Fisher).

South China Tiger Office. 2008. *Hupingshan & Houhe National Nature Reserves Field Verification, Changsha and Hupingshan National Nature Reserve, Hunan Province, Wuhan and Houhe National Nature Reserve, Hubei Province, Beijing, People’s Republic of China, June 30-July 17, 2008.* Report Submitted to the State Forestry Administration, People’s Republic of China by the South China Tiger Advisory Office. (Tilson, R., P. Nyhus, and T. Harris).

South China Tiger Office. 2008. *Work Plan May – December 2008.* Report Submitted to the State Forestry Administration, People’s Republic of China by the South China Tiger Advisory Office. (Tilson, R., P.J. Nyhus, J. Muntifering, T. J. Dahmer, and G. Nollen).

South China Tiger Office. 2008. *Recovery of Wild Populations of South China Tigers (Stage II),*

- A report submitted to the State Forestry Administration, People's Republic of China by the South China Tiger Advisory Office. (Tilson, R., P.J. Nyhus, J. Muntifering, and T. J. Dahmer).
- South China Tiger Office. 2008. *Trip Report Site Approval Meeting*, Beijing, People's Republic of China, March 23-28, 2008. (Tilson, R., P.J. Nyhus).
- South China Tiger Office. 2007. Project Development Facility Request for Pipeline Entry and PDF Block-B Approval Proposal. *Recovery and Conservation of Forest Biodiversity and Tigers in South Central China*. Document written for State Forestry Administration, People's Republic of China, by South China Tiger Office.
- South China Tiger Office. 2007. *Trip Report: Beijing, People's Republic of China, Project Implementation Negotiations October 20-25, 2007*. (Tilson, R. and P.J. Nyhus).
- South China Tiger Office. 2007. *Trip Report: Beijing People's Republic of China, UNDP-GEF Grant Development, April 17-24, 2007*. (Tilson, R. and P.J. Nyhus, J. Muntifering, and T. Dahmer).
- South China Tiger Office. 2006 *Trip Report: Beijing, People's Republic of China, June 2006, MoU Negotiation and GEF Grant Development*. (Tilson, R., P.J. Nyhus, J. Muntifering, and T. J. Dahmer).
- South China Tiger Office. 2006. *Program Concept for South China Tiger Recovery: Strategy, Timeline, and External Funding*. A report submitted June 2006 to State Forestry Administration, People's Republic of China, by the South China Tiger Advisory Office. (Tilson, R., P.J. Nyhus, J. Muntifering, and T. J. Dahmer).
- Memorandum of Understanding 2006-2011 Between the National Wildlife Research and Development Center, State Forestry Administration, P.R. China and The South China Tiger Advisory Office, Minnesota Zoo, USA [note: includes Colby College] Concerning the Collaborative Program on Conservation of South China Tigers in China.
- South China Tiger Office. 2006. *Provincial Forestry Assessment: South China Tiger Recovery, Beijing, Changsha, Guangzhou, Wuhan, P.R. China, September 6 - 16, 2006*, Submitted September 18, 2006 by the South China Tiger Advisory Office to the State Forestry Administration, People's Republic of China. (Tilson, R., P.J. Nyhus, J. Muntifering, and T. J. Dahmer).
- South China Tiger Office. 2005. *Summary Narrative Report: Rapid Tiger Habitat Assessment in South-central China, June-August 2005*. (Tilson, R., P.J. Nyhus, J. Muntifering, Wang Bin, and Cao Qing).
- South China Tiger Office. 2005. *South China Tiger Protection Program, Evaluating Options for*

a Wilderness-based Tiger Recovery Program, Trip Summary Report for First Planning Meeting, Beijing, China, 23 - 28 May, 2005. (Tilson, R., P. J. Nyhus, and J. Muntifering).

