

TAYLOR H. RICKETTS

GUND INSTITUTE FOR ECOLOGICAL ECONOMICS
UNIVERSITY OF VERMONT
617 MAIN STREET
BURLINGTON, VT 05405

P (802) 656-7796
F (802) 656-2995
TAYLOR.RICKETTS@UVM.EDU

AREAS OF INTEREST

Community and landscape ecology, ecosystem services, ecological economics, conservation biology, environmental policy, biogeography

PROFESSIONAL APPOINTMENTS

University of Vermont

Director, Gund Institute for Environment 2017-present

Director, Gund Institute for Ecological Economics 2011-2017

Gund Professor, Rubenstein School for Natural Resources & Environ. 2011-present

World Wildlife Fund – USA

Senior Fellow 2011-2016

World Wildlife Fund – USA

Managing Director, Conservation Science Program 2008-2011

Director, Conservation Science Program 2002-2008

University of Maryland, Department of Biology

2003-present

Adjunct Assistant Professor

Stanford University

2000-2002

Post-doctoral researcher, Biological Sciences

Zegrahm Expeditions

1991-1995

Lecturer and Expedition Leader for remote nature tours

EDUCATION

Stanford University: Ph.D. in Biological Sciences 2000

(Committee: Paul Ehrlich, Gretchen Daily, Hal Mooney, Peter Vitousek)

Dartmouth College: B.A. magna cum laude in Earth Sciences, Environ. Studies 1991

PUBLICATIONS

Books

Fisher, B., R. Naidoo, **T.H. Ricketts** (2014). *A field guide to economics for conservationists*. Roberts & Co. 185 pp.

Kareiva, P., H. Tallis, **T.H. Ricketts**, G.C. Daily, & S. Polasky, eds. (2011). *Natural capital: Theory and practice of mapping ecosystem services*. Oxford University Press. 432 pp.

National Research Council of the National Academies (2006). *Status of pollinators in North America*. National Academies Press, Washington, D.C. 322 pp.

Burgess, N. D., J. A. D' Amico Hales, E. Underwood, E. Dinerstein, D. Olson, J. Schipper, **T.H. Ricketts**, I. Itoua and K. Newman (2004). *Terrestrial ecoregions of*

Africa and its islands: a conservation assessment. Island Press, Washington D.C. 544 pp.

Alcamo, et al. (2003). *Ecosystems and human well-being: A framework for assessment.* Island Press. Washington DC. 245 pp.

Ricketts, T.H., E. Dinerstein, D.M. Olson, C.J. Loucks, W. Eichbaum, K. Kavanagh, P. Hedao, P. Hurley, K.M. Carney, R. Abell, and S. Walters (1999). *Ecoregions of North America: A conservation assessment.* Island Press. Washington DC. 485 pp.

Peer-reviewed journal articles and book chapters

In Press

Imbach, P, E. Fung, L. Hannah, C Navarro-Racines, D. Roubik, **T.H. Ricketts**, C.

Harvey, C. Donatti, P. Läderach, B. Locatelli, P. Roehrdanz (in press). Coffee, Bees and Climate: Coupling of pollination services and agriculture under climate. *PNAS*.

Diego Herrera, A. Ellis, B. Fisher, C.D. Goldend, K. Johnson, M. Mulligan, A. Pfaff, T. Treuer, **T.H. Ricketts**. Upstream watershed condition predicts rural children's health across 35 developing countries. *Nature Communications*.

Rieb, J.T., R. Chaplin-Kramer, G.C. Daily, P.R. Armsworth, K. Böhning-Gaese, A. Bonn, G.S. Cumming, F. Eigenbrod, V. Grimm, Bethanna M. Jackson, Alexandra Marques, S.K. Pattanayak, H.M. Pereira, G.D. Peterson, **T.H. Ricketts**, B.E. Robinson, M. Schröter, L.A. Schulte, R. Seppelt, M.G. Turner, and E.M. Bennett (in press). When, where, and how nature matters for ecosystem services: Challenges for the next generation of ecosystem service models. *Bioscience*.

Williams, N.M, R. Isaacs, E. Lonsdorf, R. Winfree, **T.H. Ricketts** (in press). Building resilience into agricultural pollination using wild pollinators. in Gardner, S., S. Ramsden, R. Hails (eds). *Agricultural Resilience: perspectives from ecology and economics*. Cambridge University Press.

2017

Sonter, L.J, J.A. Johnson, C.C. Nicholson, L.L. Richardson, K.B. Watson, **T.H. Ricketts** (2017). Multi-site interactions: Understanding the offsite impacts of land use change on the use and supply of ecosystem services. *Ecosystem Services* **23**:158-164.

Galford, G. and **T.H. Ricketts** (2017). Provisioning Ecosystem Services. In Potschin, M., R. Haines-Young, R. Fish, and R.K. Turner (eds). *Routledge Handbook of Ecosystem Services*. Earthscan Press. pp. 315-327.

2016

Ricketts, T.H., K.B. Watson, I. Koh, A.M. Ellis, C.C. Nicholson, S. Posner, L.L.

Richardson, L.J. Sonter (2016). Disaggregating the evidence linking biodiversity and ecosystem services. *Nature Communications* **7**:13106.

Doi:10.1038/ncomms13106

Watson, K.B., **T.H. Ricketts**, G. Galford, S. Polasky, J. O'Neil-Dunne (2016).

Quantifying flood mitigation services: The economic value of Otter Creek wetlands and floodplains to Middlebury, VT. *Ecological Economics* **130**:16-24.

