

---

Address: Department of Forest Engineering, Resources, and Management  
Oregon State University, Corvallis OR 97331

E-mail: Claire.Montgomery@oregonstate.edu

## **EDUCATION**

Ph.D. (1990) Economics                      University of Washington, Seattle WA  
Thesis: Household investment in the improvement of the existing housing stock  
Advisor: Dr. Robert A. Pollak  
Fields: Natural resource economics, Econometrics  
M.F. (1986) Forest Economics              University of Washington, Seattle WA  
B.S. (1984) Forest Management            Oregon State University, Corvallis OR  
B.A. (1976) Fine Art                          Portland State University, Portland OR

## **EMPLOYMENT HISTORY**

**Emeritus** (2018-present), **Head** (2012-2017), **Professor** (2006-2017), **Associate Professor** (2000-2006), **Assistant Professor** (1995-2000)

Oregon State University:                      Department of Forest Engineering, Resources, and Management; Graduate Faculty of Applied Economics; Graduate Faculty of Forest Ecosystems and Society

**Assistant Professor** (1992-1995)

University of Montana:                      School of Forestry

**Postdoctoral Research Associate** (1990-1991)

University of Washington:                      Department of Economics

**Graduate Research and Teaching Assistant** (1983-1990)

Oregon State University:                      Department of Forest Resources

University of Washington:                      College of Forest Resources, Department of Economics

**Research Assistant** (1983)

Crown Zellerbach:                              Forestry Research Division, McMinnville OR

**Forestry Technician** (1980-1983)

USDA Forest Service                          Siuslaw National Forest

Oregon State University                      College of Forestry, McDonald and Dunn Forest

## **PUBLICATIONS**

◆ **Journal articles/computer science proceedings citations** (*ISI=1215, Google=2195*)

1. Lauer, C.J., C.A. Montgomery, T.G. Dietterich. 2020. Evaluating wildland fire liability standards – does regulation incentivize good management? *International Journal of Wildland Fire*, doi.org/10.1071/WF19090.
2. Lauer, C.J., C.A. Montgomery, T.G. Dietterich. 2019. Managing fragmented fire-threatened landscapes with spatial externalities. *Forest Science*, doi.org/10.1093/forsci/fxz012. (1, 1)

