

# References

- Abraham, K. F. and Keddy, C. J. (2005). The Hudson Bay Lowland. In *The World's Largest Wetlands: Ecology and Conservation*, eds. L. H. Fraser and P. A. Keddy, pp. 118–48. Cambridge, UK: Cambridge University Press.
- Adam, P. (1990). *Saltmarsh Ecology*. Cambridge, UK: Cambridge University Press.
- Adams, G. D. (1988). Wetlands of the prairies of Canada. In *Wetlands of Canada*, National Wetlands Working Group, Ecological Land Classification Series No. 24, pp. 158–98. Montreal, QC: Polyscience Publications for Sustainable Development Branch, Environment Canada.
- Adamus, P. R. (1992). Choices in monitoring wetlands. In *Ecological Indicators*, eds. D. H. McKenzie, D. E. Hyatt, and V. J. McDonald, pp. 571–92. London: Elsevier.
- Adamus, P. R. (1996). *Bioindicators for Assessing Ecological Integrity of Prairie Wetlands*, EPA/600/R-96/082. Corvallis, OR: U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Western Ecology Division.
- Adamus, P. R. and Stockwell, L. T. (1983). *A Method for Wetland Functional Assessment*, Vol. 1 *Critical Review and Evaluation Concepts*, Report No. FHA-PI-82-23, and Vol. 2 *Federal Highway Administration Assessment Method*, Report No. FHA-PI-82-24. Springfield, VA: National Technical Information Service.
- Adamus, P. R., ARA Inc., Clairain, E. J., Smith, R. D., and Young, R. E. (1987). *Wetland Evaluation Technique (WET)*, Vol. 2, *Methodology*. Vicksburg, MS: U.S. Army Corps of Engineers.
- Aerts, R. and Berendse, F. (1988). The effect of increased nutrient availability on vegetation dynamics in wet heathlands. *Vegetatio*, **76**, 63–9.
- Agrawala, S., Ota, T., Ahmed, A. U., Smith, J., and van Aalst, M. (2003). *Development and Climate Change in Bangladesh: Focus on Coastal Flooding and The Sundarbans*. Paris: Environment Directorate, OECD.
- Agren, G. I. and Fagerstrom, T. (1984). Limiting dissimilarity in plants: randomness prevents exclusion of species with similar competitive abilities. *Oikos*, **43**, 369–75.
- Alestalio, J. and J. Haikio. (1979). Forms created by the thermal movement of lake ice in Finland in winter 1972–73. *Fennia*, **157**, 51–92.
- Alho, C. J. R. (2005). The Pantanal. In *The World's Largest Wetlands: Ecology and Conservation*, eds. L. H. Fraser and P. A. Keddy, pp. 271–303. Cambridge, UK: Cambridge University Press.
- Alho, C. J. R., Lacher, T. E., Jr., and Goncalves, H. C. (1988). Environmental degradation in the Pantanal ecosystem. *BioScience*, **38**, 164–71.
- Allison, M. A. (1998). Historical changes in the Ganges–Brahmaputra delta front. *Journal of Coastal Research*, **14**, 1269–75.
- Allison, S. K. (1995). Recovery from small-scale anthropogenic disturbances by northern California salt marsh plant assemblages. *Ecological Applications*, **5**, 693–702.
- Anderson, R. C., Liberta, A. E., and Dickman, L. A. (1984). Interaction of vascular plants and vesicular–arbuscular mycorrhizal fungi across a soil moisture–nutrient gradient. *Oecologia*, **64**, 111–17.
- Anthoni, J. F. (2006). The chemical composition of seawater. [www.seafriends.org.nz/oceano/seawater.htm](http://www.seafriends.org.nz/oceano/seawater.htm) (accessed June 4, 2008)
- Archibold, O. W. (1995). *Ecology of World Vegetation*. London: Chapman and Hall.
- Aresco, M. J. (2004). Highway mortality of turtles and other herpetofauna at Lake Jackson, Florida, USA, and the efficacy of a temporary fence/culvert system to reduce roadkills. In *Proceedings of the 2003 International Conference on Ecology and Transportation*, eds. C. L. Irwin, P. Garrett, and K. P. McDevmott, pp. 433–49. Raleigh, NC: Center for Transportation and the Environment, North Carolina State University.
- Armentano, T. V. and Verhoeven, J. T. A. (1990). Biogeochemical cycles: global. In *Wetlands and Shallow Continental Water Bodies*, Vol. 1, *Natural*

- and Human Relationships, ed. B. C. Patten, pp. 281–311. The Hague, the Netherlands: SPB Academic Publishing.
- Armstrong, W., Armstrong, J., Beckett, P. M. and Justin, S. H. F. W. (1991). Convective gas-flows in wetland plant aeration. In *Plant Life under Oxygen Deprivation*, eds. M. B. Jackson, D. D. Davies, and H. Lambers, pp. 283–302. The Hague, the Netherlands: SPB Academic Publishing.
- Armstrong, J., W. Armstrong and P. M. Beckett. (1992). *Phragmites australis*: Venturi- and humidity-induced pressure flows enhance rhizome aeration and rhizosphere oxidation. *New Phytologist*, **120**, 197–207.
- Arnold, S. J. (1972). Species densities of predators and their prey. *The American Naturalist*, **106**, 220–35.
- Arnold, T. W. and Frytzel, E. K. (1990). Habitat use by male mink in relation to wetland characteristics and avian prey abundances. *Canadian Journal of Zoology*, **68**, 2205–8.
- Arrhenius, O. (1921). Species and area. *Journal of Ecology*, **9**, 95–9.
- Arroyo, M. T. K., Plissock, P., Mihoc, M., and Arroyo-Kalin, M. (2005). The Magellanic moorland. In *The World's Largest Wetlands*, eds. L. H. Fraser and P. A. Keddy, pp. 424–45. Cambridge, UK: Cambridge University Press.
- Aselman, I. and Crutzen, P. J. (1989). Global distribution of natural freshwater wetlands and rice paddies, their net primary productivity, seasonality and possible methane emissions. *Journal of Atmospheric Chemistry*, **8**, 307–58.
- Atwood, E. L. (1950). Life history studies of the nutria, or coypu, in coastal Louisiana. *Journal of Wildlife Management*, **14**, 249–65.
- Auclair, A. N. D., Bouchard, A. and Pajaczkowski, J. (1976a). Plant standing crop and productivity relations in a *Scirpus-Equisetum* wetland. *Ecology*, **57**, 941–52.
- Auclair, A. N. D., Bouchard, A. and Pajaczkowski, J. (1976b). Productivity relations in a *Carex*-dominated ecosystem. *Oecologia*, **26**, 9–31.
- Austin, M. P. (1982). Use of a relative physiological performance value in the prediction of performance in multispecies mixtures from monoculture performance. *Journal of Ecology*, **70**, 559–70.
- Austin, M. P., Pausas, J. G., and Nicholls, A. O. (1996). Patterns of tree species richness in relation to environment in southeastern New South Wales, Australia. *Australian Journal of Ecology*, **21**, 154–64.
- Bacon, P. R. (1978). *Flora and Fauna of the Caribbean*. Trinidad: Key Caribbean Publications.
- Baedke, S. J. and T. A. Thompson. (2000). A 4700-year record of lake level and isostasy for Lake Michigan. *Journal of Great Lakes Research*, **26**, 416–26.
- Bakker, J. P. (1985). The impact of grazing on plant communities, plant populations and soil conditions on salt marshes. *Vegetatio*, **62**, 391–8.
- Bakker, S. A., Jasperse, C. and Verhoeven, J. T. A. (1997). Accumulation rates of organic matter associated with different successional stages from open water to carr forest in former turbaries. *Plant Ecology*, **129**, 113–20.
- Baldwin, A. H. and Mendelssohn, I. A. (1998a). Response of two oligohaline marsh communities to lethal and nonlethal disturbance. *Oecologia*, **116**, 543–555.
- Baldwin, A. H. and Mendelssohn, I. A. (1998b). Effects of salinity and water level on coastal marshes: an experimental test of disturbance as a catalyst for vegetation change. *Aquatic Botany*, **61**, 255–68.
- Baldwin, A. H., McKee, K. L., and Mendelssohn, I. A. (1996). The influence of vegetation, salinity and inundation of seedbanks of oligohaline coastal marshes. *American Journal of Botany*, **83**, 470–9.
- Ball, P. J. and Nudds, T. D. (1989). Mallard habitat selection: an experiment and implications for management. In *Freshwater Wetlands and Wildlife*, eds. R. R. Sharitz, and J. W. Gibbons, pp. 659–71. US Department of Energy. Proceedings of a Symposium held at Charleston, South Carolina, March 24–27, 1986. Washington, DC: U.S. Department of Energy.
- Barbour, C. D. and Brown, J. H. (1974). Fish species diversity in lakes. *The American Naturalist*, **108**, 473–89.
- Bardecki, M. J., Bond, W. K., and Manning, E. W. (1989). Assessing Greenock Swamp: functions benefits and values. In *Wetlands: Inertia or Momentum?*, pp. 235–44. Conference Proceedings, Oct 21–22. Toronto, ON: Federation of Ontario Naturalists.
- Barko, J. W. and Smart, R. M. (1978). The growth and biomass distribution of two emergent freshwater plants, *Cyperus esculentus* and *Scirpus validus*, on different sediments. *Aquatic Botany*, **5**, 109–17.
- Barko, J. W. and Smart, R. M. (1979). The nutritional ecology of *Cyperus esculentus*, an emergent aquatic