- Sonter, L.J., K.B. Watson, S.A Wood, **T.H. Ricketts** (2016). Spatial and temporal dynamics and value of nature-based recreation, Estimated via social media. *PLoS One*.11, e0162372 (2016).
- Koh, I., E.V. Lonsdorf, N.M. Williams, C. Brittain, R. Isaacs, J. Gibbs, & **T.H. Ricketts** (2016) Modeling the status, trends, and impacts of wild bee abundance in the United States. *PNAS* 113(1):140-145. DOI: 10.1073/pnas.1517685113
- Posner, S.M., C. Getz, **T.H. Ricketts** (2016). Evaluating the impact of ecosystem service assessments on decision-makers. *Environmental Science & Policy* 64:30-37.
- Posner, S.M., E. McKenzie, **T.H. Ricketts** (2016). Policy impacts of ecosystem services knowledge. *PNAS* 113(7):1760-1765.
- Posner, S., G. Verutes, I. Koh, D. Denu, & **T. Ricketts** (2016) Global use of ecosystem service models. *Ecosystem Services* 17:131–141.
- Galford, G. and **T.H. Ricketts** (2016). Chapter 25: Ecosystem services: Provisioning. In Potschin, M. et al. (eds) *Routledge Handbook of Ecosystem Services*. Earthscan:London. pp. 315-327.
- Bayles, B.R., K.A. Brauman, J.N. Adkins, B.F. Allan, A.M. Ellis, T.L. Goldberg, C.D. Golden, D.S. Grigsby-Toussaint, S.S. Myers, S.A. Osofsky, **T.H. Ricketts**, J.B. Ristaino (2016). Ecosystem services connect environmental change to human health outcomes. *EcoHealth* 13(3): 443-449.doi:10.1007/s10393-016-1137-5

2015

- Garibaldi, L. A.; I. Bartomeus; R. Bommarco; A.M. Klein; S.A. Cunningham; M.A. Aizen; V. Boreux; M.P.D. Garratt; L.G. Carvalheiro; C. Kremen; C.L. Morales; C. Schuepp; N.P. Chacoff; B.M. Freitas; V. Gagic; A. Holzschuh; B.K. Klatt; K.M. Krewenka; S. Krishnan; M.M. Mayfield; I. Motzke; M. Otieno; J. Petersen; S.G. Potts; **T.H. Ricketts**; M. Rundlof; A. Sciligo; P.A. Sinu; I. Steffan-Dewenter; H. Taki; T. Tscharrntke; C.H. Vergara; B.F. Viana; M. Woyciechowski. (2015) Trait matching of flower visitors and crops predicts fruit set better than trait diversity. *Journal of Applied Ecology* 52(6) 1436-1444
- Guerry, A.D., S. Polasky, J. Lubchenco, R. Chaplin-Kramer, G.C. Daily, R. Griffin, M. Ruckelshaus, I.J. Bateman, A. Duraiappah, T. Elmqvist, M.W. Feldman, C. Folke, J. Hoekstra, P.M. Kareiva, B.L. Keeler, S. Li, E. McKenzie, Z. Ouyang, B. Reyers, **T.H. Ricketts**, J. Rockström, H. Tallis, B. Vira. (2015). Natural capital and ecosystem services informing decisions: From promise to practice. *PNAS* 112(24): 7348-7355.
- Kleijn, D. et al. [62 authors] (2015). Delivery of crop pollination services is an insufficient argument for wild pollinator conservation. *Nature Communications* 6. doi:10.1038/ncomms8414
- Armsworth, P.R., E.R. Larson, S.T. Jackson, D.F. Sax, P. Simonin, B. Blossey, N. Green, M.L. Klein, L. Lester, **T.H. Ricketts**, M.C. Runge, M.R. Shaw (2015). Are conservation organizations configured for effective adaptation to climate change? *Frontiers in Ecology and Environment*. doi:10.1890/130352
- Ellis, A.M., S.S. Myers, **T.H. Ricketts** (2015). Do pollinators contribute to nutritional health? *PLoS ONE* 10(1): e114805. doi:10.1371/ journal.pone.0114805
- Aburto-Oropeza, O., E. Ezcurra, J. Moxley, A. Sanchez-Rodriguez, I. Mascarenas-Osorio, C. Sanchez-Ortiz, B. Erisman, **T.H. Ricketts** (2015). A framework to assess

the health of rocky reefs linking geomorphology, community assemblage, and fish biomass. *Ecological Indicators* 52: 353-361.

2014

Redford, K. H., S. S. Myers, **T. H. Ricketts**, and S. A. Osofsky (2014). Human health as a judicious conservation opportunity. *Conservation Biology*:

DOI: 10.1111/cobi.12290.

Bhagabati, N.K., **T.H. Ricketts**, T. Barano, M. Conte, C. Ennaanay, O. Hadian, E. McKenzie, N. Olwero, A. Rosenthal, H. Tallis, S. Wolny (2014). Ecosystem services reinforce Sumatran tiger conservation in land use plans. *Biological Conservation* 169:147-156.

2013

Ruckelshaus, M., E. McKenzie, H. Tallis, A. Guerry, G.C. Daily, P. Kareiva, S. Polasky, **T.H. Ricketts**, N. Bhagabati, S. Wood, J. Bernhardt (2013). Notes from the field: Lessons learned from using ecosystem service approaches to inform real-world decisions. *Ecological Economics*. doi: 10.1016/j.ecolecon.2013.07.009

Fisher, B., A. Balmford, P.J. Ferraro, L. Glew, M. Mascia, R. Naidoo, **T.H. Ricketts** (2013). Moving Rio forward and avoiding 10 more years with little evidence for effective conservation policy. *Conservation Biology*. doi: 10.1111/cobi.12221

Myers, S., L. Gaffikin, C.D. Golden, R.S. Ostfeld, K.H. Redford, **T.H. Ricketts**, W.R. Turner, S.A. Osofsky (2013). Human health impacts of ecosystem alteration. *PNAS* 110 (47) 18753-18760.