3. Harrison, J.L., C.A. Montgomery, P.W. Jeanty. 2018. A spatial, simultaneous model of social capital and poverty. *Journal of Behavioral and Experimental Economics*. 78: 193-192. (0, 6)
4. Lauer, C.J., C.A. Montgomery, T.G. Dietterich. 2017. Spatial interactions and optimal forest management on a fire-threatened landscape. *Forest Policy and Economics* 83:107-120. (4, 8)
5. Crandall, M.S., D.M. Adams, C.A. Montgomery, D. Smith. 2017. The potential rural development impacts of utilizing non-merchantable forest biomass. *Forest Policy and Economics* 74:20-29. (6, 15)
6. Dilkina, B., R.M. Houtman, C.P. Gomes, K.S. McKelvey, C.A. Montgomery, T. Graves, M.K. Schwartz. 2017. The perfect is the enemy of the good: trade-offs and efficiencies in optimal budget-constrained multi-species corridor networks. *Conservation Biology* 31(1): 192–202. (14, 24)
7. McGregor, S., H. Buckingham, T.G. Dietterich, R.M. Houtman, C.A. Montgomery, R. Metoyer. 2017. Interactive visualization for testing Markov Decision Processes: MCPVIS. *Journal of Visual Languages & Computing* 39: 93-106. (2, 6)
8. Lee, Y., C.A. Montgomery, J. Kline. 2016. The influence of age-specific migration on housing growth in the rural Midwest. *Landscape and Urban Planning* 148:68-79. (2, 6)
9. Harrison, J.L., C.A. Montgomery, J.C. Bliss. 2016. Beyond the monolith: the role of bonding, bridging, and linking social capital in the cycle of adaptive capacity. *Society and Natural Resources* 29(5):525-539. (12, 26)
10. McGregor, S., H. Buckingham, T.G. Dietterich, R. Houtman, C. Montgomery, R. Metoyer. 2015. Facilitating testing and debugging of Markov decision processes with visualization. *In: Proceedings of IEEE Symposium on Visual Languages and Human-Centric Computing, Atlanta GA, (Oct 18–22, 2015)*. (2, 12)
11. Houtman, R.M., C.A. Montgomery, A.R. Gagnon, D.E. Calkin, T.D. Dietterich, S. McGregor, M. Crowley. 2013. Allowing a wildfire to burn: estimating the effect on future fire suppression costs. *International Journal of Wildland Fire* 22(7): 871 - 882. (30, 66)
12. Montgomery, C.A. 2013. Institutional environments and arrangements for managing complex aquatic ecosystems in forested landscapes. *Forest Policy and Economics* 35: 50-56. doi: 10.1016/j.forpol.2013.06.008 (1, 8)
13. Kant, S., Wang, S., Deegen, P., Hostettler, M., von Detten, R., Howard, T., Laband, D., Montgomery, C.A., Robert, N., Sekot, W., Valatin, G., Zhang, D. 2013. New frontiers in forest economics. *Forest Policy and Economics* 35: 1-8. Doi: 10.1016/j.forpol.2013.06.002 (5, 13)
14. Dilkina, B. Lai, K.J., Le Bras, R. Xue, Y., Gomes, C.P., Sabharwal, A., Suter, J., McKelvey, K.S., Schwartz, M.K., and Montgomery, C.A. 2013. Large landscape conservation – synthetic and real-world datasets. *In: Proceedings of the 27<sup>th</sup> Conference on Artificial Intelligence, Bellevue, WA (July 15-18, 2013)*. (0, 1)
15. Le Bras, R., Dilkina, B., Xue, Y., Gomes, C.P., McKelvey, K.S., Schwartz, M.K., Montgomery, C.A. 2013. Robust network design for multispecies conservation. *In: Proceedings of the 27<sup>th</sup> Conference on Artificial Intelligence, Bellevue, WA (July 15-18, 2013)*. (5, 19)

16. Busby, G.M., Albers, H.J., and Montgomery, C.A. 2012. Wildfire risk management in a landscape with fragmented ownership and spatial interactions. *Land Economics* 88: 496-517. (18, 31)
17. Lai, K.J., Gomes, C.P., Schwartz, M.K., McKelvey, K.S., Calkin, D.E., and Montgomery, C.A. 2011. The Steiner multigraph problem: wildlife corridor design for multiple species. In: Proceedings of the 25<sup>th</sup> Conference on Artificial Intelligence, San Francisco, CA, (August 7–11, 2011). (4, 11)
18. Konoshima, M., Albers, H.J., Montgomery, C.A., and Arthur J.A. 2010. Optimal spatial patterns of fuel management and timber harvest with fire risk. *Canadian Journal of Forest Research* 40(1): 95-108. (32, 58)
19. Polasky, S., Nelson, E., Camm, J. Csuti, B. Fackler, P., Longsodr, E., Montgomery, C., White, D., Arthur, J., Garber-Yonts, B., Haight, R., Kagan, J., Starfield, T. and Tobalske, C. 2008. Where to put things? Spatial land management with biological and economic returns. *Biological Conservation* 141: 1505-1524. (349, 542)
20. Konoshima, M., Montgomery, C.A., Albers, H.J., and Arthur, J.L. 2008. Spatial endogenous fire risk and efficient fuel management and timber harvest. *Land Economics* 84(3): 449-468. (44, 63)
21. Busby, G.M., and Montgomery, C.A. 2007. The opportunity cost of forest certification on private land in western Oregon. *Western Journal of Applied Forestry* 22(1): 55-60. (10, 12)
22. Montgomery, C.A., Latta, G., and Adams, D.M. 2006. The cost of achieving old-growth forest structure. *Land Economics* 82(2): 240-256. (12, 18)
23. Montgomery, C.A., and Helvoigt, T. 2006. Changes in attitudes about importance of and willingness to pay for salmon recovery in Oregon. *Journal of Environmental Management* 78(4): 330-340. 10, 22)
24. Nalle, D.J., Arthur, J.L., and Montgomery, C.A. 2005. Economic impacts of adjacency and green-up constraints on timber production at a landscape scale. *Journal of Forest Economics* 10(4): 189-205. (6, 15)
25. Arthur, J.L., Camm, J., Haight, R.G., Montgomery, C.A., and Polasky, S. 2004. Weighing conservation objectives: maximum expected coverage versus endangered species protection. *Ecological Applications* 14(6): 1936–1945. (42, 78)
26. Nalle, D.J., Montgomery, C.A., Arthur, J.L., Schumaker, N.H., and Polasky, S. 2004. Modeling joint production of wildlife and timber in forests, *Journal of Environmental Economics and Management* 48(3): 997-1017. (127, 229)
27. Latta, G., Montgomery, C.A. 2004. Minimizing the cost of stand level management for older forest structure in western Oregon, *Western Journal of Applied Forestry* 19(4): 221-231. (14, 20)
28. Lichtenstein, M.E., and Montgomery, C.A. 2003. Biodiversity and timber in the Coast Range of Oregon: inside the production possibility frontier, *Land Economics* 79(1): 56-73. (46, 75)
29. Calkin, D., Montgomery, C.A., Schumaker, N. H., Polasky, S., Arthur, J.L, and Nalle, D.J. 2002. Developing a production possibility set of wildlife species persistence and timber harvest value using simulated annealing, *Canadian Journal of Forest Research* 32(8): 1329-1342. (41, 117)