- plant, grown on different sediments. *Aquatic Botany*, **6**, 13–28.
- Barko, J. W. and Smart, R. M. (1980). Mobilization of sediment phosphorus by submersed freshwater macrophytes. *Freshwater Biology*, **10**, 229–38.
- Barnard, J. R. (1978). Externalities from urban growth: the case of increased storm runoff and flooding. *Land Economics*, **54**, 298–315.
- Barry, J. M. (1997). *Rising Tide: The Great Mississippi Flood of 1927 and How It Changed America*. New York: Simon and Schuster.
- Barthelemy, A. (1874). De la respiration et de la circulation des gaz dans les végétaux. *Annales des Sciences Naturelles Botaniques*, **19**, 131–75.
- Bartram, W. (1791). *Travels through North & South Carolina, Georgia, East & West Florida, the Cherokee Country, the Extensive Territories of the Muscogulges, or Creek Confederacy, and the Country of the Chactaws: Containing an Account of the Soil and Natural Productions of These Regions, Together with Observations on the Manners of the Indians*. Philadelphia, PA: James and Johnson. (Digital edition, 2001, in *Documenting the South*, Chapel Hill, NC: University of North Carolina.)
- Batt, B. D. J., Anderson, M. G., Anderson, C. D., and Caswell, F. D. (1989). The use of prairie potholes by North American ducks. In *Northern Prairie Wetlands*, ed. A. G. van der Valk, pp. 204–27. Ames, IA: Iowa State University Press.
- Bauder, E. T. (1989). Drought stress and competition effects on the local distribution of *Pogogyne abramsii*. *Ecology*, **70**, 1083–9.
- Bazely, D. R. and Jefferies, R. L. (1989). Lesser snow geese and the nitrogen economy of a grazed salt marsh. *Journal of Ecology*, **77**, 24–34.
- Bazilevich, N. I., Rodin, L. Y., and Rozov, N. N. (1971). Geophysical aspects of biological productivity. *Soviet Geography, Review and Translations*, **12**, 293–317.
- Beanland, G. E. and Duinker, P. N. (1983). *An Ecological Framework for Environmental Impact Assessment in Canada*. Halifax, NS: Institute for Resource and Environmental Studies, Dalhousie University, and Federal Environmental Assessment Review Office.
- Beard, J. S. (1949). *The Natural Vegetation of the Windward and Leeward Islands*. Oxford, UK: Clarendon Press.
- Bedford, B. L. (1996). The need to define hydrologic equivalence at the landscape scale for freshwater wetland mitigation. *Ecological Applications*, **6**, 57–68.
- Bedford, B. L. and Preston, E. M. (1988). Developing the scientific basis for assessing cumulative effects of wetland loss and degradation on landscape functions: status, perspectives and prospects. *Environmental Management*, **12**, 751–71.
- Beebee, T. J. C. (1996). *Ecology and Conservation of Amphibians*. London: Chapman and Hall.
- Beefink, W. G. (1977). The coastal salt marshes of western and northern Europe: an ecological and phytosociological approach. In *Wet Coastal Ecosystems*, ed. V. J. Chapman, pp. 109–55. Amsterdam, the Netherlands: Elsevier.
- Begin, Y., Arseneault, S., and Lavoie, J. (1989). Dynamique d'une bordure forestière par suite de la hausse récente du niveau marin, rive sud-ouest du Golfe du Saint-Laurent, Nouveau-Brunswick. *Géographie physique et Quaternaire*, **43**, 355–66.
- Belanger L. and Bedard, J. (1994). Role of ice scouring and goose grubbing in marsh plant dynamics. *Journal of Ecology*, **82**, 437–45.
- Belkin, D. A. (1963). Anoxia: tolerance in reptiles. *Science*, **139**, 492–3.
- Bender, E. A., Case, T. J., and Gilpin, M. E. (1984). Perturbation experiments in community ecology: theory and practice. *Ecology*, **65**, 1–13.
- Benson, L. (1959). *Plant Classification*. Lanham, MD: Lexington Books.
- Berenbaum, M. R. (1991). Coumarins. In *Herbivores: Their Interactions with Secondary Plant Metabolites*, eds. G. A. Rosenthal and M. R. Berenbaum, pp. 221–49. San Diego, CA: Academic Press.
- Berendse, F. and Aerts, R. (1987). Nitrogen-use efficiency: a biologically meaningful definition? *Functional Ecology*, **1**, 293–6.
- Bernatowicz, S. and Zachwieja, J. (1966). Types of littoral found in the lakes of the Masurian and Suwalki Lakelands. *Komitet Ekologiczny-Polska Akademia Nauk*, **14**, 519–45.
- Bertness, M. D. (1991). Interspecific interactions among high marsh perennials in a New England salt marsh. *Ecology*, **72**, 125–37.
- Bertness, M. D. and Ellison, A. E. (1987). Determinants of pattern in a New England salt marsh plant community. *Ecological Monographs*, **57**, 12–147.

- Bertness, M. D. and Hacker, S. D. (1994). Physical stress and positive associations among marsh plants. *The American Naturalist*, **144**, 363–72.
- Bertness, M. D. and Leonard, G. H. (1997). The role of positive interactions in communities: lessons from intertidal habitats. *Ecology*, **78**, 1976–89.
- Bertness, M. D. and Shumway, S. W. (1993). Competition and facilitation in marsh plants. *The American Naturalist*, **142**, 718–34.
- Bertness, M. D. and Yeh, S. M. (1994). Cooperative and competitive interactions in the recruitment of marsh elders. *Ecology*, **75**, 2416–29.
- Bertness, M. D., Gough, L., and Shumway, S. W. (1992a). Salt tolerances and the distribution of fugitive salt marsh plants. *Ecology*, **73**, 1842–51.
- Bertness, M. D., Wikler, K., and Chatkupt, T. (1992b). Flood tolerance and the distribution of *Iva frutescens* across New England salt marshes. *Oecologia*, **91**, 171–8.
- Best, E. P. H., Verhoeven, J. T. A., and Wolff, W. J. (1993). The ecology of The Netherlands wetlands: characteristics, threats, prospects and perspectives for ecological research. *Hydrobiologia*, **265**, 305–20.
- Bethke, R. W. and Nudds, T. D. (1993). Variation in the diversity of ducks along a gradient of environmental variability. *Oecologia*, **93**, 242–50.
- Biesterfeldt, J. M., Petranks, J. W., and Sherbondy, S. (1993). Prevalence of chemical interference competition in natural populations of wood frogs, *Rana sylvatica*. *Copeia*, **3**, 688–95.
- Bilby, R. E., and Ward, J. (1991). Characteristics and function of large woody debris in streams draining old-growth, clear-cut, and 2nd-growth forests in southwestern Washington. *Canadian Journal of Fisheries and Aquatic Sciences*, **48**, 2499–508.
- Binford, M. W., Brenner, M., Whitmore, T. J., Higuera-Gundy, A., Deevey, E. S., and Leyden, B. (1987). Ecosystems, paleoecology and human disturbance in subtropical and tropical America. *Quaternary Scientific Review*, **6**, 115–28.
- Bliss, L. C. and Gold, W. G. (1994). The patterning of plant communities and edaphic factors along a high arctic coastline: implications for succession. *Canadian Journal of Botany*, **72**, 1095–107.
- Blizard, D. (1993). *The Normandy Landings D-Day: The Invasion of Europe 6 June 1944*. London: Reed International.
- Bloom, S. A. (1980). Multivariate quantification of community recovery. In *The Recovery Process in Damaged Ecosystems*, ed. J. Cairns, pp. 141–51. Ann Arbor, MI: Ann Arbor Science Publishers.
- Bodsworth, F. (1963). *Last of the Curlews*. Toronto, ON: McClelland and Stewart.
- Boers, A. M., Veltman, R. L. D., and Zedler, J. B. (2007). *Typha* × *glauca* dominance and extended hydroperiod constrain restoration of wetland diversity. *Ecological Engineering*, **29**, 232–44.
- Boesch, D. F., Josselyn, M. N., Mehta, A. J., Morris, J. T., Nuttle, W. K., Simenstad, C. A., and Swift, D. P. J. (1994). Scientific assessment of coastal wetland loss, restoration and management in Louisiana. *Journal of Coastal Research*, Special Issue No. 20.
- Bogan, A. E. (1996). *Margaritifera hembeli*. In: IUCN (2007). *2007 IUCN Red List of Threatened Species*. www.iucnredlist.org (accessed June 30, 2008)
- Bolen, E. G., Smith, L. M., and Schramm, H. L., Jr. (1989). Playa lakes: prairie wetlands of the southern High Plains. *BioScience*, **39**, 615–23.
- Bond, G. (1963). In *Plant Physiology*, eds. F. B. Salisbury and C. W. Ross (1985), 3rd edn, p. 254, Figure 13.3. Belmont, CA: Wadsworth.
- Bondavalli, C. and Ulanowicz, R. E. (1999). Unexpected effects of predators upon their prey: the case of the American Alligator. *Ecosystems*, **2**, 49–63.
- Bonetto, A. A. (1986). The Parana River system. In *The Ecology of River Systems*, eds. B. R. Davies and K. F. Walker, pp. 541–55. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Bonnicksen, T. M. (1988). Restoration ecology: philosophy, goals and ethics. *The Environmental Professional*, **10**, 25–35.
- Bormann, E. H. and Likens, G. E. (1981). *Patterns and Process in a Forested Ecosystem*. New York: Springer-Verlag.
- Boston, H. L. (1986). A discussion of the adaptation for carbon acquisition in relation to the growth strategy of aquatic isoetids. *Aquatic Botany*, **26**, 259–70.
- Boston, H. L. and Adams, M. S. (1986). The contribution of crassulacean acid metabolism to the annual productivity of two aquatic vascular plants. *Oecologia*, **68**, 615–22.
- Botch, M. S. and Masing, V. V. (1983). Mire ecosystems in the USSR. In *Ecosystems of the World*, Vol. 4B, *Mires: Swamp, Bog, Fen and Moor – Regional Studies*,

