

Curriculum Vitae

Richard T. T. Forman, Harvard University

Primary Books

- Forman, R. T. T., ed. 1979. *Pine Barrens: Ecosystem and Landscape*. Academic Press, New York. 601 pp. [1998 edition, Rutgers University Press].
- Forman, R. T. T. and M. Godron. 1986. *Landscape Ecology*. John Wiley, New York. 619 pp. [1990, 1994 Chinese editions; 1993 Czech edition].
- Zonneveld, I. S. and R. T. T. Forman, eds. 1990. *Changing Landscapes: An Ecological Perspective*. Springer-Verlag, New York. 286 pp.
- Forman, R. T. T. 1995. *Land Mosaics: The Ecology of Landscapes and Regions*. Cambridge University Press, Cambridge/New York. 632 pp. [2000 Korean edition (2002 paperback)].
- Dramstad, W., J. D. Olson, and R. T. T. Forman. 1996. *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning*. Published by Harvard University Graduate School of Design, American Society of Landscape Architects, and Island Press, Washington, D.C. 80 pp. [2005 Spanish edition; 2006 Chinese edition; 2008 Farsi edition].
- Forman, R. T. T., D. Sperling, J. A. Bissonette, A. P. Clevenger, C. D. Cutshall, V. H. Dale, L. Fahrig, R. France, C. R. Goldman, K. Heanue, J. A. Jones, F. J. Swanson, T. Turrentine, and T. C. Winter. 2003. *Road Ecology: Science and Solutions*. Island Press, Washington, D. C. 481 pp. [2008 Chinese edition].
- Forman, R. T. T. 2004. *Mosaico territorial para la region metropolitana de Barcelona. (Land Mosaic for the Greater Barcelona Region)*. Editorial Gustavo Gili, Barcelona, Spain. 150 pp.
- Forman, R. T. T. 2008. *Urban Regions: Ecology and Planning Beyond the City*. Cambridge University Press, Cambridge/New York. 408 pp.
- Forman, R. T. T. 2014. *Urban Ecology: Science of Cities*. Cambridge University Press, Cambridge/New York. 462 pp. [Chinese edition 2018].
- Forman, R. T. T. 2019. *Towns, Ecology, and the Land*. Cambridge University Press, Cambridge/New York. 585 pp.
- Forman, R. T. T., D. R. J. Kaye and R. White. 2021. *Ecology along Concord Trails: Exploring Fourteen Areas*. Natural Resources Division, Concord, Massachusetts. 107 pp.

Selected Scholarly Articles (of >165 total)

- Forman, R. T. T. 1964. Growth under controlled conditions to explain the hierarchical distributions of a moss, *Tetraphis pellucida*. *Ecological Monographs* 34: 1-25.
- Forman, R. T. T. 1969. Comparison of coverage, biomass, and energy as measures of standing crop of bryophytes in various ecosystems. *Bulletin of the Torrey Botanical Club* 96: 582-591.
- Forman, R. T. T. 1975. Canopy lichens with blue-green algae: a nitrogen source in a Colombian rainforest. *Ecology* 56: 1176-1184.
- Forman, R. T. T., A. E. Galli, and C. F. Leck. 1976. Forest size and avian diversity in New Jersey woodlots with some land-use implications. *Oecologia* 26: 1-8.
- Allen, E. B. and R. T. T. Forman. 1976. Plant species removals and old-field community structure and stability. *Ecology* 57: 1233-1243.