Garibaldi, L.A., I. Steffan-Dewenter, R. Winfree, M. A. Aizen, R. Bommarco, S. A. Cunningham, C. Kremen, L. G. Carvalheiro, L. D. Harder, O. Afik, I. Bartomeus, F. Benjamin, V. Boreux, D. Cariveau, N. P. Chacoff, J. H. Dudenhöffer, B. M. Freitas, J. Ghazoul, S. Greenleaf, J. Hipólito, A. Holzschuh, B. Howlett, R. Isaacs, S. K. Javorek, C. M. Kennedy, K. Krewenka, S. Krishnan, Y. Mandelik, M. M. Mayfield, I. Motzke, T. Munyuli, B. A. Nault, M. Otieno, J. Petersen, G. Pisanty, S. G. Potts, R. Rader, **T. H. Ricketts**, M. Rundlöf, C. L. Seymour, C. Schüepp, H. Szentgyörgyi, H. Taki, T. Tscharntke, C. H. Vergara, B. F. Viana, T. C. Wanger, C. Westphal, N. Williams, A. M. Klein (2013). Wild pollinators enhance fruit set of crops regardless of honey-bee abundance. *Science* 339(6127): 1608-1611.

Kennedy, C., E. Lonsdorf, M. Neel, W. Neal, **T.H. Ricketts**, R. Winfree, R. Bommarco, C. Brittain, A. Burley, D. Cariveau, L. Carvalheiro, N. Chacoff, S. Cunningham, B. Danforth, J. Dudenhöffer, E. Elle, H. Gaines, C. Gratton, L. Garibaldi, A. Holzschuh, R. Isaacs, S. Javorek, S. Jha, A. Klein, K. Krewenka, Y. Mandelik, M. Mayfield, L. Morandin, L. Neame, M. Otieno, M. Park, S. Potts, M. Rundlöf, A. Saez, I. Steffan-Dewenter, H. Taki, J. Wilson, B. Viana, C. Westphal, S. Greenleaf, C. Kremen (2013). A global quantitative synthesis of local and landscape effects on wild bee pollinators in agroecosystems. *Ecology Letters* 16(5): 584-599.

Ricketts, T.H., E. Lonsdorf (2013). Mapping the margin: Comparing marginal values of tropical forest remnants for pollination services. *Ecological Applications* 23(5): 1113-1123.

Pennington, D.N., T.H. **Ricketts**, R. Naidoo (2013). Priority setting for biodiversity and ecosystem services. In: Simon A Levin, editor. *Encyclopedia of Biodiversity 2nd edition*. Academic Press.

2012

Tallis, H., H. Mooney, S. Andelman, P. Balvanera, W. Cramer, D. Karp, S. Polasky, B. Reyers, T.H. **Ricketts**, S. Running, K. Thonicke, B. Tietjen, A. Walz (2012). A global system for monitoring ecosystem service change. *Bioscience* 62(11): 977-986.

Butchart, S.H., J.P.W. Scharlemann, M. Evans, S. Quader, S. Aricò, J. Arinaitwe, M. Balman, L.A. Bennun, C. Besançon, T Boucher, B. Bomhard, T.M. Brooks, I.J. Burfield, N.D. Burgess, S. Chan, R.P. Clay, M.J. Crosby, N.C. Davidson, N. De Silva, C. Devenish, G.C. L. Dutton, D.F. Díaz Fernández, L.D. C. Fishpool, C. Fitzgerald, M. Foster, M.F. Heath, M. Hockings, M. Hoffmann, D. Knox, F. Larsen, J.F. Lamoreux, C. Loucks, I. May, J. Millett, D. Molloy, P. Morling, M. Parr, T.H. **Ricketts**, B. Skolnik, A. Upgren, S. Woodley (2012). Protecting important sites for biodiversity contributes to meeting global conservation targets. *PloS ONE* 7:e32529.

2011

Fisher, B, Turner, R. K., Burgess, N. D., Swetnam, R. D., Green, J., Green, R. E., Kajembe, G., Kulindwa, K., Lewis, S. L., Marchant, R., Marshall, A. R., Madoffe, S., Munishi, P. K. T., Morse-Jones, S., Mwakalila, S., Paavola, J., Naidoo, R., **Ricketts**, T.H., Rouget, M., Willcock, S., White, S., Balmford, A. (2011). Measuring, modeling and mapping ecosystem services in the Eastern Arc Mountains of Tanzania. *Progress in Physical Geography*, 2011. 35(5): p. 595-611.

Pennington, D.N., T.H. **Ricketts** (2011). Conservation Biology and Biodiversity. In: *Encyclopedia of Life Sciences*. John Wiley & Sons Ltd, Chichester. <http://www.els.net> [doi: 10.1002/9780470015902.a0003256.pub2]

Garibaldi, L.A., I. Steffan-Dewenter, C. Kremen, J. M. Morales, R. Bommarco, S. A. Cunningham, L.G. Carvalheiro, N.P. Chacoff, J.H. Dudenhöffer, S.S. Greenleaf, A. Holzschuh, R. Isaacs, K. Krewenka, Y. Mandelik, M.M. Mayfield, L.A. Morandin, S.G. Potts, T.H. **Ricketts**, H. Szentgyörgyi, C. Westphal, R. Winfree, A.M. Klein (2011). Stability of pollination services decreases with isolation from natural areas despite honey bee visits. *Ecology Letters* 14: 1062-1072.

Abell, R., M. Thieme, T.H. **Ricketts**, N. Olwero, R. Ng, P. Petry, E. Dinerstein, C. Revenga, J. Hoekstra (2011). Concordance of freshwater and terrestrial biodiversity. *Conservation Letters* 4:127-136.