30. Montgomery, C.A. 2002. Ranking the benefits of biodiversity: an exploration of relative value, *Journal of Environmental Management* 65(3): 313-326. (39, 75)
31. Arthur, J.L., Haight, R.G., Montgomery, C.A., and Polasky, S. 2002. Analysis of the threshold and expected coverage approaches for the probabilistic reserve selection problem, *Environmental Modeling and Assessment* 7(2): 81-89. (24, 41)
32. Nalle, D.J., Arthur, J.L., Sessions, J., and Montgomery, C.A. 2002. Economic and spatial impacts of an existing reserve network on future augmentation. *Environmental Modeling and Assessment* 7(2): 99-105. (29, 52)
33. Montgomery, C.A. 2001. Modeling the United States housing sector, *Forest Science* 47(3): 371-389. (2, 5)
34. Montgomery, C.A., Pollak, R.A., Freemark, K, and White, D. 1999. Pricing biodiversity, *Journal of Environmental Economics and Management* 38(1): 1-19. (52, 112)
35. Montgomery, C.A. 1996. A structural model of the U.S. housing market: improvement and new construction, *Journal of Housing Economics* 5(2): 166-192. (5, 12)
36. Montgomery, C.A. 1996. Risk and forest policy: Issues and recent trends in the U.S., *Ecological Economics* 16: 65-72. (7, 9)
37. Montgomery, C.A., and Pollak, R.A. 1996. Economics and biodiversity, *Journal of Forestry*, 94: 34-38. (3, 19)
38. Montgomery, C.A. 1995. Economic analysis of the spatial dimensions of species preservation: The distribution of northern spotted owl habitat, *Forest Science* 41(1): 67-83. (13, 28)
39. Montgomery, C.A., Brown, G.M. Jr. and Adams, D.M. 1994. The marginal cost of species preservation: The northern spotted owl, *Journal of Environmental Economics and Management* 26: 111-128. (121, 214)
40. Montgomery, C.A. 1992. Explaining home improvement in the context of household investment in residential housing, *Journal of Urban Economics* 32: 326-350. (44, 96)
41. Montgomery, C.A., and Brown, G.M. Jr. 1992. Economics of species preservation: the spotted owl case, *Contemporary Policy Issues* 10: 1-12. (8, 22)
42. Montgomery, C.A., Brodie, J.D. and Cleaves, D.A. 1986. Allowable cut effect and fire-damage appraisal, *Western Journal of Applied Forestry* 1: 100-103. (6, 6)