- ed. A. J. P. Gore, pp. 95–152. Amsterdam, the Netherlands: Elsevier.
- Botkin, D. B. (1990). *Discordant Harmonies. A New Ecology for the Twenty-first Century*. New York: Oxford University Press.
- Boucher, D. H. (1985). *The Biology of Mutualism: Ecology and Evolution*. New York: Oxford University Press.
- Boutin, C. and Keddy, P. A. (1993). A functional classification of wetland plants. *Journal of Vegetation Science*, 4, 591–600.
- Bowden, W. B. (1987). The biogeochemistry of nitrogen in freshwater wetlands. *Biogeochemistry*, 4, 313–48.
- Bowers, M. D. (1991). Iridoid glycosides. In *Herbivores: Their Interactions with Secondary Plant Metabolites*, eds. G. A. Rosenthal and M. R. Berenbaum, pp. 297–325. San Diego, CA: Academic Press.
- Boyd, C. E. (1978). Chemical composition of wetland plants. In *Freshwater Wetlands: Ecological Processes and Management Potential*, eds. R. E. Good, D. F. Whigham, and R. L. Simpson, pp. 155–68. New York: Academic Press.
- Boyd, R. and Penland, S. (1988). A geomorphologic model for Mississippi River Delta evolution. *Transactions Gulf Coast Association of Geological Societies*, 38, 443–52.
- Bradley, C. E. and Smith, D. G. (1986). Plains cottonwood recruitment and survival on a prairie meandering river floodplain, Milk River, southern Alberta and northern Montana. *Canadian Journal of Botany*, 64, 1433–42.
- Brandle, R. A. (1991). Flooding resistance of rhizomatous amphibious plants. In *Plant Life under Oxygen Deprivation*, eds. M. B. Jackson, D. D. Davis, and H. Lambers, pp. 35–46. The Hague, the Netherlands: SPB Academic Publishing.
- Brasher, S. and Perkins, D. F. (1978). The grazing intensity and productivity of sheep in the grassland ecosystem. In *Production Ecology of British Moors and Montane Grasslands*, Ecological Studies Vol. 27, eds. O. W. Heal and D. F. Perkins, pp. 354–74. Berlin, Germany: Springer-Verlag.
- Brewer, J. S. and Grace, J. B. (1990). Plant community structure in an oligohaline tidal marsh. *Vegetatio*, 90, 93–107.
- Bridgham, S. D., Pastor, J., Janssens, J. A., Chapin, C., and Malterer, T. J. (1996). Multiple limiting gradients in peatlands: a call for a new paradigm. *Wetlands*, 16, 45–65.
- Brinkman, R. and Van Diepen, C. A. (1990). Mineral soils. In *Wetlands and Shallow Continental Water Bodies*, Vol. 1, *Natural and Human Relationships*, ed. B. C. Patten, pp. 37–59. The Hague, the Netherlands: SPB Academic Publishing.
- Brinson, M. M. (1993a). Changes in the functioning of wetlands along environmental gradients. *Wetlands*, 13, 65–74.
- Brinson, M. M. (1993b). *A Hydrogeomorphic Classification for Wetlands*, Technical Report No. WRP-DE-4. Washington, DC: U.S. Army Corps of Engineers.
- Brinson, M. M. (1995). Functional classifications of wetlands to facilitate watershed planning. In *Wetlands and Watershed Management: Science Applications and Public Policy*, eds. J. A. Kusler, D. E. Willard, and H. C. Hull Jr., pp. 65–71. A collection of papers from a national symposium and several workshops at Tampa, FL, Apr 23–26. Berne, NY: Association of State Wetland Managers.
- Brinson, M. M., Lugo, A. E. and Brown, S. (1981). Primary productivity, decomposition and consumer activity in freshwater wetlands. *Annual Review of Ecology and Systematics*, 12, 123–61.
- Brinson, M. M., Christian, R. R. and Blum, L. K. (1995). Multiple states in the sealevel induced transition from terrestrial forest to estuary. *Estuaries*, 18, 648–59.
- Bronmark, C. (1985). Interactions between macrophytes, epiphytes and herbivores: an experimental approach. *Oikos*, 45, 26–30.
- Bronmark, C. (1990). How do herbivorous freshwater snails affect macrophytes? – a comment. *Ecology*, 71, 1213–15.
- Brosnan, D., Courtney, S., Sztukowski, L., Bedford, B., Burkett, V., Collopy, M., Derrickson, S., Elphick, C., Hunt, R., Potter, K., Sedinger, J. and Walters, J. (2007). *Everglades Multi-Species Avian Ecology and Restoration Review: Final Report*. Portland, OR: Sustainable Ecology Institute.
- Brown, J. F. (1997). Effects of experimental burial on survival, growth, and resource allocation of three species of dune plants. *Journal of Ecology*, 85, 151–8.
- Brown, L. R. (2001). *Paving the Planet: Cars and Crops Competing for Land*. Washington, DC: Earth Policy Institute.

- Brown, S., Brinson, M. M., and Lugo, A. E. (1979). Structure and function of riparian wetlands. In *Strategies for Protection and Management of Floodplain Wetlands and Other Riparian Ecosystems*, Gen. Tech. Rep. No. WO-12, tech. coord. R. R. Johnson and J. F. McCormick, pp. 17–31. Washington, DC: U.S. Department of Agriculture, Forest Service.
- Bruland, G. L. and Richardson, C. J. (2005). Hydrologic, edaphic, and vegetative responses to microtopographic reestablishment in a restored wetland. *Restoration Ecology*, 13, 515–23.
- Brunton, D. F. and Di Labio, B. M. (1989). Diversity and ecological characteristics of emergent beach flora along the Ottawa River in the Ottawa–Hull region, Quebec and Ontario. *Naturaliste Canadien*, 116, 179–91.
- Brutsaert, W. (2005). *Hydrology: An Introduction*. Cambridge, UK: Cambridge University Press.
- Bubier, J. L. (1995). The relationship of vegetation to methane emission and hydrochemical gradients in northern peatlands. *Journal of Ecology*, 83, 403–20.
- Bucher, E. H., Bonetto, A., Boyle, T. P., Canevari, P., Castro, G., Huszar, P., and Stone, T. (1993). *Hidrovia: An Initial Environmental Examination of the Paraguay–Paraná Waterway*. Manomet, MA and Buenos Aires, Argentina: Wetlands for the Americas.
- Bump, S. R. (1986). Yellow-headed blackbird nest defense: aggressive responses to marsh wrens. *The Condor*, 88, 328–35.
- Burger, J., Shisler, J., and Lesser, F. H. (1982). Avian utilization on six salt marshes in New Jersey. *Biological Conservation*, 23, 187–212.
- Burnett, J. H. (1964). The study of Scottish vegetation. In *The Vegetation of Scotland*, ed. J. H. Burnett, pp. 1–11. Edinburgh, UK: Oliver and Boyd.
- Bury, B. R. (1979). Population ecology of freshwater turtles. In *Turtles: Perspectives and Research*, eds. M. Harless and H. Morlock, pp. 571–602. New York: John Wiley.
- Cade, B. S. and Noon, B. R. (2003). A gentle introduction to quantile regression for ecologists. *Frontiers in Ecology and the Environment*, 1, 412–20.
- Cade, B. S., Terrell, J. W., and Schroeder, R. L. (1999). Estimating effects of limiting factors with regression quantiles. *Ecology*, 80, 311–23.
- Cairns, J. (ed.) (1980). *The Recovery Process in Damaged Ecosystems*. Ann Arbor, MI: Ann Arbor Science Publishers.
- Cairns, J. (ed.) (1988). *Rehabilitating Damaged Ecosystems*, Vols. 1 and 2. Boca Raton, FL: CRC Press.
- Cairns, J. (1989). Restoring damaged ecosystems: is predisturbance condition a viable option? *The Environmental Professional*, 11, 152–9.
- Cairns, J., Jr., Niederlehner, B. R., and Orvos, D. R. (1992). *Predicting Ecosystem Risk*. Princeton, NJ: Princeton Scientific Publishing.
- Callaway, R. M. and King, L. (1996). Temperature-driven variation in substrate oxygenation and the balance of competition and facilitation. *Ecology*, 77, 1189–95.
- Campbell, D. (2005). The Congo River basin. In *The World's Largest Wetlands: Ecology and Conservation*, eds. L. H. Fraser and P. A. Keddy, pp. 149–65. Cambridge, UK: Cambridge University Press.
- Campbell, D. R. and Rochefort, L. (2003). Germination and seedling growth of bog plants in relation to the recolonization of milled peatlands. *Plant Ecology*, 169, 71–84.
- Canadian Hydrographic Service. (2009). *Historical water level data*. [www.waterlevels.gc.ca/C&A/historical\\_e.html](http://www.waterlevels.gc.ca/C&A/historical_e.html) (accessed May 4, 2009)
- Canny, M. J. (1998). Transporting water in plants. *American Scientist*, 86, 152–9.
- Carignan, R. and Kalff, J. (1980). Phosphorus sources for aquatic weeds: water or sediments? *Science*, 207, 987–9.
- Carpenter, S. R. and Kitchell, J. F. (1988). Consumer control of lake productivity. *BioScience*, 38, 764–9.
- Carpenter, S. R. and Lodge, D. M. (1986). Effects of submersed macrophytes on ecosystem processes. *Aquatic Botany*, 26, 341–70.
- Carpenter, S. R., Kitchell, J. F., Hodgson, J. R., Cochran, P. A., Elser, J. J., Elser, M. M., Lodge, D. M., Kretchmer, D., He, X., and von Ende, C. N. (1987). Regulation of lake primary productivity by food web structure. *Ecology*, 68, 1863–76.
- Carpenter, S. R., Chisholm, S. W., Krebs, C. J., Schindler, D. W., and Wright, R. F. (1995). Ecosystem experiments. *Science*, 269, 324–7.
- Carvalho, A. R. (2007). An ecological economics approach to estimate the value of a fragmented wetland in Brazil (Mato Grosso do Sul state). *Brazilian Journal of Biology*, 67, 663–71.