Swetnam, R. D., B. Fisher, B. P. Mbilinyi, P. K. Munishi, S. Willcock, T.H. **Ricketts**, S. Mwakalila, A. Balmford, N.D. Burgess, A.R. Marshall, S.L. Lewis (2011). Mapping socio-economic scenarios of land cover change: a GIS method to enable ecosystem service modelling. *Journal of Environmental Management* 92:563-574

Lonsdorf, E., T. H. **Ricketts**, C. Kremen, R. Winfree, S. Greenleaf, and N. Williams (2011). Crop Pollination. in Kareiva, P. et al. (eds). *Natural capital: Theory and practice of mapping ecosystem services*. Oxford University Press.

Daily, G.C., P. Kareiva, S. Polasky, T. H. **Ricketts**, H. Tallis (2011). Mainstreaming Natural Capital into Decisions, in Kareiva, P. et al. (eds). *Natural capital: Theory and practice of mapping ecosystem services*. Oxford University Press.

- Polasky, S., G. Caldarone, T. K. Duarte, J. Goldstein, N. Hannahs, **T. H. Ricketts**, and H. Tallis (2011). Putting Ecosystem Service Models to Work: Conservation, Management and Tradeoffs. in Kareiva, P. et al. (eds). *Natural capital: Theory and practice of mapping ecosystem services*. Oxford University Press.
- Conte, M., E. Nelson, K. Carney, C. Fissore, N. Olwero, A. Plantinga, S. Wood, and **T. H. Ricketts** (2011). Terrestrial Carbon Sequestration and Storage. in Kareiva, P. et al. (eds). *Natural capital: Theory and practice of mapping ecosystem services*. Oxford University Press.

2010

- Ricketts, T.H.**, B. Soares-Filho, G. A. B. da Fonseca, D. Nepstad, A. Pfaff, A. Peterson, A. Anderson, D. Boucher, A. Cattaneo, M. Conte, K. Creighton, L. Linden, C. Maretti, P. Moutinho, R. Ullman, R. Victurine (2010). Indigenous lands, Protected areas, and slowing climate change. *PLoS Biology* 8:3 e10000331

2009

- Lonsdorf, E., Kremen, C., **Ricketts, T.H.**, Winfree, R., Williams, N. and Greenleaf, S. (2009). Modeling pollination services across agricultural landscapes. *Annals of Botany* 103(9): 1-12.
- Daily, G.C., S. Polasky, J. Goldstein, P. M. Kareiva, H.A. Mooney, L. Pejchar, **T.H. Ricketts**, J. Salzman, R. Shallenberger (2009). Ecosystem services in decision-making: Time to deliver. *Frontiers in Ecology and Environment* 7(1):21-28.
- Nelson, Erik, G. Mendoza, J. Regetz, S. Polasky, H. Tallis, D.R. Cameron, K.M.A. Chan, G.C. Daily, J. Goldstein, P. Kareiva, E. Lonsdorf, R. Naidoo, **T.H. Ricketts**, M.R. Shaw (2009). Modeling multiple ecosystem services, biodiversity, conservation, commodity production, and tradeoffs at landscape scales. *Frontiers in Ecology and Environment* 7(1): 4-11.
- Mwakalila, S., Burgess, N. D., **Ricketts, T.H.**, Olwero, N. , Swetnam, R., Mbilinyi, B., Marchant, R., Mtalo, F., White, S., Munishi, P., Marshall, A., Malimbwi, R., Smith, C., Jambiya, G., Madoffe, S., Fisher, B., Kajembe, G., Morse-Jones, S., Kulindwa, K., Green, J., Balmford, A. (2009). Linking Science with Stakeholders to Sustain Natural Capital. *The Arc Journal* 23: 22-27

2008

- Allnutt, T.F., S. Ferrier, G. Manion, G. V. N. Powell, **T.H. Ricketts**, B.L. Fisher, G.J. Harper, C. Kremen, J. Labat, D.C. Lees, T.A. Pearce, M.E. Irwin, F. Rakotondrainibe. (2008). Quantifying biodiversity loss in Madagascar from a 50-year record of deforestation. *Conservation Letters* 1:173-181.
- Naidoo, R., A. Balmford, R. Costanza, B. Fisher, R.E. Green, B. Lehner, T.R. Malcolm, **T.H. Ricketts** (2008). Global mapping of ecosystem services and conservation priorities. *Proceedings of the National Academy of Sciences – US*. 105: 9495-9500.
- Loucks, C., **T.H. Ricketts**, R. Naidoo, J. Lamoreux, J. Hoekstra (2008). Explaining the global pattern of protected area coverage: relative importance of vertebrate biodiversity, human activities and agricultural suitability. *J. Biogeography*. 35:1337-1348.