◆ **Articles included in collections**

1. Montgomery, C.A., Brown, G.M. Jr., and Adams, D.M. 1994. The marginal cost of species preservation: The northern spotted owl. *Journal of Environmental Economics and Management* 26: 111-128.  
*In:* Sedjo, R.A. (ed.). 2003. Economics of forestry. Ashgate Publishing Ltd.: Aldershot, UK.  
Polasky, S. (Ed.). 2002. Economics and biodiversity conservation. Ashgate Publishing Ltd.: Aldershot, UK.  
Willis, K.G., K.J. Button, P. Nijkamp (Eds.) 1999. Environmental valuation, Vol. I. Edward Elgar Publishing Ltd.: Cheltenham, Glos, UK.  
Willis, K.G., and Garrod, G.D. 2012. Valuing Environment and Natural Resources. Edward Elgar Publishing Ltd.: Cheltenham, Glos, UK.
2. Montgomery, C.A., Pollak, R.A., Freemark, K, and White, D. 1999. Pricing biodiversity,

---

*Journal of Environmental Economics and Management* 38(1): 1-19.

*In:* Polasky, S. (Ed.) 2002. Economics and biodiversity conservation. Ashgate Publishing Ltd.: Aldershot, UK.

◆ **Book chapters** (*ISI=48/Google=94*)

1. Haynes, R.W., Montgomery, C.A., Alexander, S.J. 2017. Wood products markets, communities, and regional economies. Ch. 4, pp. 47-61. **In:** Olson, D.H. and Van Horne, B. (eds) People, forests, and change: Lessons from the Pacific Northwest, Island Press. (1, 2)
2. Montgomery, C.A. and Crandall, M. 2014. Economics of old-growth forests. Ch. 10, pp. 149-161. **In:** Kant, S. and J. Alavalapati (eds.) Handbook of forest economics. Routledge Books. (3, 3)
3. Montgomery, C.A. 2014. Fire: an agent and a consequence of land use change. Ch. 11, pp. 281-301. **In:** Duke, J.M. and J. Wu (eds.) The Oxford handbook of land economics. UK: Oxford University Press. (2, 8)
4. Adams, D.M. and Montgomery, C.A. 2013. Economic analysis of forest products markets. Vol. 2. pp. 87-96. Ch. 136 **In:** Shogren, J.F. (ed.) Encyclopedia of energy, natural resource and environmental economics. Elsevier Academic Press. (1, 2)
5. Nelson, E., Montgomery, C.A., Conte, M., and Polasky, S. 2011. The provisioning value of timber and non-timber forest products. Ch. 8 **In:** Kareiva, P., Tallis, H., Ricketts, T.H., Daily, G., and Polasky, S. (eds.) Natural capital: Theory and practice of mapping ecosystem services, UK: Oxford University Press. (5, 21)
6. Konoshima, M., Montgomery, C.A., Albers, H.J., and Arthur, J.L. 2007. Effects of spatial externality on efficient spatial allocation of forest fuel management. *In:* Sasaki, N., and Yoshimoto, A. (eds.) Forest resource management and mathematical modeling, FORMATH Vol. 7., Japan Society of Forest Planning Press.
7. Montgomery, C.A. 2003. The production possibilities approach to understanding and modeling compatibility. Ch. 2 *In:* Monserud, R.A., R.W. Haynes, and A. Johnson (eds.) Compatible forest management, Dordrecht: Kluwer Academic Publishing. (3, 5)
8. Toppinen, A., Adams, D.M., and Montgomery, C.A. 2001. Biodiversity conservation and forest products: the case of the northern spotted owl in the Pacific Northwest, Ch. 27, p.385-394 *In:* Palo, M., J. Uusivuori and G. Mery (eds.) World forests, markets and policies, Vol. 3, Dordrecht: Kluwer Academic Publishing. (3, 3)
9. Montgomery, C.A., and Adams, D.M. 1995. Optimal timber management, Ch. 17, p. 379-404 *In:* Bromley, D.W. (ed.), Handbook of environmental economics, Oxford: Basil Blackwell. (30, 59)

◆ **Feature articles and book reviews**

1. Montgomery, C.A. 1994. Book review of "Forestry and the environment: economic perspectives", *Journal of Forestry* 92(6): 55.