- Carver, E. and Caudill, J. (2007). *Banking on Nature: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation*. Washington, DC: U.S. Fish and Wildlife Service.
- Castellanos, E. M., Figueroa, M. E., and Davy, A. J. (1994). Nucleation and facilitation in saltmarsh succession: interactions between *Spartina maritima* and *Arthrocnemum perenne*. *Journal of Ecology*, 82, 239–48.
- Catling, P. M., Spicer, K. W., and Lefkovitch, L. P. (1988). Effects of the introduced floating vascular aquatic, *Hydrocharis morsus-ranae* (Hydrocharitaceae), on some North American aquatic macrophytes. *Naturaliste Canadien*, 115, 131–7.
- Cavalieri, A. J. and Huang, A. H. C. (1979). Evaluation of proline accumulation in the adaptation of diverse species of marsh halophytes to the saline environment. *American Journal of Botany*, 66, 307–12.
- Cazenave, A. and Nerem, R. (2004). Present-day sea level change: observations and causes. *Reviews of Geophysics*, 42, 139–50.
- Chaneton, E. J. and Facelli, J. M. (1991). Disturbance effects on plant community diversity: spatial scales and dominance hierarchies. *Vegetatio*, 93, 143–56.
- Chapin, F. S., III. (1980). The mineral nutrition of wild plants. *Annual Review of Ecology and Systematics*, 11, 233–60.
- Chapman, V. J. (1940). The functions of the pneumatophores of *Avicennia nitida* Jacq. *Proceedings of the Linnean Society of London*, 152, 228–33.
- Chapman, V. J. (1974). *Salt Marshes and Salt Deserts of the World*. Lehre, Germany: J. Cramer.
- Chapman, V. J. (ed.) (1977). *Wet Coastal Ecosystems*. Amsterdam, the Netherlands: Elsevier.
- Charlton, D. L. and Hilts, S. (1989). Quantitative evaluation of fen ecosystems on the Bruce Peninsula. In *Ontario Wetlands: Inertia or Momentum*, eds. M. J. Bardecki and N. Patterson, pp. 339–54. Proceedings of Conference, Ryerson Polytechnical Institute, Toronto, Oct 21–22, 1988. Toronto, ON: Federation of Ontario Naturalists.
- Cherry-Garrard, A. (1922). *The Worst Journey in the World*. London: Constable.
- Chesson, P. L. and Warner, R. R. (1981). Environmental variability promotes coexistence in lottery competitive systems. *The American Naturalist*, 117, 923–43.
- Chimney, M. and Goforth, G. (2006). History and description of the Everglades Nutrient Removal Project. *Ecological Engineering*, 27, 268–78.
- China Development Brief. (2004). Ploughshares into fishing nets. [www.chinadevelopmentbrief.com/node/204](http://www.chinadevelopmentbrief.com/node/204) (accessed Dec 3, 2007)
- Christensen, N. L. (1999). Vegetation of the Coastal Plain of the southeastern United States. In *Vegetation of North America*, 2nd edn, eds. M. Barbour and W. D. Billings, pp. 397–448. Cambridge, UK: Cambridge University Press.
- Christensen, N. L., Burchell, R. B., Liggett, A., and Simms, E. L. (1981). The structure and development of pocosin vegetation. In *Pocosin Wetlands: An Integrated Analysis of Coastal Plain Freshwater Bogs in North Carolina*, ed. C. J. Richardson, pp. 43–61. Stroudsburg, PA: Hutchinson Ross.
- Christensen, N. L., Bartuska, A. M., Brown, J. H., Carpenter, S., D'Antonio, C., Francis, R., Franklin, J. F., MacMahon, J. A., Noss, R. F., Parsons, D. J., Peterson, C. H., Turner, M. G., and Woodmansee, R. G. (1996). The report of the Ecological Society of America Committee on the Scientific Basis for Ecosystem Management. *Ecological Applications*, 6, 665–91.
- Christie, W. J. (1974). Changes in the fish species composition of the Great Lakes. *Journal of the Fisheries Research Board of Canada*, 31, 827–54.
- Chung, C. (1982). Low marshes, China. In *Creation and Restoration of Coastal Plant Communities*, ed. R. R. Lewis III, pp. 131–45. Boca Raton, FL: CRC Press.
- Cicerone, R. J. and Ormland, R. S. (1988). Biogeochemical aspects of atmospheric methane. *Global Biogeochemical Cycles*, 2, 299–327.
- Clapham, W. B., Jr. (1973). *Natural Ecosystems*. New York: Macmillan.
- Clark, M. A., Siegrist, J., and Keddy, P. A. (2008). Patterns of frequency in species-rich vegetation in pine savannas: effects of soil moisture and scale. *Ecoscience*, 15, 529–35.
- Clarke, L. D. and Hannon, N. J. (1967). The mangrove swamp and salt marsh communities of the Sydney district. I. Vegetation, soils and climate. *Journal of Ecology*, 55, 753–71.
- Clarke, L. D. and Hannon, N. J. (1969). The mangrove swamp and salt marsh communities of the Sydney

- district. II. The holocoenotic complex with particular reference to physiography. *Journal of Ecology*, **57**, 213–34.
- Clegg, J. (1986). *Pond Life*. London: Frederick Warne.
- Clements, F. E. (1916). *Plant Succession: An Analysis of the Development of Vegetation*. Washington, DC: Carnegie Institution of Washington.
- Clements, F. E. (1935). Experimental ecology in the public service. *Ecology*, **16**, 342–63.
- Clements, F. E. (1936). Nature and structure of climax. *Journal of Ecology*, **24**, 254–82.
- Clements, F. E., Weaver, J. E., and Hanson, H. C. (1929). *Plant Competition*. Washington, DC: Carnegie Institution of Washington.
- Clymo, R. S. and Duckett, J. G. (1986). Regeneration of *Sphagnum*. *New Phytologist*, **102**, 589–614.
- Clymo, R. S. and Hayward, P. M. (1982). The ecology of *Sphagnum*. In *Bryophyte Ecology*, ed. A. J. E. Smith, pp. 229–89. London: Chapman and Hall.
- Cobbaert, D., Rochefort, L., and Price, J. S. (2004). Experimental restoration of a fen plant community after peat mining. *Applied Vegetation Science*, **7**, 209–20.
- Coleman, J. M., Roberts, H. H., and Stone, G. W. (1998). Mississippi River Delta: an overview. *Journal of Coastal Research*, **14**, 698–716.
- Coles, B. and Coles, J. (1989). *People of the Wetlands: Bogs, Bodies and Lake-Dwellers*. London: Thames and Hudson.
- Coley, P. D. (1983). Herbivory and defense characteristics of tree species in a lowland tropical forest. *Ecological Monographs*, **53**, 209–33.
- Colinvaux, P. (1978). *Why Big Fierce Animals Are Rare: An Ecologist's Perspective*. Princeton, NJ: Princeton University Press.
- Colwell, R. K. and Fuentes, E. R. (1975). Experimental studies of the niche. *Annual Review of Ecology and Systematics*, **6**, 281–309.
- Committee on Characterization of Wetlands. (1995). *Wetlands: Characteristics and Boundaries*. Washington, DC: National Academy of Sciences Press.
- Committee on Ecological Land Classification. (1988). *Wetlands of Canada, Ecological Land Classification Series No. 24*. Ottawa, ON: National Wetlands Working Group, Environment Canada.
- Conant, R. and Collins, J. T. (1998). *A Field Guide to Reptiles and Amphibians, Eastern/Central North America*, 3rd edn. New York: Houghton Mifflin.
- Connell, J. H. (1978). Diversity in tropical rain forests and coral reefs. *Science*, **199**, 1302–10.
- Connell, J. H. (1980). Diversity and the coevolution of competitors, or the ghost of competition past. *Oikos*, **35**, 131–8.
- Connell, J. H. (1987). Maintenance of species diversity in biotic communities. In *Evolution and Coadaptation in Biotic Communities*, eds. S. Kawano, J. H. Connell, and T. Hidaka, pp. 208–18. Tokyo: University of Tokyo Press.
- Connell, J. H. and Orias, E. (1964). The ecological regulation of species diversity. *The American Naturalist*, **98**, 399–414.
- Conner, W. H. and Buford, M. A. (1998). Southern deepwater swamps. In *Southern Forested Wetlands: Ecology and Management*, eds. M. G. Messina and W. H. Conner, pp. 261–87. Boca Raton, FL: Lewis Publishers.
- Conner, W. H., Day, J. W., Jr., Baumann, R. H., and Randall, J. M. (1989). Influence of hurricanes on coastal ecosystems along the northern Gulf of Mexico. *Wetlands Ecology and Management*, **1**, 45–56.
- Connor, E. F. and McCoy, E. D. (1979). The statistics and biology of the species–area relationship. *The American Naturalist*, **113**, 791–833.
- Connor, E. F. and Simberloff, D. (1979). The assembly of species communities: chance or competition? *Ecology*, **69**, 1132–40.
- Cordone, A. J. and Kelley, D. W. (1961). The influences of inorganic sediment on the aquatic life of streams. *California Fish and Game*, **47**, 189–228.
- Cornwell, W. K., Bedford, B. L., and Chapin, C. T. (2001). Occurrence of arbuscular mycorrhizal fungi in a phosphorus-poor wetland and mycorrhizal response to phosphorus fertilization. *American Journal of Botany*, **88**, 1824–9.
- Costanza, R., Cumberland, J., Daly, H., Goodland, R., and Norgaard, R. (1997). *An Introduction to Ecological Economics*. Boca Raton, FL: St. Lucie Press.
- Cowardin, L. M. and Golet, F. C. (1995). US Fish and Wildlife Service 1979 wetland classification: a review. *Vegetatio*, **118**, 139–52.
- Cowardin, L. M., Carter, V., Golet, F. C., and LaRoe, E. T. (1979). *Classification of Wetlands and Deepwater Habitats of the United States*, FWS/OBS-79/31. Washington, DC: U.S. Department of the Interior Fish and Wildlife Service.