- Forman, R. T. T. 1979. The Pine Barrens of New Jersey: an ecological mosaic. In *Pine Barrens: Ecosystem and Landscape*, R. T. T. Forman, ed. Academic Press, New York. Pp. 569-585.
- Forman, R. T. T. and M. Godron. 1981. Patches and structural components for a landscape ecology. *BioScience* 31: 733-740.
- Forman, R. T. T. 1981. Interaction among landscape elements: a core of landscape ecology. In *Perspectives in Landscape Ecology*, S. P. Tjallingii and A. A. de Veer, editors. Proceedings of the International Congress of the Netherlands Society of Landscape Ecology, Veldhoven. PUDOC, Wageningen, Netherlands. Pp. 35-48.
- Forman, R. T. T. and R. E. J. Boerner. 1981. Fire frequency and the Pine Barrens of New Jersey. *Bulletin of the Torrey Botanical Club* 108: 34-50.
- Forman, R. T. T. 1983. (Editorial). An Ecology of the landscape. *BioScience* 33: 535.
- Risser, P. G., J. R. Karr, and R. T. T. Forman. 1983. *Landscape Ecology: Directions and Approaches*. Illinois Natural History Survey, Special Publication Number 2, Champaign, Illinois. 18 pp.
- Forman, R. T. T. 1983. Corridors in a landscape: their ecological structure and function. *Ekologia (Czechoslovakia CSSR)* 2: 375-387.
- Forman, R. T. T. and J. Baudry. 1984. Hedgerows and hedgerow networks in landscape ecology. *Environmental Management* 8: 495-510.
- Milne, B. T. and R. T. T. Forman. 1986. Peninsulas in Maine: woody plant diversity, distance, and environmental patterns. *Ecology* 67: 967-974.
- Franklin, J. F. and R. T. T. Forman. 1987. Creating landscape patterns by forest cutting: ecological consequences and principles. *Landscape Ecology* 1: 5-18.
- Hardt, R. A. and R. T. T. Forman. 1989. Boundary form effects on woody colonization of reclaimed surface mines. *Ecology* 70: 1252-1260.
- Peterken, G. F., D. Ausherman, M. Buchenau, and R. T. T. Forman. 1992. Old-growth conservation within British upland conifer plantations. *Forestry* 65: 127-144.
- Cantwell, M. D. and R. T. T. Forman. 1994. Landscape graphs: ecological modeling with graph theory to detect configurations common to diverse landscapes. *Landscape Ecology* 8: 239-255.
- Forman, R. T. T. 1995. Some general principles of landscape and regional ecology. *Landscape Ecology* 10: 133-142.
- Forman, R. T. T. and S. K. Collinge. 1995. The "spatial solution" to conserving biodiversity in landscapes and regions. In *Conservation of Faunal Diversity in Forested Landscapes*. R. M. DeGraaf and R. I. Miller, eds. Chapman & Hall, London. Pp. 537-568.
- Forman, R. T. T. and A. M. Hersperger. 1996. Road ecology and road density in different landscapes, with international planning and mitigation solutions. In *Trends in Addressing Transportation Related Wildlife Mortality*. G. L. Evink *et al.*, eds. Publication FL-ER-58-96, Florida Department of Transportation, Tallahassee, Florida. Pp. 1-22.
- Forman, R. T. T. and L. E. Alexander. 1998. Roads and their major ecological effects. *Annual Review of Ecology and Systematics* 29: 207-231.
- Collinge, S. K. and R. T. T. Forman. 1998. A conceptual model of land conversion processes: predictions and evidence from a microlandscape experiment with grassland insects. *Oikos* 82: 66-84.
- Forman, R. T. T. and R. D. Deblinger. 2000. The ecological road-effect zone of a Massachusetts (USA) suburban highway. *Conservation Biology* 14: 36-46.
- Forman, R. T. T. 2000. Estimate of the area affected ecologically by the road system in the United States. *Conservation Biology* 14: 31-35.