2007

- Ricketts, T.H.**, J. Regetz, I. Steffan-Dewenter, S. A. Cunningham, C. Kremen, B. Gemmill, S. S. Greenleaf, A. M. Klein, M. M. Mayfield, L. A. Morandin, A. Ochieng', R. Winfree. (2007). Landscape effects on crop pollination services: Are there general patterns?. *Ecology Letters* 11:499-515.
- Grand, J., M. P. Cummings, T. G. Rebelo, **T. H. Ricketts**, and M. C. Neel. 2007. Biased data reduce efficiency and effectiveness of conservation reserve networks. *Ecology Letters* 10:364-374.
- Armsworth, P.R., K.M.A. Chan, G.C. Daily, P.R. Ehrlich, C. Kremen, **T.H. Ricketts**, M.A. Sanjayan (2007). Ecosystem service science and the way forward for conservation. *Conservation Biology* 21: 1383-1384.
- Zhang, W., **T.H. Ricketts**, C. Kremen, K.M. Carney, S.M. Swinton (2007). Ecosystem services and dis-services to agriculture. *Ecological Economics* 64: 253-260.
- Hess, G., R.A. Bartel, A. Leidner, K.M. Rosenfeld, M.J. Rubino, S. Snider, **T.H. Ricketts** (2007). Effectiveness of biodiversity indicators varies with extent, grain, and region. *Biological Conservation* 132:448-457.
- Lamoreux, J.F., J.C. Morrison, **T.H. Ricketts**, D.M. Olson, E. Dinerstein, M.W. McKnight, H. H. Shugart (2007). The multifaceted nature of biodiversity conservation: Reply to Leroux and Schiegelow. *Conservation Biology*. 21: 269-270.
- Kremen, C., N. Williams, M.A. Aizen, B. Gemmill-Herren, G. LeBuhn, R. Minckley, L. Packer, S. Potts, T. Roulston, I. Steffan-Dewenter, D. Vazquez, R. Winfree, L. Adams, E. Crone, S. Greenleaf, T. Keitt, A.M. Klein, J. Regetz, **T.H. Ricketts** (2007). Pollination and other ecosystem services produced by mobile organisms: a conceptual framework for the effects of land use change. *Ecology Letters*. 10:299-314.

2006

- Naidoo, R., A. Balmford, P. J. Ferraro, S. Polasky, **T. H. Ricketts**, M. Rouget (2006). Integrating economic costs into conservation planning. *Trends in Ecology and Evolution* 21(12): 681-687.
- Florez, J.A.; M.A. Guzmán, **T.H. Ricketts**, R. Vandame (2006). Café y abejas: conservación y producción. In Pohlan, A.J., L. Soto Pinto, and J.F. Barrera (eds). *El cafetal del futuro: Realidades y visiones*. Shaker Verlag, Aachen, Germany
- Naidoo, R. and **T.H. Ricketts** (2006). Mapping economic costs and benefits of conservation. *PLoS Biology* 4(11):e360.
- Lamoreux, J.F., J.C. Morrison, **T.H. Ricketts**, D.M. Olson, E. Dinerstein, M.W. McKnight, H. H. Shugart (2006). Global tests of biodiversity concordance and the importance of endemism. *Nature* 440:212-213.
- Burgess, N., J. D'Amico Hales, **T.H. Ricketts**, E. Dinerstein. 2006. Factoring species, non-species values and threats into biodiversity prioritisation across the ecoregions of Africa and its islands. *Biological Conservation* 127:383-401.
- Ricketts, T.H.**, N. Williams, and M. Mayfield (2006). Connectivity and ecosystem services: crop pollination in fragmented landscapes. In Crooks, K. and M. Sanjayan, editors. *Connectivity Conservation*. Cambridge University Press, Cambridge, UK.

2005

- Ricketts, T.H.**, E. Dinerstein, T. Boucher, T.M. Brooks, S.M. Butchart, M. Hoffman, J.F. Lamoreux, J. Morrison, M. Parr, J.D. Pilgrim, A.S.L. Rodrigues, W. Sechrest, G.E. Wallace, K. Berlin, J. Bielby, N.D. Burgess, D.R. Church, N. Cox, D. Knox, C. Loucks, G.W. Luck, L.L. Master, R. Moore, R. Naidoo, R. Ridgely, G.E. Schatz, G. Shire, H. Strand, W. Wettengel, E. Wikramanayake (2005). Pinpointing and preventing imminent extinctions. *Proceedings of the National Academy of Sciences – US* 102:18497-18501.
- Kier, G., J. Mutke, E. Dinerstein, **T.H. Ricketts**, W. Küper, H. Kreft, W. Barthlott. (2005) Global patterns of plant diversity. *Journal of Biogeography* 32:1107-1116.
- Loh, J., R.E. Green, **T.H. Ricketts**, J. Lamoreux, M. Jenkins, V. Kapos, and J. Randers (2005). The Living Planet Index: Using species population time series to track trends in biodiversity. *Philosophical Transactions of the Royal Society of London, Series B* 360:289-295
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- Defries, R., et al. 2005. Analytical approaches for assessing ecosystem condition and human well-being. in N. J. Ash, R. Hassan, and R. Scholes, eds. *Millennium Ecosystem Assessment. Ecosystems and human well-being, vol. 1: Current state and trends*. Island Press, Washington, DC.
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2004

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Rosenzweig, M.L., W. Turner, J.G. Cox, and **T.H. Ricketts**. (2003). Estimating diversity in unsampled habitats of a biogeographical province. *Conservation Biology* 17(3):864-874.

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Ricketts, T.H., G.C. Daily, and P.R. Ehrlich. (2002). Does butterfly diversity predict moth diversity? Testing a popular indicator taxon at local scales. *Biological Conservation* 103(3):361-370.

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Ricketts, T.H. (2001). The matrix matters: effective isolation in fragmented landscapes. *American Naturalist* 158(1):87-99.

Ricketts, T.H., G.C. Daily, P.R. Ehrlich, and J.P. Fay. (2001). Countryside biogeography of moths in a fragmented landscape: biodiversity in native and agricultural habitats. *Conservation Biology* 15(2):378-388.

Balvanera, P., G.C. Daily, P.R. Ehrlich, **T.H. Ricketts**, S.A. Bailey, S.Kark, C. Kremen, and H. Pereira. (2001). Conserving biodiversity and ecosystem services. *Science* 291(5511):2047.

Hughes, J.B., J.J. Hellmann, **T.H. Ricketts**, and B.J. Bohannan. (2001). Counting the uncountable: Statistical approaches to estimating microbial diversity. *Applied and Environmental Microbiology* 67(10):4399-4406.