- Cowling, R. M., Rundel, P. W., Lamont, B. B., Arroyo, M. K., and Arianoutsou, M. (1996a). Plant diversity in Mediterranean-climate regions. *Trends in Ecology and Evolution*, 11, 362–6.
- Cowling, R. M., MacDonald, I. A. W., and Simmons, M. T. (1996b). The Cape Peninsula, South Africa: physiographical, biological and historical background to an extraordinary hot-spot of biodiversity. *Biodiversity and Conservation*, 5, 527–50.
- Craft, C. B., Vymazal, J., and Richardson, C. J. (1995). Response of everglades plant communities to nitrogen and phosphorus additions. *Wetlands*, 15, 258–71.
- Craighead, F. C., Sr. (1968). The role of the alligator in shaping plant communities and maintaining wildlife in the southern Everglades. *The Florida Naturalist*, 41, 2–7, 69–74.
- Crawford, R. M. M. (1982). Physiological response to flooding. In *Encyclopedia of Plant Physiology*, new series Vol. 12B, *Physiological Plant Ecology II*, eds. O. L. Large, P. S. Nobel, C. B. Osmond, and H. Ziegler, pp. 453–77. Berlin, Germany: Springer-Verlag.
- Crawford, R. M. M. and Braendle, R. (1996). Oxygen deprivation stress in a changing environment. *Journal of Experimental Botany*, 47, 145–59.
- Crawford, R. M. M. and McManmon, M. (1968). Inductive responses of alcohol and malic acid dehydrogenases in relation to flooding tolerance in roots. *Journal of Experimental Botany*, 19, 435–41.
- Crawley, M. J. (1983). *Herbivory: The Dynamics of Plant/Animal Interactions*. Oxford, UK: Blackwell Scientific Publications.
- Crocker, L. P. (1990). *Army Officer's Guide*, 45th edn. Harrisburg, PA: Stackpole Books.
- Crook, D. A. and Robertson, A. I. (1999). Relationships between riverine fish and woody debris: implications for lowland rivers. *Marine and Freshwater Research*, 50, 941–53.
- Crosby, A. W. (1993). *Economic Imperialism: The Biological Expansion of Europe 900–1900*. Cambridge, UK: Cambridge University Press.
- Crow, G. E. (1993). Species diversity in aquatic angiosperms: latitudinal patterns. *Aquatic Botany*, 44, 229–58.
- Crowder, A. A. and Bristow, J. M. (1988). Report: the future of waterfowl habitats in the Canadian lower Great Lakes wetlands. *Journal of Great Lakes Research*, 14, 115–27.
- Cummins, K. W. (1973). Trophic relationships of aquatic insects. *Annual Review of Entomology*, 18, 83–206.
- Cummins, K. W. and Klug, M. J. (1979). Feeding ecology of stream invertebrates. *Annual Review of Ecology and Systematics*, 10, 147–72.
- Currie, D. J. (1991). Energy and large-scale patterns of animal- and plant-species richness. *The American Naturalist*, 137, 27–49.
- Cyr, H. and Pace, M. L. (1993). Magnitude and patterns of herbivory in aquatic and terrestrial ecosystems. *Nature*, 361, 148–50.
- Czaya, E. (1983). *Rivers of the World*. Cambridge, UK: Cambridge University Press.
- Dacey, J. W. H. (1980). Internal winds in water lilies: an adaptation for life in anaerobic sediments. *Science*, 210, 1017–19.
- Dacey, J. W. H. (1981). Pressurized ventilation in the yellow water lily. *Ecology*, 62, 1137–47.
- Dacey, J. W. H. (1988). In *Plant Physiology*, 3rd edn, eds. F. B. Salisbury and C. W. Ross, pp. 68–70. Belmont, CA: Wadsworth.
- Dahm, C. N., Cummins, K. W., Valett, H. M., and Coleman, R. L. (1995). An ecosystem view of the restoration of the Kissimmee River. *Restoration Ecology*, 3, 225–38.
- Daily, G. C. (1997). *Nature's Services: Societal Dependence Upon Natural Ecosystems*. Washington, DC: Island Press.
- Damman, A. W. H. (1986). Hydrology, development, and biogeochemistry of ombrogenous bogs with special reference to nutrient relocation in a western Newfoundland bog. *Canadian Journal of Botany*, 64, 384–94.
- Damman, A. and Dowhan, J. (1981). Vegetation and habitat conditions in Western Head Bog, a southern Nova Scotian plateau bog. *Canadian Journal of Botany*, 59, 1343–59.
- Dansereau, P. (1959). Vascular aquatic plant communities of southern Quebec: a preliminary analysis. *Transactions of the Northeast Wildlife Conference*, 10, 27–54.
- Dansereau, P. and Segadas-Vianna, F. (1952). Ecological study of the peat bogs of eastern North America. *Canadian Journal of Botany*, 30, 490–520.
- Darlington, P. J. (1957). *Zoogeography: The Geographical Distribution of Animals*. New York: John Wiley.

- Davis, D. W. (2000). Historical perspective on crevasses, levees, and the Mississippi River. In *Transforming New Orleans and Its Environs: Centuries of Change*, ed. C. E. Colten, pp. 84–108. Pittsburgh, PA: University of Pittsburgh Press.
- Davis, S. M. and Ogden, J. C. (eds.) (1994). *Everglades: The Ecosystem and its Restoration*. Delray Beach, FL: St. Lucie Press.
- Day, J. W., Jr., Boesch, D. F., Clairain, E. J., Kemp, G. P., Laska, S. B., Mitsch, W. J., Orth, K., Mashriqui, H., Reed, D. J., Shabman, L., Simenstad, C. A., Streever, B. J., Twilley, R. R., Watson, C. C., Wells, J. T., and Whigham, D. F. (2007). Restoration of the Mississippi Delta: lessons from Hurricanes Katrina and Rita. *Science*, 315, 1679–84.
- Day, R. T., Keddy, P. A., McNeill, J., and Carleton, T. (1988). Fertility and disturbance gradients: a summary model for riverine marsh vegetation. *Ecology*, 69, 1044–54.
- Day, W. (1984). *Genesis on Planet Earth*, 2nd edn. New Haven, CT: Yale University Press.
- Dayton, P. K. (1979). Ecology: a science and a religion. In *Ecological Processes in Coastal and Marine Systems*, ed. R. J. Livingston, pp. 3–18. New York: Plenum Press.
- DeBenedictis, P. A. (1974). Interspecific competition between tadpoles of *Rana pipiens* and *Rana sylvatica*: an experimental field study. *Ecological Monographs*, 44, 129–51.
- de Groot, R. S. (1992). *Functions of Nature*. Groningen, the Netherlands: Wolters-Noordhoff.
- Delany, S. N. and Scott, D. A. (2006). *Waterbird Population Estimates*, 4th edn. Wageningen, the Netherlands: Wetlands International.
- Delcourt, H. R. and Delcourt, P. A. (1988). Quaternary landscape ecology: relevant scales in space and time. *Landscape Ecology*, 2, 23–44.
- Delcourt, H. R. and Delcourt, P. A. (1991). *Quaternary Ecology: A Paleoecological Perspective*. London: Chapman and Hall.
- del Moral R., Titus, J. H., and Cook, A. M. (1995). Early primary succession on Mount St. Helens, Washington, USA. *Journal of Vegetation Science*, 6, 107–20.
- De Luc, J. A. (1810). Geologic travels. In Gorham, E. (1953). Some early ideas concerning the nature, origin and development of peat lands. *Journal of Ecology*, 41, 257–74.
- Denny, P. (1972). Sites of nutrient absorption in aquatic macrophytes. *Journal of Ecology*, 60, 819–29.
- Denny, P. (1985). *The Ecology and Management of African Wetland Vegetation*. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Denny, P. (1993a). Wetlands of Africa: Introduction. In *Wetlands of the World*, Vol. 1, eds. D. F. Whigham, D. Dykyjova, and S. Hejny, pp. 1–31. Dordrecht, the Netherlands: Kluwer.
- Denny, P. (1993b). Eastern Africa. In *Wetlands of the World*, Vol. 1, ed. D. F. Whigham, D. Dykyjova, and S. Hejny, pp. 32–46. Dordrecht, the Netherlands: Kluwer.
- Denny, P. (1995). Benefits and priorities for wetland conservation: the case for national conservation strategies. In *Wetlands. Archaeology and Nature Conservation*, eds. M. Cox, V. Straker, and D. Taylor, pp. 249–74. London: HMSO.
- Desmukh, I. (1986). *Ecology and Tropical Biology*. Palo Alto, CA: Blackwell Scientific Publications.
- Desrochers, D. W., Keagy, J. C., and Cristol, D. A. (2008). Created versus natural wetlands: avian communities in Virginia salt marshes. *Ecoscience*, 15, 36–43.
- Diamond, J. M. (1975). Assembly of species communities. In *Ecology and Evolution of Communities*, eds. M. L. Cody and J. M. Diamond, pp. 342–444. Cambridge, MA: Belknap Press of Harvard University Press.
- Diamond, J. M. (1983). Laboratory, field and natural experiments. *Nature*, 304, 586–7.
- Diamond, J. (1994). Ecological collapses of past civilisations. *Proceedings of the American Philosophical Society*, 138, 363–70.
- Diamond, J. (2005). *Collapse: How Societies Choose to Fail or Succeed*. New York: Penguin Books.
- Dickinson, C. H. (1983). Micro-organisms in peatlands. In *Ecosystems of the World Vol. 4A, Mires: Swamp, Bog, Fen and Moor—General Studies*, ed. A. J. P. Gore, pp. 225–45. Amsterdam, the Netherlands: Elsevier.
- Digby, P. G. N. and Kempton, R. A. (1987). *Multivariate Analysis of Ecological Communities*. London: Chapman and Hall.
- Dinerstein, E. (1991). Seed dispersal by greater one-horned rhinoceros (*Rhinoceros unicornis*) and the flora of *Rhinoceros latrines*. *Mammalia*, 55, 355–62.
- Dinerstein, E. (1992). Effects of *Rhinoceros unicornis* on riverine forest structure in lowland Nepal. *Ecology*, 73, 701–4.