GRANTS AND FELLOWSHIPS

- 2008 *Lessons from Maine: How States Can Create Effective Environmental Policy.* Nyhus, P.J. and G.L. Carlson. A Civic Engagement Faculty Research Grant, the Goldfarb Center for Public Affairs and Civic Engagement, Colby College (\$5,000).
- 2008 *Developing Interdisciplinary Models and Processes for Endangered Species Risk Assessment,* Interdisciplinary Studies Division grant, Colby College (\$3,210).
- 2007 *Evaluating the Round River Conservation Studies Program in Namibia.* Office of Off-Campus Study, from A.W. Mellon Foundation (\$3,425).
- 2006 *Course development in Environmental Policy.* Course enhancement grant from the Environmental Studies Program with funding from the Andrew W. Mellon Foundation to enhance *ES233: Environmental Policy.* (\$2,500, July 1, 2006 to June 30, 2007).
- 2006 *A comparative assessment of wolf-human conflict policy: Implications for restoring wolves in Maine.* Interdisciplinary Studies Division, Colby College (\$2,990).
- 2006 *Faculty Seminars on Environmental History: Nature, Climate and Environment as Human Construct.* P. Josephson (PI), Philip Nyhus, Tilar Mazzeo (Colby), Gerald Bigelow, Michael Jones, Michael Retelle (Bates); Connie Chang, Matt Klinge, Sarah McMahan (Bowdoin). A Bates, Bowdoin and Colby Mellon Foundation Faculty Development Project. (\$5,980, September 15, 2006 – April 15, 2007).
- 2005 *Rapid Assessment of Potential South China Tiger Recovery Zones.* R. Tilson, J. Muntifering, and P. Nyhus. The Minnesota Zoo Foundation & The Gary and JoAnn Fink Foundation (\$22,380).
- 2005 *Developing Student-Community Partnerships to Create State of Maine: An Environmental Assessment.* Goldfarb Center for Public Affairs and Civic Engagement, Colby College (\$3,000).
- 2005 *The Conservation Value of Private Ownership.* Interdisciplinary Studies Division, Colby College (\$2,615).
- 2005 *Two summer research assistants.* Colby College Summer Research Assistant Program 2005 with funds from the Andrew W. Mellon Foundation and the Gordon Foundation (\$5,846).

- 2005 *Goldfarb Student-Faculty Research GIS*. Goldfarb Center for Public Affairs and Civic Engagement, Colby College. Ariel Armony and Philip Nyhus.
- 2003 *Estimating abundance of tigers and other large exotic cats in captivity*. Committee on Grants, Franklin and Marshall College (\$1,400)
- 2001 *ESRI University Lab Kit* (ArcGIS) with 25 seats (to F&M, P. Nyhus PI)
- 2000 *Models and meta-networks for interdisciplinary research in biodiversity risk assessment*. Philip J. Nyhus (PI), Frances Westley, Phillip Miller, Gayl Ness, Robert Lacey (Co-PIs). Biocomplexity Competition, Division of Environmental Biology, National Science Foundation. Effective Date: 9/15/00. Award Duration: 23 months. \$96,036.
- 2000 *Developing a Sumatran Tiger GIS: A spatially-explicit model using land use, ecosystem, and human dimension data for tiger conservation in central Sumatra, Indonesia*. The Tiger Foundation (\$10,000).
- 2000 Christian A. Johnson Foundation advanced clusters grant through the Integrated Studies Program at Colby College to develop new interdisciplinary courses (\$1,500)
- 2000 *ESRI Arc/Info University Lab Kit* grant (to Colby College, P. Nyhus PI). A software grant of ArcIMS internet map server software (commercial price: \$12,500; academic price: \$1,000).
- 2000 *ESRI Arc/Info University Lab Kit* grant (to Colby College, P. Nyhus PI). A software grant of ArcInfo for Windows NT, including NETWORK, TIN, COGO, GRID, ArcScan, ArcSTORM, ArcPress, ArcView 3.2, Network Analyst, Spatial Analyst, Image Analyst, 3D analyst, and the following digital data: ArcUSA, ArcWorld, ArcScene World Tour, ESRI US Street Database, and Digital Chart of the World). (commercial price: \$40,000; academic price: \$6,000).
- 1999 *Saving the last wild Sumatran tigers: Mapping its habitat and threats*, The Tiger Foundation (\$9,400)
- 1997 United States Department of the Interior, Fish and Wildlife Service, Rhinoceros and Tiger Conservation Act grant (R. Tilson, PI) (\$21,900)
- 1997 Erdas, Inc. software and training grant (R. Tilson, PI) (\$6,500)
- 1997 Environmental Systems Research Institute, Redlands CA, Conservation Program grant of software, training, and support (R. Tilson, PI)
- 1997 National Fish and Wildlife Foundation, Save the Tiger Fund grant (R. Tilson PI, \$15,000)
- 1996 National Fish and Wildlife Foundation, Save the Tiger Fund grant (R. Tilson PI,

\$30,000)

- 1995 National Security Education Program (NSEP) *Graduate International Fellowship* (\$16,000)
- 1994 University of Wisconsin *Graduate International Travel Award* (\$500)
- 1992 *Fulbright-Hays Group Projects Abroad Fellowship* for advanced language training in Java, Indonesia

SELECTED TALKS AND MEETINGS (* designates student co-author)