◆ **Reports and proceedings**

1. Crandall, M.S., J.L. Harrison, and C.A. Montgomery. 2014. Incorporating Rural Community Characteristics into Forest Management Decisions, Ch. 6 *In: Halofsky, J., Hemstrom, M. (eds.) Integrated Landscape Assessment Methods of Analysis*. Gen. Tech. Rep. PNW-GTR-896. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.
2. Latta, G., and C.A. Montgomery. 2007. Economic considerations in managing for older-forest structure. P. 95-104 in *Managing for wildlife habitat in Westside production forests*, Harrington, T.B., and G.E. Nicholas (tech. eds.). USDA For. Serv. Gen. Tech. Rep. PNW-GTR-695. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. (1, 4)
3. Montgomery, C.A. 2005. A proposal for evaluating alternative approaches to implementing sustainable forestry practices in western Oregon, Ch. 8 *In: Deal, R. L.; S. M. White; eds. Understanding key issues of sustainable wood production in the Pacific Northwest*. Gen. Tech. Rep. PNW-GTR-626. Portland, OR: U.S. Department of Agriculture, Forest Service: 47-53.
4. Montgomery, C.A. 2002. Compatibility of timber and conservation: tracing the tradeoff frontier, *In: Johnson, A. C.; Haynes, R. W.; Monserud, R. A.; eds. Congruent management of multiple resources: proceedings from the Wood Compatibility Initiative workshop*. Gen. Tech. Rep. PNW-GTR-563. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. (1, 7)
5. Stevens, J.A. and Montgomery, C.A. 2002. A synthesis of multi-resource research with application to the Pacific Northwest: multiple use, tradeoffs, and joint production, Gen. Tech. Rep. PNW-GTR-539, Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 44 p. (8, 22)
6. Montgomery, C.A., Arthur, J.L., Nalle, D.J., Polasky, S., and Schumaker, N. 2002. Land management with ecological and economics objectives: developing a production possibility set of wildlife species persistence and timber harvest value, *In: Proceedings of the 2002 Decision-Making and Valuation for Environmental Policy Progress Review Workshop*, Washington, DC.
7. Montgomery, C.A. 2001. The future of housing in the United States: An econometric model and long-term predictions for the 2000 RPA Timber Assessment, Res. Pap. PNW-RP-531. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 38 p.
8. Calkin, D., Montgomery, C.A., Schumaker, N.H., Polasky, S., Arthur, J.L., and Nalle, D.J. 2000. Modeling the compatibility of biological and economic objectives on a forested landscape, *In: Proceedings of the 2000 International Institute of Fisheries Economics and Trade Conference*, Corvallis, OR.
9. Arthur, J. L., Calkin, D., Montgomery, C.A., Nalle, D.J., Polasky, S., and Schumaker, N.H. 1999. Balancing economics and conservation in forest land management, pp. 1415-1417 *In: Proceedings of the 5th International Conference of the Decision Sciences Institute*, Athens, Greece (July 1999).
10. Adams, D.M., Montgomery, C.A., and Naito, T., 1998. Input substitution in the U.S. new construction sector: Evidence from a profit function analysis, *In: Proceedings of the International Symposium on Global Concerns for Forest Resource Utilization, Volume I*, Miyazaki, Japan (October 1998)