- Dittmar, L. A. and Neely, R. K. (1999). Wetland seed bank response to sedimentation varying in loading rate and texture. *Wetlands*, 19, 341–51.
- Douglas, B. C. (1997). Global sea rise: a redetermination. *Surveys in Geophysics*, 18, 279–92.
- Dowdeswell, J. A. (2006). The Greenland ice sheet and global sea-level rise. *Science*, 311, 963–4.
- Doyle, T. W., Garrett, F. G., and Books, M. A. (2003). Modeling mangrove forest migration along the southwest coast of Florida under climate change. In *Integrated Assessment of the Climate Change Impacts on the Gulf Coast Region*, eds. Z. H. Ning, R. E. Turner, T. Doyle, and K. K. Abdollahi, pp. 211–21. Baton Rouge, LA: Gulf Coast Climate Change Assessment Council (GCRCC) and Louisiana State University (LSU) Graphic Services.
- Dray, F. A., Jr, Bennett, B. C., and Center, T. D. (2006). Invasion history of *Melaleuca quinquenervia* (Cav.) S. T. Blake in Florida. *Castanea*, 71, 210–25.
- Dugan, P. (ed.) (1993). *Wetlands in Danger*. New York: Oxford University Press.
- Dugan, P. (ed.) (2005). *Guide to Wetlands*. Buffalo, NY: Firefly Books.
- Dumortier, M., Verlinden, A., Beeckman H., and van der Mijnsbrugge, K. (1996). Effects of harvesting dates and frequencies on above- and below-ground dynamics in Belgian wet grasslands. *Ecoscience*, 3, 190–8.
- Duncan, R. P. (1993). Flood disturbance and the coexistence of species in a lowland podocarp forest, south Westland, New Zealand. *Journal of Ecology*, 81, 403–16.
- Durant, W. (1944). *The Story of Civilization III: Caesar and Christ*. New York: Simon and Schuster.
- du Rietz, G. E. (1931). *Life-Forms of Terrestrial Flowering Plants*. Uppsala, Sweden: Almqvist & Wiksell.
- Dynesius, M. and Nilsson, C. (1994). Fragmentation and flow regulation of river systems in the northern third of the world. *Science*, 266, 753–62.
- Edmonds, J. (ed.) (1997). *Oxford Atlas of Exploration*. New York: Oxford University Press.
- Ehrenfeld, J. G. (1983). The effects of changes in land-use on swamps of the New Jersey pine barrens. *Biological Conservation*, 25, 353–75.
- Ehrlich, A. and Ehrlich, P. (1981). *Extinction: The Causes and Consequences of the Disappearance of Species*. New York: Random House.
- Elakovich, S. D. and Wootten, J. W. (1989). Allelopathic potential of sixteen aquatic and wetland plants. *Journal of Aquatic Plant Management*, 27, 78–84.
- Ellenberg, H. (1985). Veränderungen der Flora Mitteleuropas unter dem Einfluss von Düngung und Immissionen. *Schweizerische Zeitschrift für Forstwesen*, 136, 19–39.
- Ellenberg, H. (1988). Floristic changes due to nitrogen deposition in central Europe. In *Critical Loads for Sulfur and Nitrogen*, eds. J. Nilsson and P. Grennfelt, pp. 375–83. Report from a workshop held at Skokloster, Sweden, Mar 19–24, 1988. Copenhagen: Nordic Council of Ministers.
- Ellenberg, H. (1989). Eutrophierung: das gravierendste Problem im Naturschutz? *Norddeutsche Naturschutzakademie*, 2, 9–12.
- Ellery, W. N., Ellery, K., Rogers, K. H., McCarthy, T. S., and Walker, B. H. (1993). Vegetation, hydrology and sedimentation processes as determinants of channel form and dynamics in the northeastern Okavango Delta, Botswana. *African Journal of Ecology*, 31, 10–25.
- Ellison, A. M. and Farnsworth, E. J. (1996). Spatial and temporal variability in growth of *Rhizophora mangle* saplings on coral cays: links with variation in insolation, herbivory, and local sedimentation rate. *Journal of Ecology*, 84, 717–31.
- Elton, C. (1927). *Animal Ecology*. London: Sidgwick and Jackson.
- Elveland, J. (1978). *Management of Rich Fens in Northern Sweden: Studies of Various Factors Influencing the Vegetational Dynamics*, Statens naturvårdsverk PM 1007. Solna, Sweden: Forskningsnamnden.
- Elveland, J. (1979). *Irrigated and Naturally Flooded Hay-Meadows in North Sweden: A Nature Conservancy Problem*, Statens naturvårdsverk PM 1174. Solna, Sweden: Forskningssektariatet.
- Elveland, J. and Sjöberg, K. (1982). *Some Effects of Scything and Other Management Procedures on the Plant and Animal Life of N. Swedish Wetlands Formerly Mown for Hay*, Statens naturvårdsverket PM 1516. Solna, Sweden: Forskningssektariatet.
- Encyclopaedia Britannica. (1991). Vol. 16, p. 481. Chicago, IL: Encyclopaedia Britannica Inc.
- Environment Canada. (1976). *Marine Environmental Data Service, Ocean and Aquatic Sciences: Monthly*

- and *Yearly Mean Water Levels*, Vol. 1, *Inland*. Ottawa, ON: Department of Environment.
- Environment Canada. (2000). *The Importance of Nature to Canadians: The Economic Significance of Nature-Related Activities*. Ottawa, ON: Environment Canada.
- Eriksson, O. (1993). The species-pool hypothesis and plant community diversity. *Oikos*, **68**, 371–4.
- Essame, H. (1974). *Patton: A Study in Command*. New York: Charles Scribner's Sons.
- Ewel, J. J. (1986). Invasibility: lessons from south Florida. In *Ecology of Biological Invasions of North America and Hawaii*, eds. H. A. Mooney and J. A. Drake, pp. 214–30. New York: Springer-Verlag.
- Facelli, J. M., Leon, R. J. C., and Deregibus, V. A. (1989). Community structure in grazed and ungrazed grassland sites in the flooding Pampa, Argentina. *American Midland Naturalist*, **121**, 125–33.
- Faith, D. P., Minchin, P. R. and Belbin, L. (1987). Compositional dissimilarity as a robust measure of ecological distance. *Vegetatio*, **69**, 57–68.
- Farney, R. A. and Bookhout, T. A. (1982). Vegetation changes in a Lake Erie marsh (Winous Point, Ottawa County, Ohio) during high water years. *Ohio Journal of Science*, **82**, 103–7.
- Faulkner, S. P. and Richardson, C. J. (1989). Physical and chemical characteristics of freshwater wetland soils. In *Constructed Wetlands for Wastewater Treatment*, ed. D. A. Hammer, pp. 41–72. Chelsea, MI: Lewis Publishers.
- Fernandez-Armesto, F. (1989). *The Spanish Armada: The Experience of War in 1588*. Oxford, UK: Oxford University Press.
- Field, R., Stuzeski, E. J., Masters, H. E., and Tafuri, A. N. (1974). Water pollution and associated effects from street salting. *Journal of Environmental Engineering Division*, **100**, 459–77.
- Findlay, S. C. and Houlihan, J. (1997). Anthropogenic correlates of biodiversity in southeastern Ontario wetlands. *Conservation Biology*, **11**, 1000–9.
- Finney, B. P. and Johnson, T. C. (1991). Sedimentation in Lake Malawi (East Africa) during the past 10,000 years: a continuous paleoclimatic record from the southern tropics. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **85**, 351–66.
- Fitter, A. and Hay, R. (2002). *Environmental Physiology of Plants*, 3rd edn. San Diego, CA: Academic Press.
- Flint, R. F. (1971). *Glacial and Quaternary Geology*. New York: John Wiley.
- Flores, D. L. (ed.) (1984). *Jefferson and Southwestern Exploration: The Freeman and Custis Accounts of the Red River Expedition of 1806*. Norman, OK: University of Oklahoma Press.
- Food and Agriculture Organization of the United Nations (FAO). (2009). *Commodities by Country*. <http://faostat.fao.org/site/339/default.aspx> (accessed Dec 4, 2009)
- Forman, A. T. and Alexander, L. E. (1998). Roads and their ecological effects. *Annual Review of Ecology and Systematics*, **29**, 207–31.
- Forman, R. T. T. (ed.) (1998). *Pine Barrens: Ecosystem and Landscape*. Rutgers, NJ: Rutgers University Press.
- Forman, R. T. T., Sperling, D., Bissonette, J., Clevenger, A. P., Cutshall, C. D., Dale, V. H., Fahrig, L., France, R., Goldman, C. R., Heanue, K., Jones, J. A., Swanson, F. J., Turrentine, T., and Winter, T. C. (2002). *Road Ecology: Science and Solutions*. Washington, DC: Island Press.
- Forster, P., Ramaswamy, V., Artaxo, P., Bernsten, T., Betts, R., Fahey, D. W., Haywood, J., Lean, J., Lowe, D. C., Myhre, G., Nganga, J., Prinn, R., Raga, G., Schulz, M., and Van Dorland, R. (2007). Changes in atmospheric constituents and in radiative forcing. In *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, eds. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. M. B. Tignor and H. L. Miller, pp. 129–234. Cambridge, UK: Cambridge University Press.
- Foster, D. R. and Glaser, P. H. (1986). The raised bogs of south-eastern Labrador, Canada: classification, distribution, vegetation and recent dynamics. *Journal of Ecology*, **74**, 47–71.
- Foster, D. R. and Wright, H. E., Jr. (1990). Role of ecosystem development and climate change in bog formation in central Sweden. *Ecology*, **71**, 450–63.
- Foster, D. R., King, G. A., Glaser, P. H., and Wright, H. E., Jr. (1983). Origin of string patterns in boreal peatlands. *Nature*, **306**, 256–7.
- Fox, A. D. and Kahlert, J. (1999). Adjustments to nitrogen metabolism during wing moult in Greylag Geese, *Anser anser*. *Functional Ecology*, **13**, 661–9.