Ricketts, T.H. (2001). Aligning conservation goals: are patterns of species richness and endemism concordant at regional scales? *Animal Biodiversity and Conservation* 24(1):91-99

Olson, D.M., E. Dinerstein, E.D. Wikramanayake, N.D. Burgess, G.V.N. Powell, E.C. Underwood, J.A. D'Amico, I. Itoua, H.E. Strand, J.C. Morrison, C.J. Loucks, T.F. Allnutt, **T.H. Ricketts**, Y. Kura, J.F. Lamoreux, W.W. Wettengel, P. Hedao, and K.R. Kassem. (2001). Terrestrial ecoregions of the world: New map of life on earth. *Bioscience* 51(11):933-938.

Heal, G. G.C. Daily, P.R. Ehrlich, J. Salzman, C. Boggs, J.J. Hellmann, J.B. Hughes, C. Kremen, **T.H. Ricketts**. (2001). Protecting natural capital through ecosystem service districts. *Stanford Environmental Law Journal* 20(2):333-364.

Ricketts, T.H. (2001). Conservation biology and biodiversity. *Encyclopedia of Life Sciences*. MacMillan Reference Ltd, London.

2000

Kremen, C. and **T.H. Ricketts**. (2000). Global perspectives on pollination disruptions. *Conservation Biology* 14(5):1226-1228.

1999

- Ricketts, T.H.**, E. Dinerstein, D.M. Olson, C. Loucks. (1999). Who's where in North America? Patterns of species richness and the utility of indicator taxa for conservation. *Bioscience* 49(5):369-381.
- Fleishman, E., G.H. Wolff, C.L. Boggs, P.R. Ehrlich, A.E. Launer, J.O. Niles and **T.H. Ricketts**. (1999). Conservation in practice: overcoming obstacles to implementation. *Conservation Biology* 13:450-452

Non-peer-reviewed Publications

- Tallis, H.T., **Ricketts, T.H.**, Guerry, A.D., Nelson, E., Ennaanay, D., Wolny, S, Olwero, N., Vigerstol, K., Pennington, D., Mendoza, G., Aukema, J., Foster, J., Forrest, J., Cameron, D, Lonsdorf, E., Kennedy, C., Verutes, G., Kim, C.K., Guannel, G., Papenfus, M., Toft, J., Marsik, M., and Bernhardt, J. (2011). *INVEST 2.0 beta User's Guide*. The Natural Capital Project.
- WWF (2010). Living Planet Report. Contributing author, ecosystem services sections.
- Ricketts, T.H.** (2010). Why ecoregions? In Hoekstra et al. eds. *The Atlas of Global Conservation*. University of California Press. Pp. 6-7.
- Burgess, N., Mwakalila, S., Madoffe, S., **Ricketts, T.H.**, Olwero, N., Swetnam, R., Mbilinyi, B., Marchant, R., Mtalo, F., White, S., Munishi, P., Marshall, A., Malimbwi, R., Jambiya, G., Fisher, B., Kajembe, G., Morse-Jones, S., Kulindwa, K., Green, J., and A. Balmford (2009). Valuing the Arc – A Programme to Map and Value Ecosystem Services in Tanzania. *Mountain Research Initiative Newsletter* 18(3):18-21.
- Burgess, N.D., **T. H. Ricketts**, A. Balmford and R. Wild. 2004. The 5th World Parks Congress. *Oryx* 38: 1-2.
- Flather, C.H.; **Ricketts, T.H.**; Sieg, C.H.; Knowles, M.S.; Fay, J.P.; McNees, J. 2003. Criterion 1: conservation of biological diversity. Indicator 6: the number of forest-dependent species. In: Darr, D., compiler. *Technical document supporting the 2003 national report on sustainable forests*. Washington, DC: U.S. Department of Agriculture, Forest Service.
- Flather, C.H.; **Ricketts, T.H.**; Sieg, C.H.; Knowles, M.S.; Fay, J.P.; McNees, J.. 2003. Criterion 1: Conservation of biological diversity. Indicator 7: The status (threatened, rare, vulnerable, endangered, or extinct) of forest-dependent species at risk of not maintaining viable breeding populations, as determined by legislation or scientific assessment. In: Darr, D., compiler. *Technical document supporting the 2003 national report on sustainable forests*. Washington, DC: U.S. Department of Agriculture, Forest Service.
- Fleishman, E., C.L. Boggs, M.C. Devine, S. Kark, and **T.H. Ricketts**. (2001). Status of the union. Review of Mac, M.J., P.A. Opler, C.E. Puckett Haecker, and P.D. Doran, editors. 1998. Status and Trends of the Nation's Biological Resources. U.S.G.S., Reston, Virginia. *Conservation Biology* 14(6):1926-1927.
- Dinerstein, E., G. Powell, D.M. Olson, E. Wikramanayake, R. Abell, C. Loucks, E. Underwood, T. Allnutt, W. Wettengel, **T.H. Ricketts**, H. Strand, S. O'Connor, and N. Burgess. 2001. *A workbook for conducting biological assessments and*

developing biodiversity visions for ecoregion-based conservation. World Wildlife Fund, Washington, DC.

Ricketts, T.H. 1999. Managing water more wisely. Review of P.H. Gleik. 1998. The World's Water. *Bioscience* 49(10):831-832.

Hellmann, J.J., J.B. Hughes, and **T.H. Ricketts**. 1998. Review of J.L. Simon, editor. 1995. The State of Humanity. *Ecofables/ECOSCIENCE* 1:11-17.

Ricketts, T.H., E.S. Bryant, R.W. Birnie, K.D. Kimball. 1992. Landsat TM mapping of alpine vegetation to monitor global climate change. *Proceedings of the American Society for Photogrammetry and Remote Sensing/ ACSM/RT 92 Convention*. Washington, D.C., USA. August 3-7, 1992. IV:86-97.