- 2009 Nyhus, P.J., R. Tilson, J. Muntifering, T. Dahmer, L. Jun, W. Bin, C. Qing, C. Larson*, and C. Carroll*. "Restoring wild south china tigers: implications for large carnivore conservation in Asia. Society for Conservation Biology Annual Meeting, Beijing, China. [pending]
- 2009 Nyhus, P.J. "Restoring China's Wild Tigers". Colby College Alumni Series, Union Club of Boston, Boston, MA, March 3, 2009 (invited).
- 2008 Nyhus, P.J. "Declining forests, expanding farms: The troubled state of the world's tigers." Invited talk, University of Maine, Department of Wildlife Ecology Seminar Series, April 21, 2008.
- 2007 Nyhus, P., R. Tilson, J. Muntifering, and T. Dahmer. "Beyond conservation: The tiger as driver to restore biodiversity in China." Talk, *Felid Biology and Conservation Conference*, Wildlife Conservation Research Unit of Oxford University in partnership with the IUCN/SSC Cat Specialist Group, 17-21 September 2007, Oxford University, U.K.
- 2007 *Cats in conflict: A workshop on human-felid conflict*, Tubney House, Wildlife Conservation Research Unit, University of Oxford, UK, 21 September 2007 (invited to attend).
- 2006 Nyhus, P. "Biocomplexity and real world decision-making: approaches to applied data management at multiple scales." Invited talk, *Information Management and Databasing Issues Relevant to the Wild Bird GAINS (Global Avian Influenza Network for Surveillance) Initiative*, Wildlife Conservation Society, Washington, D.C., May 19, 2006.
- 2006 Nyhus, P., R. Tilson, and J. Muntifering. "Saving the south China tiger." Invited talk, Minnesota Zoo, March 16, 2006.
- 2005 Nyhus, P., R. Tilson, J. Muntifering, and Ciau Qing. "South China tiger program

rapid habitat assessment preliminary results July-August, 2005”. *International Workshop for the Chinese Tiger Reintroduction*, Beijing, China, 17-18 December, 2005.

- 2005 Nyhus, P., J. Muntifering, T. Dahmer, and R. Tilson. “South China tiger status and recovery options.” *IUCN World Commission on Protected Areas 5th Conference on Protected Areas of East Asia*, “Sustainable Management of Protected Areas for Future Generations” 21-25 June, 2005. Hong Kong.
- 2004 Tilson, R., P. J. Nyhus, J. Muntifering, and L. Hunter. “Status and recovery options for south China tigers: A wilderness vision.” Paper presented at the *XIXth International Congress of Zoology, August 23-27 2004, Beijing, China: ‘Conservation and Biodiversity – Tiger Conservation Biology’ symposium*.
- 2004 Miller, Philip S., Robert Lacy, Philip Nyhus, Laura Hungerford, Paul Paquet, and Frances Westley. “Considering disease dynamics in wildlife conservation decision-making: An integrated meta-model approach.” *18th Annual Meeting of the Society for Conservation Biology*, July 30th to August 2nd, 2004 - New York, New York, USA.
- 2003 Nyhus, P.J. and R. Tilson. “Private vs. zoo ownership of exotic dangerous felids.” In Session: The Private Sector and Zoos in Conservation and Management of Exotic and Endangered Species: Successful Collaboration, Conflict, or...? Paper presented at *American Zoo and Aquarium Association Conference, Connect With Wildlife*. 7-11 September, 2003, Columbus, Ohio.
- 2003 Invited Participant, Southern and East African Experts Panel on Designing Successful Conservation and Development Interventions at the Wildlife/Livestock Interface: Implications for Wildlife, Livestock, and Human Health. *World Parks Congress*, Johannesburg, South Africa, September 14-15, 2003.
- 2003 Nyhus, P.J., R. Lacy, P. Paquet, F. Westley, P. Miller, and H. Vredenburg. “Biocomplexity and Biodiversity Risk Assessment.” Assessing Risks to Wildlife Populations from Multiple Stressors. Symposium, *10th Annual Conference of The Wildlife Society*, Burlington, Vermont, September 6-10, 2003 (invited talk).
- 2003 Nyhus, P.J., S. Zeigler* (F&M '04), and R. Tilson. 2003. “Abundance, distribution, and extinction risk of the critically endangered Sumatran tiger in Indonesia.” Paper presented at the *Society for Conservation Biology Annual Meeting*, 28 June-2 July, 2003, Duluth, Minnesota.
- 2003 Zeigler*, S. (F&M '04), P. J. Nyhus, and R. Tilson. 2003. “GIS analysis of viable habitat for *Panthera tigris sumatrae* in Sumatra, Indonesia.” Poster presented at the *Society for Conservation Biology Annual Meeting*, 28 June-2 July, 2003, Duluth, Minnesota.