- Fragoso, J. M. V. (1998). Home range and movement patterns of white-lipped Peccary (*Tayassu pecari*) herds in the northern Brazilian Amazon. *Biotropica*, 30, 458–69.
- Francis, T. B. and Schindler, D. E. (2006). Degradation of littoral habitats by residential development: woody debris in lakes of the Pacific Northwest and Midwest, United States. *AMBIO: A Journal of the Human Environment*, 35, 274–80.
- Fraser, A. (1973). *Cromwell: The Lord Protector*. New York: Konecky and Konecky.
- Fraser, L. H. and Keddy, P. A. (eds.) (2005). *The World's Largest Wetlands: Ecology and Conservation*. Cambridge, UK: Cambridge University Press.
- Freedman, B. (1995). *Environmental Ecology*, 2nd edn. San Diego, CA: Academic Press.
- Fremelin, G. (ed. in chief) (1974). *The National Atlas of Canada*, 4th edn, revd. Toronto, ON: Macmillan.
- Frenzel, B. (1983). Mires: repositories of climatic information or self-perpetuating ecosystems? In *Ecosystems of the World Vol. 4A, Mires: Swamp, Bog, Fen and Moor – General Studies*, ed. A. J. P. Gore, pp. 35–65. Amsterdam, the Netherlands: Elsevier.
- Fretwell, S. D. (1977). The regulation of plant communities by food chains exploiting them. *Perspectives in Biology and Medicine*, 20, 169–85.
- Frey, R. W. and Basan, P. B. (1978). Coastal salt marshes. In *Coastal Sedimentary Environments*, ed. R. A. Davis, pp. 101–69. New York: Springer-Verlag.
- Fritzell, E. K. (1989). Mammals in prairie wetlands. In *Northern Prairie Wetlands*, ed. A. van der Valk, pp. 268–301. Ames, IA: Iowa State University Press.
- Galatowitsch, S. M. and van der Valk, A. G. (1994). *Restoring Prairie Wetlands: An Ecological Approach*. Ames, IA: Iowa State University Press.
- Galatowitsch, S. M. and van der Valk, A. G. (1996). The vegetation of restored and natural prairie wetlands. *Ecological Applications*, 6, 102–12.
- Galinato, M. and van der Valk, A. (1986). Seed germination of annuals and emergents recruited during drawdowns in the Delta Marsh, Manitoba, Canada. *Aquatic Botany*, 26, 89–102.
- Garcia, L. V., Maranon, T., Moreno, A., and Clemente, L. (1993). Above-ground biomass and species richness in a Mediterranean salt marsh. *Journal of Vegetation Science*, 4, 417–24.
- Gastescu, P. (1993). The Danube Delta: geographical characteristics and ecological recovery. *Earth and Environmental Science*, 29, 57–67.
- Gaston, K. J. (2000). Global patterns in biodiversity. *Nature*, 405, 220–7.
- Gaston, K. J., Williams, P. H., Eggleton, P., and Humphries, C. J. (1995). Large scale patterns of biodiversity: spatial variation in family richness. *Proceedings of the Royal Society of London Series B*, 260, 149–54.
- Gaudet, C. L. and Keddy, P. A. (1988). A comparative approach to predicting competitive ability from plant traits. *Nature*, 334, 242–3.
- Gaudet, C. L. and Keddy, P. A. (1995). Competitive performance and species distribution in shoreline plant communities: a comparative approach. *Ecology*, 76, 280–91.
- Geho, E. M., Campbell, D., and Keddy, P. A. (2007). Quantifying ecological filters: the relative impact of herbivory, neighbours, and sediment on an oligohaline marsh. *Oikos*, 116, 1006–16.
- Geis, J. W. (1985). Environmental influences on the distribution and composition of wetlands in the Great Lakes basin. In *Coastal Wetlands*, eds. H. H. Prince and F. M. D'Itri, pp. 15–31. Chelsea, MI: Lewis Publishers.
- Gentry, A. H. (1988). Changes in plant community diversity and floristic composition on environmental and geographical gradients. *Annals of the Missouri Botanical Garden*, 75, 1–34.
- German Advisory Council on Global Change. (2006). *The Future Oceans: Warming Up, Rising High, Turning Sour*, Special Report. Berlin, Germany: German Advisory Council on Global Change.
- Gibson, D. J., Zampella, R. A., and Windisch, A. G. (1999). New Jersey Pine Plains: the “true barrens” of the New Jersey Pine Barrens. In *Savannas, Barrens, and Rock Outcrop Communities of North America*, eds. R. C. Anderson, J. S. Fralish, and J. M. Bastin, pp. 52–66. Cambridge, UK: Cambridge University Press.
- Gignac, L. D. and Vitt, D. H. (1990). Habitat limitations of *Sphagnum* along climatic, chemical, and physical gradients in mires of western Canada. *The Bryologist*, 93, 7–22.
- Gilbert, J. J. (1988). Suppression of rotifer populations by *Daphnia*: a review of the evidence, the

- mechanisms, and the effects on zooplankton community structure. *Limnology and Oceanography*, 33, 1286–303.
- Gilbert, J. J. (1990). Differential effects of *Anabaena affinis* on cladoceran and rotifers: mechanisms and implications. *Ecology*, 71, 1727–40.
- Gilbert, R. and Glew, J. R. (1986). A wind-driven ice-push event in eastern Lake Ontario. *Journal of Great Lakes Research*, 12, 326–31.
- Gill, D. (1973). Modification of northern alluvial habitats by river development. *The Canadian Geographer*, 17, 138–53.
- Giller, K. E. and Wheeler, B. D. (1986). Past peat cutting and present vegetation patterns in an undrained fen in the Norfolk Broadland. *Journal of Ecology*, 74, 219–47.
- Givnish, T. J. (1982). On the adaptive significance of leaf height in forest herbs. *The American Naturalist*, 120, 353–81.
- Givnish, T. J. (1988). Ecology and evolution of carnivorous plants. In *Plant–Animal Interactions*, ed. W. B. Abrahamson, pp. 243–90. New York: McGraw-Hill.
- Gladwell, M. (2002). *The Tipping Point: How Little Things Can Make a Big Difference*. New York: Little, Brown.
- Glaser, P. H. (1992). Raised bogs in eastern North America: regional controls for species richness and floristic assemblages. *Journal of Ecology*, 80, 535–54.
- Glaser, P. H., Janssens, J. A., and Siegel, D. I. (1990). The response of vegetation to chemical and hydrological gradients in the Lost River peatland, northern Minnesota. *Journal of Ecology*, 78, 1021–48.
- Gleason, H. A. (1926). The individualistic concept of the plant association. *Bulletin of the Torrey Botanical Club*, 53, 7–26.
- Gleason, H. A. (1939). The individualistic concept of the plant association. *American Midland Naturalist*, 21, 92–110.
- Glob, P. V. (1969). *The Bog People. Iron-Age Man Preserved*, translated from the Danish by R. Bruce-Mitford. Ithaca, NY: Cornell University Press.
- Glooschenko, W. A. (1980). Coastal ecosystems of the James/Hudson Bay area of Ontario, Canada. *Zeitschrift für Geomorphologie*, NF, 34, 214–24.
- Godfrey, W. E. (1966). *The Birds of Canada*. Ottawa, ON: Information Canada.
- Godwin, Sir H. (1981). *The Archives of the Peat Bogs*. Cambridge, UK: Cambridge University Press.
- Godwin, K. S., Shallenberger, J., Leopold, D. J., and Bedford, B. L. (2002). Linking landscape properties to local hydrogeologic gradients and plant species occurrence in New York fens: a hydrogeologic setting (HGS) framework. *Wetlands*, 22, 722–37.
- Goethe, J. W. (1831). *Goethe's Faust, Part 2*, translated by B. Taylor, revised and edited by S. Atkins, 1962. New York: Collier Books.
- Goin, C. J. and Goin, O. B. (1971). *Introduction to Herpetology*, 2nd edn. San Francisco, CA: W. H. Freeman.
- Goldsmith, F. B. (1973). The vegetation of exposed sea cliffs at South Stack, Anglesey. II. Experimental studies. *Journal of Ecology*, 61, 819–29.
- Goldsmith, F. B. (ed.) (1991). *Monitoring for Conservation and Ecology*. London: Chapman and Hall.
- Goldsmith, F. B. and Harrison, C. M. (1976). Description and analysis of vegetation. In *Methods in Plant Ecology*, ed. S. B. Chapman, pp. 85–155. Oxford, UK: Blackwell Scientific Publications.
- Golet, F. C. and Parkhurst, J. A. (1981). Freshwater wetland dynamics in South Kingston, Rhode Island, 1939–1972. *Environmental Management*, 5, 245–51.
- Good, R. E., Whigham, D. F., and Simpson, R. L. (eds.) (1978). *Freshwater Wetlands: Ecological Processes and Management Potential*. New York: Academic Press.
- Gopal, B. (1990). Nutrient dynamics of aquatic plant communities. In *Ecology and Management of Aquatic Vegetation in the Indian Subcontinent*, ed. B. Gopal, pp. 177–97. Dordrecht, the Netherlands: Kluwer.
- Gopal, B. and Goel, U. (1993). Competition and allelopathy in aquatic plant communities. *Botanical Review*, 59, 155–210.
- Gopal, B., Kvet, J., Löffler, H., Masing, V. and Patten, B. (1990). Definition and classification. In *Wetlands and Shallow Continental Water Bodies*, Vol. 1, *Natural and Human Relationships*, ed. B. C. Patten, pp. 9–15. The Hague, the Netherlands: SPB Academic Publishing.
- Gore, A. J. P. (ed.) (1983). *Ecosystems of the World*, Vol. 4A, *Mires: Swamp, Bog, Fen and Moor – General Studies*. Amsterdam, the Netherlands: Elsevier.
- Gore, A. J. P. (1983). Introduction. In *Ecosystems of the World*, Vol. 4A, *Mires: Swamp, Bog, Fen and*