GRANTS

Vermont Agency of Agriculture, Food and Markets Program Managing locally sourced native bees as alternative pollinators \$36,055 to UVM, PI	2017-present
Various private individuals <i>Specific projects and general program support to Gund Institute, UVM</i> Total of over \$7,000,000, PI	2013-present
USDA, McIntire Stennis Cooperative Program <i>Ecosystem services from a changing Northern Forest</i> \$142,000 to UVM, PI	2015-2017
Luc Hoffmann Institute, WWF <i>Watershed and Health</i> \$108,000 to UVM, PI	2015-2017
USDA, McIntire Stennis Cooperative Program <i>Managing the matrix: A framework for assessing ecosystem services in forested landscapes.</i> \$950,000 to UVM, Co-PI (PI Bill Keeton, UVM)	2014-2019
Social Sciences and Humanities Research Council, Canada <i>Economics for the Anthropocene</i> \$2,500,000 total, ~ \$750,000 to UVM, Co-PI (PI Peter Brown, McGill University)	2014-2020
National Science Foundation Research Coordination Network <i>Scenarios, Services, and Society</i> \$750,000 total, \$0 to UVM, Co-PI (PI David Foster, Harvard Forest)	2014-2018
Lintilhac Foundation <i>Conserving Nature for a Resilient Vermont</i> \$17,000, PI	2013-2014
Gordon and Betty Moore Foundation <i>Health and Ecosystems, Analysis of Linkages</i> \$2,000,000 total, \$306,000 to UVM, Co-PI (PI Steve Osofsky, WCS)	2012-2016
WWF Senior Fellowship <i>Valuing Nature</i> \$71,000, PI	2012-2014
USDA <i>Developing Sustainable Pollination Strategies for US Specialty Crops</i> ~\$3,000,000 total, \$736,000 to UVM, Co-PI (PI Rufus Isaacs, Michigan State U.)	2012-2017

NSF SESYNC	2012-2014
<i>Human health and welfare, ecological condition and natural resources governance</i>	
\$100,000, PI (with Brendan Fisher, WWF)	
National Research Council	2012-2013
<i>Healthy ecosystems and healthy people: Bridging disciplines to understand health impacts of environmental change</i>	
\$100,000, co-PI (with Kate Brauman, U. Minnesota)	
Google, Inc.	2010-2012
<i>Natural Capital Project</i>	
\$2,000,000, PI	
Norwegian Agency for Development Cooperation	2010-2013
<i>REDD for People and Nature</i>	
\$4,800,000 in 2 phases, \$1,080,000 for WWF Science	
Various private individuals	2009-2011
<i>Specific projects and general program support to WWF Science Program</i>	
Total of over \$435,000, PI	
Moore Foundation	2008-2010
<i>Marine InVEST: Development and application of ecosystem service models to inform marine ecosystem-based management</i>	
\$1,970,000 total, \$80,000 to WWF Science	
Wilberforce Foundation	2010
<i>Natural Capital Project</i>	
\$2,750, PI	
Packard Foundation	2007-2009
<i>Putting ecosystem services to work in Eastern Arc Mountains, Tanzania,</i>	
\$400,000, PI	
NASA	2005
<i>Measuring Wild Nature for 2010 targets – Royal Society Workshop</i>	
\$10,000, PI	
NASA Earth Science Land Cover Land Use Change Program	2000-2004
<i>Measuring human impacts on the biodiversity and carrying capacity of ecosystems</i>	
\$182,000 for WWF Science, collaborator, PI: Marc Imhoff, NASA	
U.S. Forest Service	2001-2002
<i>Regional and local species diversity of birds in North America</i>	
\$10,000, PI	
Summit Foundation	2000-2002
<i>Coffee pollination in a tropical fragmented landscape: conservation of an important ecosystem service</i>	
\$200,000, PI	
NASA Earth Observing System Interdisciplinary Science Program	1999-2000
<i>Urbanization, land use, and biological resources</i>	
\$10,000 to support graduate project, collaborator, PI: Marc Imhoff, NASA	

HONORS

Named “Highly Cited Researcher” by Thompson Reuters	2014, 2015
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Visiting Distinguished Ecologist, Colorado State University	2013
Boething Lecture, Stanford University	2010
Rothenburg Lecture: Biology in Public Policy, Bryn Mawr College	2008
Zayed Prize for Scientific Achievement in Environment (shared with all authors of Millennium Ecosystem Assessment)	2005
Teresa Heinz Scholarship for Environmental Research	1999-2000
Wessells Award for outstanding performance in teaching (Stanford University)	1998
National Science Foundation Graduate Research Fellowship	1996-1999
NASA Space Grant Undergraduate Fellow	1991
Upham Prize for most outstanding research in Earth Sciences (Dartmouth College)	1991

TEACHING AND MENTORING

Courses

Landscape Ecology, UVM	2014, 2015
Behavioral Economics, UVM	2013
Ecosystem Services, UVM	2013, 2015, 2016
Ecosystems and Human Health, UVM	2012
Field Ecology, Stanford University (with Diane Wagner and Nate Sanders)	1998

Graduate students

Jesse Gourevitch, UVM, PhD	2016-present
Aaron Schwartz, UVM, PhD	2015-present
Charlie Nicholson, UVM, PhD	2013-present
Keri Bryan, UVM, PhD	2013-2017
Steve Posner, UVM, PhD	2012-2015