- 2002 Nyhus, P.J., H. Fischer, F. Madden, and S. A. Osofsky. 2002. "Why wildlife compensation schemes succeed or fail: A global perspective". *People and Wildlife: Conflict and Co-Existence?* A joint symposium of the Zoological Society of London and the Wildlife Conservation Society. December 5-6, 2002, London Zoological Society, UK (poster).
- 2002 Cole, F.R., Firmage, D.H., Nyhus, P.J., Schwartz M.C. *, and Yeterian, E.H. "Using an interdisciplinary undergraduate research symposium to enhance the integration of research and education at Colby College." *9th National Conference -CUR 2002: "Undergraduate Research for All"*, June 19-22, 2002, Connecticut College, New London, Connecticut (talk).
- 2001 *Second National Conference on Science, Policy and the Environment: Sustainable communities: Science and Solutions, National Council on Science and the Environment*. December 6-7, 2001, Washington DC (workshop participant).
- 2001 Nyhus, P.J., F. R. Westley, R.C. Lacey, P.S. Miller. *Models and meta-networks for interdisciplinary research in biodiversity risk assessment*. Biocomplexity Awardee Conference, National Science Foundation, Arlington, Virginia, October 16 & 17, 2001 (poster).
- 2001 Tilson, R., P. Nyhus, N. Franklin, Bastoni and G. Hoeker. "Population density, distribution, and status of the Malayan tapir (*Tapirus indicus*) in a lowland forest in Sumatra, Indonesia." *First International Tapir Symposium*, November 3-8 2001, San Jose, Costa Rica (talk)
- 2001 Nyhus, Philip J., David Firmage, and F. Russell Cole. "Enhancing undergraduate education through research in the environmental science laboratory: GIS and project-based learning at Colby College." *National Council for Undergraduate Research (NCUR) national meeting*, Lexington, KY. March 15-17, 2001 (talk).
- 2001 Lehmann*, Phoebe S. , Aaron M. Megquier* and Day G. Thornton*, David H. Firmage, F. Russell Cole, Philip J. Nyhus. "Geographic information systems and integrated watershed research at Lake Wesserunsette, Maine." *National Conference of Undergraduate Research*, University of Kentucky, Lexington, Kentucky, March 15-18 (poster).
- 2001 Lehmann*, Phoebe S., A. M. Megquier*, and Day G. Thornton*, David H. Firmage, F. Russell Cole, Philip J. Nyhus. "Using geographic information systems as a tool for watershed assessment at Lake Wesserunsett, Maine." *Maine Water Conference*, University of Maine at Augusta, May 3, 2001 (poster). [Won best poster award]
- 2001 Logan*, John M., Karalyn A. Parzych*, Meghan E. Short*, and Hilary N. Spitz*, F. Russell Cole, David H. Firmage, Philip J. Nyhus. "The impact of land use patterns on the water quality of Lake Wesserunsett, Maine." *National Conference of Undergraduate Research*, University of Kentucky, Lexington, Kentucky,

March 15-18, 2001 (poster).

- 2001 Logan*, John M., Karalyn A. Parzych*, Meghan E. Short*, and Hilary N. Spitz*, F. Russell Cole, David H. Firmage, Philip J. Nyhus. "Watershed land use patterns and lake water quality for Lake Wesserunsett, Maine." *Maine Water Conference*, University of Maine at Augusta, May 3, 2001 (poster).
- 2001 Nyhus, P.J. "Tiger-human conflict." *Tiger Tales at the Minnesota Zoo*, Apple Valley, Minnesota, March 10, 2001 (invited talk)
- 2001 Principal organizer for *Biocomplexity: Models and Meta-Networks for Interdisciplinary Research in Biodiversity Risk Assessment*, June 24-26, 2001, White Oak Plantation, Yulee, Florida, USA, a meeting of 37 research collaborators from four countries.
- 2000 Nyhus, P.J., F.R. Cole, and D.H. Firmage. *Using NSF-AIRE to Introduce New Technology for Teaching and Research at Colby College*. RAIRE/AIRE meeting at Carnegie Mellon University, Pittsburgh, Pennsylvania, November 30th, 2000 (invited talk).
- 2000 Invited Delegate, *Future Search Meeting, World Conservation Union (IUCN) Species Survival Commission (SSC) Conservation Breeding Specialist Group (CBSG)*, 26-28 August, White Oak Conservation Center, Yulee, Florida.
- 2000 Nyhus, P.J. "Tigers, cameras, and satellites: Interdisciplinary efforts to map the habitat and threats of the last Sumatran tigers." *ESRI International User Conference 2000*, June 26-30, 2000, San Diego, California.
- 2000 Firmage, D. H. and P. J. Nyhus. "Water Quality at the headwaters of the Belgrade Lakes: An interdisciplinary assessment of East Pond and surrounding watersheds." Paper presented at the *Maine Water Conference 2000*, Augusta, Maine, April 13, 2000.
- 1999 Nyhus, P. J., D. H. Firmage, and F. R. Cole. "Immersing ourselves: Integrating GIS and inquiry-based learning for regional water quality assessment at Colby College. Poster presented at 1999 *Sigma Xi Forum: Reshaping Undergraduate Science and Engineering Education: Tools for Better Learning*, November 4-5, 1999, Minneapolis, Minnesota.
- 1999 Nyhus, P.J., R. Tilson and N. Franklin. "Tiger and large mammal restoration in Asia: Ecological theory and sociological reality." Presentation at the *Large Mammal Restoration: Ecological and Sociological Considerations Symposium, The Wildlife Society Annual Meeting*, September 7-11, 1999 (invited talk).
- 1999 Nyhus, P.J., and R. Tilson. "People, politics, and village-level conservation in Sumatra, Indonesia". In *Conservation at the local level: Dealing with politics and people*, a symposium of the *American Zoo and Aquarium Annual Meeting*, Minneapolis, MN, August, 1999 (invited).