11. Montgomery, C.A., and Pollak, R.A. 1995. Valuing and measuring biodiversity for comparing land-use alternatives, *In: Proceedings for IUFRO XX World Congress, 1995 August 6-12, Tampere, Finland, (1995).*
12. Montgomery, C.A. 1994. Socioeconomic risk assessment and its relation to ecosystem management, pp. 307-317 *In: M.E. Jensen and P.S. Bourgeron, (eds.), Volume II: Ecosystem management: principles and applications, Gen. Tech. Rep. PNW-GTR-318, Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 376 p.*
13. Montgomery, C.A. and Brown Jr., G.M. 1989. The economic trade-off between anadromous fish and timber production, Research paper, Washington DC: National Fish and Wildlife Foundation.
14. Montgomery, C.A. 1989. Longrun supply and demand of new residential construction in the United States: 1986 to 2040, Res. Pap. PNW-RP-412, Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

◆ **Contributor to**

1. An Analysis of the Timber Situation in the United States: 1999-2050: A technical document supporting the 2000 USDA Forest Service RPA Assessment.
2. Stewardship Incentives: Conservation strategies for Oregon's working landscape. by Sara Vickerman, Defenders of Wildlife.

**RESEARCH GRANTS**

1. New Computational Tools for Sustainable Ecosystem Management, Lead PI: T.D. Dietterich (EECS), Co-PIs: C.A. Montgomery, H.J. Albers, R. Metoyer (EECS), National Science Foundation, Total: \$1,199,577, Montgomery portion \$278,125 (2013-2016).
2. Cost-effective forest wildfire management: Incentives matter, C.A. Montgomery, USDA Forest Service \$62,528 (2011-2015).
3. Economics of forest policy, T.C. Maness and C.A. Montgomery, USDA Forest Service \$102,730 (2011-2012).
4. Integrating ecological and social data to optimize economic decisions on wildlife corridors, C.A. Montgomery, USDA Forest Service \$69,686 (2010-2014).
5. Prioritize fuel treatments by estimating restoration potential and understanding their effects: Community economics of fuel treatments, USDA Forest Service, Lead PI: Lisa Gaines, at OSU-INR, Steve Tesch at OSU-CoF, Co-PIs: C.A. Montgomery, A. Morzilla, M. Wing, USDA Forest Service, Total: \$3,254,570, CoF portion: \$947,098, Montgomery portion \$222,125 (2009-2013).
6. Letting fires burn: a cost benefit analysis of wildfire as fuel treatment, C.A. Montgomery, USDA Forest Service \$40,100 (2009-2011).
7. Community considerations in prioritizing fuel treatments, C.A. Montgomery, USDA Forest Service \$100,026 (2009-2014).
8. Expeditions in computing, computational sustainability: Computational Methods for a