- Forman, R. T. T., B. Reineking, and A. M. Hersperger. 2002. Road traffic and nearby grassland bird patterns in a suburbanizing landscape. *Environmental Management* 29: 782-800.
- Hersperger, A. M. and R. T. T. Forman. 2003. Adjacency arrangement effects on plant diversity and composition in woodland patches. *Oikos* 101: 279-290.
- Forman, R. T. T. 2004. Road ecology's promise: What's around the bend? *Environment* 46: 8-21.
- Forman, R. T. T. 2008. (Editorial). The urban region: natural systems in our place, our nourishment, our home range, our future. *Landscape Ecology* 23: 251-253.
- McDonald, R. I., P. Kareiva, and R. T. T. Forman. 2008. The implications of current and future urbanization for global protected areas and biodiversity conservation. *Biological Conservation* 141: 1695-1703.
- McDonald, R. I., R. T. T. Forman, P. Kareiva, R. Neugarten, D. Salzer, and J. Fisher. 2009. Urban effects, distance, and protected areas in an urbanizing world. *Landscape and Urban Planning* 93: 63-75.
- Forman, R. T. T. 2010. Coastal regions: spatial patterns, flows, and a people-nature solution from the lens of landscape ecology. In *La costa obliqua: Un atlante per la Puglia (The Oblique Coast: An Atlas for Puglia)*. M. Mininni, ed. Donzelli editore, Roma, Italy. Pp. 249-265.
- Hurley, S. E. and R. T. T. Forman. 2011. Stormwater ponds and biofilters for large urban sites: modeled arrangements that achieve the phosphorus reduction target for Boston's Charles River, USA. *Ecological Engineering* 37: 850-863.
- Forman, R. T. T. and D. Sperling. 2011. The future of roads: no driving, no emissions, nature reconnected. *Solutions* 2: 10-23. (Expanded version, www.thesolutionsjournal.com).
- Forman, R. T. T. 2012. Infrastructure and nature: reciprocal effects and patterns for our future. In *Infrastructure Sustainability and Design*. S. N. Pollalis, D. L. Schodek, S. J. Ramos, and A. Georgoulis, eds. Routledge, New York. Pp. 35-49.
- Lydecker, M. and R. T. T. Forman. 2013. Diverse productive roadsides: ecologically integrating agriculture along our highways. *Oecologia Australis* 17: 157-174.
- Forman, R. T. T. 2014. The Barcelona edge: combining built and natural environments. In *Urbanism of open spaces: landscape, leisure and production*. Barcelona, Spain: Quaderns---Pla Director Urbanistic 03, Workshop 2, Area Metropolitana de Barcelona. Pp. 26-40.
- Forman, R. T. T. 2015. Corredores verdes ecologicos---Ecological green corridors. *Paisea* 30: 8-13.
- Forman, R. T. T. 2015. Launching landscape ecology in America and learning from Europe. In *History of Landscape Ecology in the United States*. G. W. Barrett, T. L. Barrett and J. Wu, eds. New York: Springer. Pages 13-30.
- Kolbe, J. J., VanMiddlesworth, P., Battles, A. C., Stroud, J. T., Buffum, B., Forman, R. T. T. and Losos, J. B. 2016. Determinants of spread in an urban landscape by an introduced lizard. *Landscape Ecology* 31: 1795-1813.
- Forman, R. T. T. and Wu, J. 2016. Where are the best places for the next billion people? Think globally, plan regionally. In *Handbook on Biodiversity and Ecosystem Services in Impact Assessment*, D. Geneletti, ed. Cheltenham, UK: Edward Elgar Publishers. Pp. 453-473.
- Forman, R. T. T. 2016. Urban ecology principles: Are urban ecology and natural area ecology really different? *Landscape Ecology* 31: 1653-1662.
- Forman, R. T. T. and Wu, J. 2016. Where to put the next billion people. *Nature* 537: 608-611.
- Forman, R. T. T. 2019. (Editorial). Town ecology for the land of towns and villages. *Landscape Ecology* 34: 2209-2211.

- Forman, R. T. T. 2022. Responses of 73 ecologists important in developing the foundations of ecology: summary of a 1952-59 and 1972 survey. *Bulletin of the Ecological Society of America* 103(1): e01938 (21 pp.).
- Forman, R. T. T. 2022. Ecologists' big step forward: opening the Ecological Society of America's Washington Office in 1983. *Bulletin of the Ecological Society of America* 103(2): e01969 (16 pp).
- Forman, R. T. T. 2022. Values of large-versus-small urban greenspaces and their arrangement. In *Why Cities Need Large Parks: Large Parks in Large Cities*, editor R. Murray. London, Routledge, pp. 18-43.
- Forman, R. T. T. 2022. *Deciphering Concord's Old Stone Walls and What They Indicate: A Field Guide*. Concord Land Conservation Trust, Concord, Massachusetts. 12 pp.