- 1999 Nyhus, P., R. Tilson, and N. Franklin. "Tigers, elephants, and agroforestry: Balancing conservation theory and practice in human-dominated landscapes of Southeast Asia." In the methodology workshop, *Environmental Services and Land Use Change: Bridging the Gap between Policy and Research in Southeast Asia*, 31 May to 2 June 1999.
- 1998 Nyhus, P.J. "The human dimension of wildlife conservation in Indonesia." Human Dimension of Wildlife Management course, *School of Fisheries and Wildlife, University of Minnesota* (Invited lecture).
- 1998 Matschei's Tree Kangaroo CAMP/PHVA, Lae, Papua New Guinea. Invited researcher and participant through the World Conservation Union (IUCN), Species Survival Commission (SSC), Conservation Breeding Specialist Group.
- 1998 *Year of the Tiger Conference*, Dallas, Texas. Assistant conference organizer.
- 1997 Nyhus, P.J. "Human dimension of tiger conservation at Way Kambas National Park." First *Network Meeting to Incorporate the Human Dimension into the PHVA Process*. Minneapolis, Minnesota. Hosted by IUCN Conservation Breeding Specialist Group with funding from the Canadian Social Science Research Council, Minneapolis, Minnesota (invited talk).
- 1997 Nyhus, P.J. "The Sumatran Tiger Project." Invited Seminar, *University of Lampung, Indonesia*.

Selected Interviews

Interviews with me have appeared on or in the following sources (listed alphabetically):

- Animal Planet Channel (including feature March 2009, "Human Prey: Killers on the Loose")
- *City Pages* (Minneapolis, MN)
- *Colby Alumni Magazine* (including cover Fall 2008)
- *Colby Echo*
- Discovery Channel (feature Summer 2009 "Eaten Alive" series)
- *Geo Info Systems* magazine
- *Lancaster New Era*
- *Morning Sentinel*
- *National Geographic*
- *New York Times*
- *Next Wave/Science* (AAAS)
- *Ozarks Magazine*
- Reuters News Service
- Scripps Howard News Service
- *Time Magazine*
- *Washington Post*
- WCCO Radio (Minneapolis)

Information about projects I am working on has appeared in *Science* (AAAS) and *Nature*, among many other publications.

SERVICE TO THE FIELD

Journal and Book Reviews

Reviewer for journals:

- *Animal Conservation*
- *Biological Conservation*
- *Cat News (IUCN/SSC Cat Specialist Group)*
- *Conservation Biology*
- *Ecology and Society*
- *Ecosystems*
- *Endangered Species Research*
- *Environmental Conservation*
- *Environmental Management*
- *Journal of Environmental Management*
- *Oryx—The International Journal of Conservation*
- *Small-Scale Forest Economics*
- *Management and Policy*
- *Society and Natural Resources*

Reviewer for publishers: Prentice Hall-Pearson Education; Pearson/Longman.

Assessor for IUCN Red List of Threatened Species: *Panthera tigris ssp. Amoyensis* (2008 IUCN Red List of Threatened Species)

Professional Positions and Memberships

Topic Editor for the Encyclopedia of Earth (<http://www.eoearth.org/>) in the areas of Conservation Biology and Wildlife Management. (2007-present)

GIS Advisory Group (“Board” Member), National Institute for Technology and Liberal Education (NITLE) (2005-2008).