Advisees

Melanie Kazenel	2016-present
Kathryn Wrigley, UVM, PhD	2015-present
Hilary Byerly, UVM, PhD	2015-present
Qing Ren, UVM, MS	2014-2016
Samantha Alger, UVM, PhD	2013-present
Michele Brown, UVM, PhD	2013-present
Sam Carlson, UVM, MS	2012-2016
Joan White, UVM, MS	2012-2014
Sebastian Castro, UVM, PhD	2012-2014
Pierre Mokondoko, Insituto de Ecologia, Mexico, PhD	2011-present
Becky Cushing, UVM, MS	2012-2013
Christina Kennedy, U. Maryland, PhD	2004-2010

Post-doctoral researchers

Ranaivo Rasolofoson, U. Vermont	2016-present
Nitin Singh, U. Vermont	2016-present
Leif Richardson, U. Vermont	2015-present
Laura Sonter, U. Vermont	2015-2017

Insu Koh, U. Vermont	2013-2017
Alicia Ellis, U. Vermont	2012-2014
Octavio Aburto-Oropeza, Scripps Institution, WWF Fuller Fellow	2010-2012
Joanna Grand, U. Maryland, NSF Post-doctoral fellow	2005-2008
Robin Naidoo, WWF, SHHRC Post-doctoral fellow	2003-2005

PROFESSIONAL ACTIVITIES

Scientific Panels and Committees

Advisory Council, Institute at Brown for Environment and Society	2015-present
Review Editor, Intergov. Platform on Biodiversity and Eco. Services	2014-2016
Conservation Research Panel, WWF Hoffmann Institute	2012-2015
Advisory Council, RFF Center for Management of Ecological Wealth	2012-2014
Science Advisory Board, NCEAS (Chair 2010-2011)	2008-2012
Committee on Status of Pollinators, National Research Council	2005-2006
Coordinating Lead Author, Millennium Ecosystem Assessment	2000-2005

Editorial service

Associate Editor, <i>Frontiers in Ecology and Evolution</i>	2005-2012
Faculty member, Faculty of 1000 Biology	2004-2008
Editorial Board, <i>Animal Biodiversity and Conservation</i>	2002-present

UVM Service

UVM Faculty Senate	2015-2017
Campus wide Committee to resource Environment Institute (co-chair)	2015
Campus wide Committee to design Environment Institute (co-chair)	2014
Campus wide Committee on Envisioning Environment at UVM	2012-2013
Rubenstein School Graduate Standards Committee	2012-2015
Rubenstein School committee to design an online masters degree	2012-2013

Community service

External Review Panel, Institute on Environment, U. Minnesota	2013
Governing Board, Vermont Land Conservation and Flood Resiliency	2012-present
Governing Board, Natural Capital Project	2007-present

Professional associations

International Society for Ecological Economics	2012-present
American Association for the Advancement of Science	2004-present
Ecological Society of America	1997-present
Society for Conservation Biology	1997-present
Rocky Mountain Biological Laboratory	1998-2002

Invited seminars and lectures

AAAS, invited talk	2017
National Council for Science and the Environment (NCSE), invited talk	2017
Symposium on Ecological Levers for Health (UC Santa Barbara)	2017
Planetary Health Alliance, Inaugural meeting	2017

CATIE (Costa Rica)	2016
International Conference on Pollinator Biology, Health, and Policy (plenary)	2016
Symposium on Vermont's Pollinators (keynote)	2016
University of Cambridge, International Student Conference (keynote)	2016
Institute for Ecology, Xalapa Mexico, invited seminar	2015
University of California, Berkeley, ESPM invited seminar	2015
International Alliance of Research Univ., Sustainability Congress (keynote)	2014
U. Copenhagen, Center for Macroecology, Evolution and Climate	2014
Franklin and Marshall College, Department of Biology	2014
University of British Columbia, Biodiversity Research Seminar	2013
University of Maine, Dept. of Wildlife Ecology and School of Economics	2013
Colorado State University, Distinguished Visiting Ecologist	2013
Ecological Society of America Emerging Issues conference (plenary address)	2012
Miller Institute Symposium, UC Berkeley (distinguished speaker)	2011
University of Washington, College of the Environment	2011
World Bank, WAVES symposium (plenary speaker and panelist)	2011
University of North Carolina, Curriculum for Ecology (student-invited speaker)	2011
University of Vermont, Rubenstein School for Environment and NR	2011
Resources for the Future	2011
North Carolina State, Department of Forestry	2010
Stanford University, Annual Boething Lecture	2010
Dartmouth College, Department of Biology	2010
Princeton University, Woodrow Wilson School of Public and Intntl Affairs	2009
Duke University, Ecology Program	2009
American Institute for Biological Sciences Annual Meeting (plenary)	2009
Millennium Ecosystem Assessment, Kuala Lumpur, Malaysia	2008
Global Environment Facility (GEF) Secretariat, Natural Resources Seminar	2008
University of Colorado, Boulder, Dept. of Ecology & Evolutionary Biology	2008
RUBICODE – Ecosystem Services in Dynamic Landscapes, Sweden	2008
USDA CREES, Ecosystem Services Seminar series	2007
US Forest Service, Ecosystem Services seminar series	2007
US EPA, Office of Research and Development	2007
Aldo Leopold Leadership Program	2006
University of North Carolina, Curriculum in Ecology	2006
Google Tech Talk	2005
USAID, Biodiversity Program	2005
University of Tennessee, Department of Ecology and Evolutionary Biology	2005
Duke University, Nicholas School of Environment	2004
International Leadership Institute for Environmental Education, Orlando, FL	2004
Cambridge University, Department of Zoology	2004
Brown University, Department of Ecology and Evolutionary Biology	2003
University of Maryland, Behavior, Ecology, Evolution, and Systematics	2003
Humboldt State University, Department of Biology	2002
Utah State University, School of Natural Resources	2002
Victoria University, Wellington, New Zealand, School of Biological Sciences	2001
University of Arizona, Department of Ecology and Evolutionary Biology	2001