- 
- Sustainable Environment, Economy, and Society, Lead PI: C. Gomes at Cornell U., at OSU: T. Dietterich (EECS), C.A. Montgomery and H.J. Albers, National Science Foundation, Total: *\$5,990,621*, OSU portion: *\$1,058,321*, Montgomery portion *\$245,000* (2008-2013).
9. Models to improve the effectiveness of wildland fire suppression, H.J. Albers and C.A. Montgomery, USDA Forest Service *\$45,000* (2007-2010).
  10. Extensions of RPA timber assessment modeling, D.M. Adams and C.A. Montgomery, USDA Forest Service *\$49,999* (2006-2011).
  11. Interaction of private and public forest fire risk management decisions, C.A. Montgomery, USDA Forest Service *\$25,499* (2006-2009).
  12. Changing housing density in the rural Midwest, C.A. Montgomery, USDA Forest Service *\$46,315* (2003-2009).
  13. Modeling compatibility of timber, biodiversity, and old forest structure with fire risk, C.A. Montgomery, USDA Forest Service *\$34,674* (2003-2008).
  14. Achieving sustainable forestry: Incentives or regulations?, C.A. Montgomery, USDA Forest Service *\$48,885* (2003- 2006).
  15. A temporal and spatial analysis of Oregonians' willingness to pay for salmon, C.A. Montgomery, USDA Forest Service *\$8,575* (2003-2005).
  16. Modeling private nonindustrial forest landowners and conservation incentives, C.A. Montgomery, USDA Forest Service *\$72,287*, (2000-2003).
  17. Compatibility of timber and conservation: tracing the trade-off frontier, C.A. Montgomery, USDA Forest Service *\$55,956*, (2000-2004).
  18. Modeling the impact of incentive, regulation, and taxation packages on Oregon forest landowner behavior, C.A. Montgomery, Oregon Department of Forestry *\$40,062*, (2000-2001).
  19. Pricing biodiversity: an application in the Muddy Creek Basin of Oregon, C.A. Montgomery, USDA Forest Service *\$16,321*, (1997-2001).
  20. Land management with biological and economic objectives, C.A. Montgomery, S. Polasky, N. Schumaker, J. Arthur, USDA Forest Service *\$31,500*, EPA Star Grant *\$131,090*, (1997-2002).
  21. Residential housing starts and expenditure on upkeep and improvement in the U.S.: Projection and trends for the 1997 RPA Timber Assessment, C.A. Montgomery, USDA Forest Service *\$29,966*, (1996-2001).
  22. Estimating cross-price elasticities of demand for solidwood products and substitutes in the U.S., D.M. Adams and C.A. Montgomery, USDA Forest Service *\$36,327*, (1995-1998).
  23. The definition and measurement of biodiversity: a welfare based index approach, C.A. Montgomery, USDA Forest Service *\$74,000*, (1994-1997).
  24. Historical levels of forest resource production in National Forests in the Rockies, C.A. Montgomery, USDA Forest Service *\$8,000*, (1994-1995).
  25. Public preferences and the demand for biodiversity, C.A. Montgomery, McIntire-Stennis Forestry Research Grant Program *\$27,000*, (1994-1995).
  26. Economic analysis of the spatial dimensions of species preservation: the distribution of northern spotted owl habitat, C.A. Montgomery, USDA Forest Service *\$15,000*, (1993-1994).
  27. The demand for investment in the residential housing stock: New construction and



- 
- improvement of existing stock, C.A. Montgomery, USDA Forest Service *\$14,000*, (1993-1995).
28. The role of risk and uncertainty in demand for forest uses: Ecosystem management as a response, C.A. Montgomery, USDA Forest Service *\$7,000*, (1993-1994).
  29. Socioeconomic analysis of proposed wolf recovery in central Idaho and Yellowstone National Park, J. Duffield, D. Pletscher, C.A. Montgomery and others, U.S. Fish and Wildlife *\$35,000*, (1993-1994).
  30. The marginal cost of species preservation: the northern spotted owl, C.A. Montgomery, USDA Forest Service *\$14,000*, (1992-1994).

### **COURSES TAUGHT**

#### **◆ Undergraduate**

Forest Resource Economics I  
Forest Resource Economics II  
Forest Resource Valuation

#### **◆ Graduate**

Advanced Forest Economics  
Discovery Seminar Series  
Economics of the Forest Resource  
Microeconomic Theory  
Introduction to Sustainable Natural Resource Management  
Market Tools for Managing Greenhouse Gas Emissions

#### **◆ Guest Lecturer**

Careers and Issues in Forestry  
Sustainable Forest Management  
Forest Policy Analysis  
Forest Products: Wood as a Resource for Housing Forest and Wildlife Interface  
Forest Products Merchandising  
Introduction to Forestry  
Introduction to American Forestry Issues  
Issues in Natural Resources Measurement of Biodiversity  
Wildlife Habitat Management

#### **◆ Teaching Assistant**

Principles of Microeconomics Principles of Macroeconomics

#### **◆ Continuing Education**

National Advanced Silviculture Program (NASPII) Inventory Modeling and Decision Support Workshop Economics Module