Panel member for: Science/Technology Merit Review Panel for the year 2002 National Security Education Program (NSEP) David L. Boren Graduate Fellowships administered by the Academy for Educational Development (AED).

Student Representative, Land Resources Program, Institute for Environmental Studies, UW Madison (1993-4)

Current Memberships

Society for Conservation Biology (member of the following SCB Regional Sections and Working Groups: Asia Section, Ecological Economics and Sustainability Science, North America Section, Social Science Working Group)

World Conservation Union (IUCN), Species Survival Commission (SSC), Cat Specialist Group

World Conservation Union (IUCN) Species Survival Commission (SSC) Conservation Breeding Specialist Group (CBSG)

Previous Memberships

American Association for the Advancement of Science

The Association of American Geographers

American Institute of Biological Sciences

Sigma Xi: The Scientific Research Society

The Wildlife Society

Additional Activities and Training

Participant (one of five representatives from Colby College), National Institute for Technology and Liberal Education (NITLE)/Project Kaleidoscope (PKAL) *New Learning Spaces* workshop, October 22 - October 24, 2004, Vassar College, Poughkeepsie, New York.

Led GIS workshop August 17-19, 2004 for faculty/staff/students from Department of Economics, Government, Biology, and ITS at Colby College, *Introducing Geographic Information Systems: A Workshop for Environmental and Social Scientists*. The workshop, funded by a grant to Colby College from the Andrew W. Mellon Foundation, was the first of what we hope will become a series of workshops discussing the integration of GIS across the curriculum.

Led three-day GIS workshop for conservation professionals from three different countries in July, 2004, in Minneapolis, MN.

Appointed by the County Commissioners of Lancaster County to the Citizen's Advisory Committee to the Lancaster County Solid Waste Management Authority (2002-present)

Participant in summer *Collaborations Summer Seminar* to develop guidelines for collaborations courses, Franklin and Marshall College

Participant in Workshop on Integrating Education in Biocomplexity Research, April 14th-16th 2001, Washington, D.C., sponsored by National Academy of Sciences and National Science Foundation.

Participant in Colloquium for Service-Learning Practitioners workshop, May 13-17, 2001, Franklin and Marshall College.

I have organized and funded multiple workshops and numerous smaller meetings in which more than 50 individuals from four countries participated to integrate modeling tools and expertise; to expand the inclusion of individuals, methods, and institutions that might not otherwise

collaborate; and to examine the implications for research, policy, and outreach related to biodiversity risk assessment and biocomplexity.

Developed and organized the first two all-college Undergraduate Research Symposia at Colby College, Maine, in Spring 2000 and Spring 2001. Sixty percent of all departments and programs and approximately one-fifth of all junior and senior students at the College participated

Principal organizer for workshop on Rapid and Participatory Rural Appraisal, University of Wisconsin—Madison (1995). Karen Schoonmaker Freudenberger, a widely-recognized expert on RRA/PRA who has worked for USDA, FAO and other international organizations, was the invited instructor.

I have graduate-level training in GIS and remote sensing and additional training in satellite image processing methods from Erdas, Inc. in Atlanta, GA. I have experience with a range of mapping and modeling software, including ArcInfo, ArcView, Erdas Imagine, Atlas, Vortex, Stella, and SPSS, and tools such as global positioning systems (GPS) and infra-red remote camera units. I also have advanced Indonesian and intermediate German language training.

COLLEGE SERVICE

Selected Invited College Talks

- 2009 Nyhus, P.J. “Can we coexist with large carnivores? Exploring big conservation questions with Colby research students”. Keynote Address, 10th Annual Colby Undergraduate Research Symposium, April 29, 2009 (invited).
- 2009 Nyhus, P.J. “Restoring China’s wild tigers: How Colby is using GIS to save an endangered species”. Waterville Public Library, Sponsored by Goldfarb Center for Public Affairs and Civic Engagement, February 25, 2009 (invited).
- 2008 Nyhus, P.J. and M. Gimond. “Teaching and learning with Geographic Information Systems (GIS) at Colby College”. Presentation to the Alden Trust and Dean of Faculty, September 24, 2008. (invited).
- 2008 Nyhus, P.J. and G. Carlson. 2008. “Know before you vote: The environment.” Invited talk, Know Before You Vote series sponsored by the Goldfarb Center for Public Affairs and Civic Engagement, Colby College, 12 February, 2008 (invited).
- 2008 Nyhus, P.J. “More cages, fewer trees: Challenges to saving the world's last tigers.” Invited talk, Reunion Faculty lectures, Colby College, 6 June 2008. (invited)
- 2008 Nyhus, P.J. “Tigers, travels, and tales from sabbatical.” Environmental Studies Lunchtime Colloquia, Colby College, Fall 2007 (invited).
- 2005 Cole, F.R., D. H. Firmage, P. J. Nyhus, and P. Lehmann-Zarnetski*. “From lake