Other Major Activities (by the numbers)

Invited lectures (excluding on own campus)

International: nations (31); host institutions/organizations (104); invited lectures (123)
(most frequent, Spain, Australia, China, France, Colombia)

USA: host institutions/organizations (154), invited lectures (208) (most frequent, Harvard Forest, U. of Massachusetts, U. of New Mexico, U. of Florida)

Visiting scholars & post-doctoral fellows

At Rutgers (3); at Harvard (13)

Major collaborative joint-teaching colleagues (6)

William Foster, Paul G. Pearson, Edmund W. Stiles, Katharine C. Parsons, Michael W. Binford, Mark Brenner

Approx. week-long class field-study trips led (perhaps 250 local trips led):

Puerto Rico & U.S. Virgin Islands (5), Venezuela (2), Virginia (4), West Virginia (2), Maine (8), New Mexico (12), Florida (26)

Teaching at field stations (6)

Pigeon Lake, Wisconsin, 1964, 1965; Organization for Tropical Studies, Costa Rica, 1970; West Indies Lab, St. Croix, 1973; Fort Burgwin Research Center, Taos, New Mexico, 1976; Archbold Biological Station, Florida, 1989-2015; Sevilleta National Wildlife Refuge, New Mexico, 2016

Advisor for students & theses

Doctoral students (11): Elizabeth Haines (Nash), 1973; Gerald E. Lang, 1974; W. Dean Cocking, 1974; Emily Russell (Southgate), 1979; Ralph E. J. Boerner, 1980; Mark J. McDonnell, 1983; Bruce T. Milne, 1985; Sharon K. Collinge, 1995; Anna M. Hersperger, 2000; Lauren Alexander (Augustine), 2003; Stephanie E. Hurley, 2009
Masters students (14), and undergraduate senior thesis students (6)

Ecology history articles (3)

Launching landscape ecology, 2015; Seventy-three early ecologists, 2022; Opening the ESA Washington Office, 2022

Administration (4)

Director, Hutcheson Memorial Forest Center, Rutgers U., 1972-84

Director, Graduate Program in Botany (& Plant Physiology), Rutgers U., 1979-83

Chair(man), Public Affairs Committee, Ecological Society of America, Opening the first ESA Washington Office, 1982-83

Acting Director, Ph.D. Program in Architecture, Landscape Architecture, & Urban

Planning, Harvard U., 1989-90

Service on major university committees (26)

University of Wisconsin (1); Rutgers University (11); Harvard University (14)

Board Member of organization (5)

(Cary) Institute of Ecosystem Studies (Advisory Committee), 1985-88

The Trustees of Reservations (MA), 1984-2001

The Nature Conservancy---Massachusetts Chapter, 2000-10

Massachusetts Audubon Society (Council), 2001-present

Sudbury Valley Trustees, 2015-present

Consulting (5)

The Nature Conservancy---New Jersey/Pennsylvania, 1981

President of Costa Rica & Minister of Natural Resources and Energy, 1994-96

Alberta Forestry, Alberta Wildlife, & Olson & Olson, Calgary, 1996

Mayor & Chief Architect/Planner of Barcelona, Catalonia, 2001-04

Chinese Academy of Transportation Science, Ministry of Transport, China, 2010-11

Editorial Board of Journal (6)

Bulletin of the Torrey Botanical Club (Society), 1967-70; *Ecology*, 1973-77; *Ecological*

Monographs, 1973-77; *Bulletin of the New Jersey Academy of Science*, 1972-84;

BioScience, 1978-84; *Landscape Ecology*, 1987-2001

Lead officer of professional society (3)

International Association of Landscape Ecology, Founding Vice President, 1982-88

Torrey Botanical Club (Society), President, 1980-81

Ecological Society of America, Vice President, 1982-83