### **GRADUATE STUDENTS**

---



---

**◆ Major Professor**

1. Chris Lauer  
paper: Ph. D. Applied Economics (2017)  
Determining optimal timber harvest and fuel treatment on a fire-threatened landscape using approximate dynamic programming  
employed: economist, USDC National Oceanic and Atmospheric Administration
2. Aaron Gagnon  
paper: M.S. Sustainable Forest Management (2015)  
Economic benefit from allowing wildfires to burn in federal east-side Cascade forests  
employed: forester, USDA Forest Service, Washington Office
3. Kate Marcille  
paper: M.F. Sustainable Forest Management (2015)  
Analyzing suppression resource allocation and productivity on large wildland fires  
employed: research associate, BBER, University of Montana
4. Mindy Crandall  
dissertation: Ph.D. Applied Economics (2014)  
The effects of increased supply and emerging technologies in the forest products industry on rural communities in the northwest U.S.  
employment: assistant professor, Oregon State University
5. Jane Harrison  
dissertation: Ph.D. Forest Resources (2013)  
The impact of social capital on well-being in rural communities  
employed: economist, Sea Grant, North Carolina State University
6. Yohan Lee,  
paper: M.S. Applied Economics (2012)  
Changing housing density in the rural Midwest  
employed: assistant professor, Yeungnam University, South Korea
7. Rachel Houtman,  
thesis: M.S. Forest Resources (2011)  
Letting wildfires burn: Modeling the change in future suppression costs as the result of a suppress versus a let-burn management choice  
employed: faculty research assistant, Oregon State University
8. Gwen Busby,  
dissertation: Ph.D. Forest Resources, co-chair Albers (2008)  
Interaction of private and public forest fire risk management decisions  
employed: economics consultant, Greenwood Resources, Inc.
9. Masashi Konoshima,  
dissertation: Ph.D. Forest Resources, co-chair with Arthur (2006)  
Spatially explicit intertemporal forest management decision under the risk of fire  
employed: associate professor, University of the Ryukyus, Okinawa, Japan
10. Christian Langpap,  
dissertation: Ph.D. Agricultural and Resource Economics, co-chair Polasky (2002)  
Modeling private nonindustrial forest landowners and conservation incentives  
employed: associate professor, Oregon State University, Agricultural and Resource Economics.

- 
- |                             |  |
|-----------------------------|--|
| 11. Darek Nalle,            | Ph.D. Forest Resources, co-chair with Arthur (2001) dissertation:<br>Optimizing spatial and temporal aspects of nature reserve design<br>under economic and ecological objectives            |
| employed:                   | research forester, USFS Rocky Mountain Research Station  |
| 12. David Calkin,           | M.S., Resource Conservation (1994), Ph.D. Forest Resources (2001)  |
| dissertation:               | Land management with ecological and economic objectives:<br>developing a production possibility set of wildlife species<br>persistence and timber harvest value using simulated<br>annealing |
| employed:                   | research forester, USFS Rocky Mountain Research Station  |
| 13. Mark Lichtenstein,      | M.S. Forest Resources (2001)   |
| thesis:                     | Tradeoffs associated with managing forested landscapes for<br>timber and biodiversity: A case study in the Oregon Coast<br>Range   |
| employed:                   | Branch Chief Fire Planning and Budget, USDA Forest Service, D.C.   |
| 14. Neal Shunk,             | M.S. Forest Resources (2000)   |
| thesis:                     | Choosing efficient land allocations and forest management<br>regimes for biodiversity  |
| employed:                   | forest economist, Weyerhaeuser   |
| 15. Reena Hunter,           | M.S. non-thesis, Resource conservation (1996)  |
| 16. Gumani David Mbulaheni, | M.S. non-thesis, Forest economics (1995)   |
| employed:                   | district manager, South African Forestry Company, LTD  |

◆ **Minor Professor**

1. Xiaou Han, Ph.D., Wood Science and Engineering (ch. Hansen exp. 2012)
2. Mindy Crandall, M.S., Agricultural and Resource Economics (ch. Weber, 2003)
3. Jessica Leahy, M.S. Forest Resources (ch. Johnson, 2001)
4. Beth Dodson Coulter, M.S., Forest Engineering (ch. Olsen, 1999)
5. Gerald Barton, M.S., Agricultural Education and General Agriculture (ch. Sharrow, 1999)