preservation to tiger conservation: Using Geographic Information Systems (GIS) to address local and global environmental issues.” Invited talk, Reaching the World: A Campaign for Colby Waterville Kickoff Celebration, October 22, 2005.

2000 Satellites, Rifles, and DNA: *A Tiger’s-Eye View of Science, Technology, and Conservation*. Science, Technology, & Society Spring Colloquium Series 2000, Colby College (invited talk).

Invited speaker, Admissions Day panel (2009)

Invited speaker, Admissions Day panel (2008)

Invited speaker, Maine Day panel (2007)

Elected Committees

Communication Skills Working Group, Curricular Planning Working Group (2007-8)

Information Technology Committee (2005-present)

Financial Priorities Committee (2005-6)

Appointed Committees, ad hoc Committees, and other Significant College Responsibilities

Colby Environmental Initiatives Advisory Group (EIAG), appointed *ad hoc* member (2008-present)

Environmental Advisory Group (EAG) (2008-present)

Appointed outside member of the search committee for Department of Philosophy/Integrated Studies Program environmental philosophy search (2009)

Selection of new campus-wide course management software *ad-hoc* advising committee (2008)

Committee Member for Undergraduate Honors Theses: Jaime O’Connell (’08) Environmental Studies Senior Honors Thesis (2008), Lindsay Dreiss (’09) Environmental Studies Senior Honors Thesis (2009)

National Science Foundation Epscor grant proposal, invited *ad hoc* committee member Colby College (2007-8)

Campus liaison, Morris K. Udall Scholarship Program (2007-present)

Davis Projects for Peace selection committee member (2007)

Search Committee Member, ES/IS Mellon Fellow for International Environmental Human Rights (2007)

Search Committee Member, ES/Government International Environmental Policy one-year sabbatical replacement position (2007)

Appointed search committee member, Director of Communications for the College (2007)

Supervisor, Colby College portion of Round River Conservation Studies Namibia Program semester (2006-present)

Invited Oak Human Rights Fellow search committee member (2006)

Search committee member, Geographic Information System/Quantitative Analysis position in Information Technology Services (2006)

National Council of Science and the Environment (NSCE) Deans and Directors Meeting in Minneapolis, MN, Colby College Representative (2006)

Appointed outside member of the Search Committee for the Assistant Professor of Psychology (Cognitive) (2005-6)

Appointed outside member of the search committee for the Faculty Fellow in Biology (Animal Ecology) (2005-6)

ES Program member for the Environmental Studies/GIS and Policy search committee (2005-6)

ES Program member for the Environmental Studies/Environmental Justice search committee (2005-6)

TEACHING

Courses Taught

Colby College has a five course-equivalent teaching load. The senior Environmental Studies/Policy capstone course (ES493) and the introductory GIS course (ES212) both have laboratories. These laboratories together represent the equivalent of one course. All of my courses include significant student research and oral and written presentation requirements.

Colby College (2004-present) (* Denotes course required for major)

Spring 2009

ES212*: Introduction to GIS and Remote Sensing & Laboratory (14 students)

ES118*: Environmental and Society (48 students)

Fall 2008

ES233*: Environmental Policy (27 students)

ES493*: Environmental Policy Practicum and Laboratory (12 students)

Spring 2008

ES212: Introduction to GIS and Remote Sensing & Laboratory (16 students)

ES118*: Environmental and Society (48 students)

Fall 2007

ES233*: Environmental Policy (25 students)

ES493*: Environmental Policy Practicum and Laboratory (11 students)

Spring 2007

Sabbatical

Fall 2006

Sabbatical

Spring 2006

ES212: Introduction to GIS and Remote Sensing & Laboratory (16 students)

ES118*: Environmental and Society (co-taught, new course for me, 48 students)

Fall 2005

ES233*: Environmental Policy (27 students)

ES493*: Environmental Policy Practicum and Laboratory (8 students)

Spring 2005

ES212: Introduction to GIS and Remote Sensing & Laboratory (14 students) (new course)

ES336: Endangered Species Policy and Practice (22 students) (new course)

Fall 2004

ES233*: Environmental Policy (16 students) (new course)

ES401: Environmental Studies Colloquium* (10 students)

ES493*: Environmental Policy Seminar (5 students) (new course)

Franklin and Marshall College (2001-2004)

Env 117: Environment and Human Values*

Env 216: Environmental Policy*

Env 235: Endangered Species Conservation

Env 454: Environmental Problems*

Colby College (as NSF Award for the Integration of Research and Education Postdoctoral Fellow) (1999-2001)

BI 298: Global Change: Life Science and Society (Spring 2001)

BI 398: Introduction to GIS and Remote Sensing (January 2001)

BI 493: Methods in Environmental Science* (Fall 1999 and Fall 2000, co-taught)

ST 112: Introduction to Science, Technology, and Society (Spring 2000 and Spring 2001, co-taught)

St. Olaf College (1998)

Introduction to Environmental Studies (Spring 1998)

Ecological Principles* (Spring 1998)

University of Wisconsin

Evolution, Ecology, and Genetics (Lab TA) (4 semesters)

Biological Interactions (Lecture TA) (3 semesters, TA)

Introductory Botany (Lab, Lecture, Administrative TA)

Undergraduate Student Honors Thesis and Significant Research Advising

Colby College

2009

Protecting Maine's Mammals: A Model of Land Use Management and Biodiversity in the North Woods (Year-long independent study thesis in Environmental Studies). Casey, Caitlin (Colby '09).

Identification and Assessment of Human-Carnivore Conflict Hotspots in the United States (Honors thesis in Environmental Studies). Dufraine, Caitlin (Colby '09).

Factors Contributing to Successful Tiger Conservation: Implications for Tiger Conservation Policy in Asia. (Honors thesis in Environmental Studies). Saunders, Megan (Colby '09).

Land Trust Data Recording and its Impact on Conservation (Honors thesis in Environmental Studies). Roche, Patrick (Colby '09).

GIS Analysis of the Social Suitability of the Northeast for Wolf Reintroduction (Year-long independent study thesis in Environmental Studies). Tyson, Will (Colby '09).

2008

Separating People and Wildlife: Zoning as a Conservation Strategy for Large Carnivores (Honors thesis in Environmental Studies). Larson, Courtney (Colby '08).

2007

Modeling spatially explicit human-wildlife conflict: GIS and moose-vehicle collisions in Maine (Honors thesis in Environmental Studies). Jospe, Alexandra (Colby '06).

2006

Exploring the conservation value of private ownership of endangered species (Honors thesis in Environmental Studies). Beetz, Jessica (Colby '05).

2005

Exploring differences in the natural environment, environmental processes, and attitudes along the US-Canada border (Honors thesis in Environmental Studies). Carroll, Brendan (Colby '05).

Colby College as NSF Award for the Integration of Research and Education Postdoctoral Fellow

2001

Using GIS for tiger conservation in Sumatra, Indonesia. (Honors Thesis, Department of Biology, Colby College). Megquier, Aaron (Colby '01).

2000

Study of tiger habitat in Sumatra, Indonesia, using GIS and satellite imagery (**First** Honors Thesis, Department of Biology, Colby College). Sullivan, Patrick (Colby '00).

Franklin & Marshall College

Using GIS for tiger conservation and biocomplexity. (Senior Honors Thesis, Department of Earth and Environment, Franklin and Marshall College). Zeigler, Sara (F&M '04).

Spatially Explicit Population Dispersal Modeling in a Heterogeneous Landscape Illustrated by Elk at Riding Mountain National Park. (Senior Honors Thesis, Department of Earth and Environment, Franklin and Marshall College). Voynov, Andrey (F&M '04).

Other Significant Teaching Activities at Colby

In addition to my courses and thesis advising, I have supervised, advised, and sponsored:

- More than 10 internships and off-campus independent studies
- 86 GIS significant research projects and map products presented at the Colby

Undergraduate Research Symposium (2005-2009)

- 12 semester-long original research projects as part of ES118 presented as affiliated sessions with the Colby Undergraduate Research Symposium (2006, 2008-2009)

Significant Course Websites and Student Research Reports Edited

In two of my courses, *ES212: Introduction to GIS and Remote Sensing* and *ES493: Environmental Policy Practicum*, students produce major research reports and map outputs that are available for the public. Examples of recent reports (including links to reports published in 2004, 2005, 2006, 2007, 2008, and 2009) are available at:

- *State of Maine's Environment 2008*: <https://wiki.colby.edu/display/stateofmaine2008>
- *Atlas of Maine 2009*: www.colby.edu/enviro/courses/ES212/aom09

Nyhus cv version: June 2009