- Moor – *General Studies*, ed. A. J. P. Gore. Amsterdam, the Netherlands: Elsevier.
- Gorham, E. (1953). Some early ideas concerning the nature, origin and development of peat lands. *Journal of Ecology*, **41**, 257–74.
- Gorham, E. (1957). The development of peatlands. *Quarterly Review of Biology*, **32**, 145–66.
- Gorham, E. (1961). Water, ash, nitrogen and acidity of some bog peats and other organic soils. *Journal of Ecology*, **49**, 103–6.
- Gorham, E. (1990). Biotic impoverishment in northern peatlands. In *The Earth in Transition*, ed. G. M. Woodwell, pp. 65–98. Cambridge, UK: Cambridge University Press.
- Gorham, E. (1991). Northern peatlands role in the carbon cycle and probable responses to climatic warming. *Ecological Applications*, **1**, 182–95.
- Gosselink, J. G. and Turner, R. E. (1978). The role of hydrology in freshwater wetland ecosystems. In *Freshwater Wetlands: Ecological Processes and Management Potential*, eds. R. E. Good, D. F. Whigham, and R. L. Simpson, pp. 63–79. New York: Academic Press.
- Gottlieb, A. D., Richards, J. H., and Gaiser, E. E. (2006). Comparative study of periphyton community structure in long and short hydroperiod Everglades marshes. *Hydrobiologia*, **569**, 195–207.
- Gough, J. (1793). Reasons for supposing that lakes have been more numerous than they are at present; with an attempt to assign the causes whereby they have been defaced. *Memoirs of the Literary and Philosophical Society of Manchester*, **4**, 1–19.
- In Walker, D. (1970). *Direction and Rate in Some British Post-Glacial Hydroses*. In *Studies in the Vegetational History of the British Isles*, eds. D. Walker and R. G. West, pp. 117–39. Cambridge, UK: Cambridge University Press.
- Gough, L. G., Grace, J. B., and Taylor, K. L. (1994). The relationship between species richness and community biomass: the importance of environmental variables. *Oikos*, **70**, 271–9.
- Goulding, M. (1980). *The Fishes and the Forest: Explorations in Amazonian Natural History*. Berkeley, CA: University of California Press.
- Grace, J. B. (1990). On the relationship between plant traits and competitive ability. In *Perspectives on Plant Competition*, eds. J. B. Grace and D. Tilman, pp. 51–65. San Diego, CA: Academic Press.
- Grace, J. B. (1999). The factors controlling species density in herbaceous plant communities: an assessment. *Perspectives in Plant Ecology, Evolution and Systematics*, **2**, 1–28.
- Grace, J. B. and Ford, M. A. (1996). The potential impact of herbivores on the susceptibility of the marsh plant *Sagittaria lancifolia* to saltwater intrusion in coastal wetlands. *Estuaries*, **19**, 13–20.
- Grace, J. B. and Wetzel, R. G. (1981). Habitat partitioning and competitive displacement in cattails (*Typha*): experimental field studies. *The American Naturalist*, **118**, 463–74.
- Graf, D. L. and Cummings, K. S. (2007). Review of the systematics and global diversity of freshwater mussel species (Bivalvia: Unionoida). *Journal of Molluscan Studies*, **73**, 291–314.
- Graham, J. B. (1997). *Air Breathing Fishes*. San Diego, CA: Academic Press.
- Greening, H. (1995). Resource-based watershed management in Tampa Bay. In *Wetlands and Watershed Management: Science Applications and Public Policy*, eds. J. A. Kusler, D. E. Willard, and H. C. Hull Jr., pp. 172–81. A collection of papers from a national symposium and several workshops at Tampa, FL, Apr 23–26. Berne, NY: Association of State Wetland Managers.
- Griffiths, R. A., Denton, J., and Wong, A. L. (1993). The effect of food level on competition in tadpoles: interference mediated by protothecan algae? *Journal of Animal Ecology*, **62**, 274–9.
- Grime, J. P. (1973). Competitive exclusion in herbaceous vegetation. *Nature*, **242**, 344–7.
- Grime, J. P. (1974). Vegetation classification by reference to strategies. *Nature*, **250**, 26–31.
- Grime, J. P. (1977). Evidence for the existence of three primary strategies in plants and its relevance to ecological and evolutionary theory. *The American Naturalist*, **111**, 1169–94.
- Grime, J. P. (1979). *Plant Strategies and Vegetation Processes*. Chichester, UK: John Wiley.
- Grime, J. P. and Hunt, R. (1975). Relative growth-rate: its range and adaptive significance in a local flora. *Journal of Ecology*, **63**, 393–422.
- Grime, J. P., Mason, G., Curtis, A. V., Rodman, J., Band, S. R., Mowforth, M. A. G., Neal, A. M., and Shaw, S.

- (1981). A comparative study of germination characteristics in a local flora. *Journal of Ecology*, 69, 1017–59.
- Grimes, W. (2006). Visionaries and rascals in Florida's wetlands: review of *The Swamp: The Everglades, Florida and the Politics of Paradise*. *The Washington Post*, Mar 8, 2006.
- Grishin, S. Y., del Moral, R., Krestov, P. V., and Verkholat, V. P. (1996). Succession following the catastrophic eruption of Ksudach volcano (Kamchatka, 1907). *Vegetatio*, 127, 129–53.
- Groombridge, B. (ed.) (1992). *Global Biodiversity: Status of the Earth's Living Resources*, a report compiled by the World Conservation Monitoring Centre. London: Chapman and Hall.
- Grootjans, A. P., van Diggelen, R., Everts, H. F., Schipper, P. C., Streefkerk, J., de Vries, N. P., and Wierda, A. (1993). Linking ecological patterns to hydrological conditions on various spatial scales: a case study of small stream valleys. In *Landscape Ecology of a Stressed Environment*, eds. C. C. Vos and P. Opdam, pp. 60–99. London: Chapman and Hall.
- Grosse, W., Buchel, H. B., and Tiebel, H. (1991). Pressurized ventilation in wetland plants. *Aquatic Botany*, 39, 89–98.
- Grover, A. M. and Baldassarre, G. A. (1995). Bird species richness within beaver ponds in south-central New York. *Wetlands*, 15, 108–18.
- Grubb, P. J. (1977). The maintenance of species-richness in plant communities: the importance of the regeneration niche. *Biological Reviews*, 52, 107–45.
- Grubb, P. J. (1985). Plant populations and vegetation in relation to habitat disturbance and competition: problems of generalizations. In *The Population Structure of Vegetation*, ed. J. White, pp. 595–621. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Grubb, P. J. (1986). Problems posed by sparse and patchily distributed species in species-rich plant communities. In *Community Ecology*, eds. J. M. Diamond and T. J. Case, pp. 207–25. New York: Harper and Row.
- Grubb, P. J. (1987). Global trends in species-richness in terrestrial vegetation: a view from the northern hemisphere. In *Organization of Communities Past and Present*, eds. J. H. R. Gee and P. S. Giller, pp. 99–118. 27th Symposium of the British Ecological Society, Aberystwyth. Oxford, UK: Blackwell Scientific Publications.
- Grumbine, R. E. (1994). What is ecosystem management? *Conservation Biology*, 8, 27–38.
- Grumbine, R. E. (1997). Reflections on 'What is ecosystem management?' *Conservation Biology*, 11, 41–7.
- Grunwald, M. (2006). *The Swamp: The Everglades, Florida and the Politics of Paradise*. New York: Simon and Schuster.
- Gurevitch, J., Morrow, L., Wallace, A., and Walsh, A. (1992). A meta-analysis of competition in field experiments. *The American Naturalist*, 140, 539–72.
- Guy, H. P. (1973). Sediment problems in urban areas. In *Focus on Environmental Geology*, ed. R. W. Tank, pp. 186–92. New York: Oxford University Press.
- Guyer, C. and Bailey, M. A. (1993). Amphibians and reptiles of longleaf pine communities. In *The Longleaf Pine Ecosystem: Ecology, Restoration and Management*, ed. S. M. Hermann, pp. 139–58. Proceedings of the Tall Timbers Fire Ecology Conference No. 18. Tallahassee, FL: Tall Timbers Research Station.
- Hacker, S. D. and Bertness, M. D. (1999). Experimental evidence for factors maintaining plant species diversity in a New England salt marsh. *Ecology*, 80, 2064–73.
- Hacker, S. D. and Gaines, S. D. (1997). Some implications of direct positive interactions for community species diversity. *Ecology*, 78, 1990–2003.
- Haeuber, R. and Franklin, J. (eds.) (1996). Perspectives on ecosystem management. *Ecological Applications*, 6, 692–747.
- Hairton, N. G., Smith, F. E., and Slobodkin, L. B. (1960). Community structure, population control, and competition. *The American Naturalist*, 94, 421–5.
- Haith, D. A. and Shoemaker, L. L. (1987). Generalized watershed loading functions for stream-flow nutrients. *Water Resources Bulletin*, 23, 471–8.
- Hamilton, S. K., Sipel, S. J., and Melack, J. M. (1996). Inundation patterns in the Pantanal wetland of South America determined from passive microwave remote sensing. *Archiv für Hydrobiologie*, 137, 1–23.
- Hammer, D. A. (1969). Parameters of a marsh snapping turtle population Lacreek refuge, South Dakota. *Journal of Wildlife Management*, 33, 995–1005.
- Hammer, D. A. (ed.) (1989). *Constructed Wetlands for Wastewater Treatment: Municipal, Industrial and Agricultural*. Chelsea, MI: Lewis Publishers.

- Hanski, I. (1994). Patch-occupancy dynamics in fragmented landscapes. *Trends in Ecology and Evolution*, 9, 131–5.
- Hanski, I. and Gilpin, M. (1991). Metapopulation dynamics: a brief history and conceptual domain. *Biological Journal of the Linnean Society*, 42, 3–16.
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162, 1243–8.
- Hardin, G. and Baden, J. (1977). *Managing the Commons*. San Francisco, CA: W. H. Freeman.
- Harington, C. R. (1996). Giant beaver. (Reproduced courtesy of the Canadian Museum of Nature, Ottawa). [www.beringia.com/02/02maina6.html](http://www.beringia.com/02/02maina6.html) (accessed July 28, 2008)
- Harmon, M. E., Franklin, J. F., Swanson, F. J., Sollins, P., Gregory, S. V., Lattin, J. D., Anderson, N. H., and Cline, S. P. (1986). Ecology of coarse woody debris in temperate ecosystems. *Advances in Ecological Research*, 15, 133–302.
- Harper, J. L. (1977). *Population Biology of Plants*. London: Academic Press.
- Harper, J. L., Williams, J. T., and Sagar, G. R. (1965). The behavior of seeds in soil. I. The heterogeneity of soil surfaces and its role in determining the establishment of plants from seed. *Journal of Ecology*, 53, 273–86.
- Harris, R. R., Fox, C. A., and Risser, R. (1987). Impact of hydroelectric development on riparian vegetation in the Sierra Nevada region, California, USA. *Environmental Management*, 11, 519–27.
- Harris, S. W. and Marshall, W. H. (1963). Ecology of water-level manipulations on a northern marsh. *Ecology*, 44, 331–43.
- Hart, D. D. (1983). The importance of competitive interactions within stream populations and communities. In *Stream Ecology: Application and Testing of General Ecological Theory*, eds. J. R. Barnes and G. W. Minshall, pp. 99–136. New York: Plenum Press.
- Hartman, J. M. (1988). Recolonization of small disturbance patches in a New England salt marsh. *American Journal of Botany*, 75, 1625–31.
- Harvey, P. H., Colwell, R. K., Silvertown, J. W., and May, R. M. (1983). Null models in ecology. *Annual Review of Ecology and Systematics*, 14, 189–211.
- Haukos, D. A. and Smith, L. M. (1993). Seed-bank composition and predictive ability of field vegetation in playa lakes. *Wetlands*, 13, 32–40.
- Haukos, D. A. and Smith, L. M. (1994). Composition of seed banks along an elevational gradient in playa wetlands. *Wetlands*, 14, 301–7.
- Hayati, A. A. and Proctor, M. C. F. (1991). Limiting nutrients in acid-mire vegetation: peat and plant analyses and experiments on plant responses to added nutrients. *Journal of Ecology*, 79, 75–95.
- Heal, G. (2000). Valuing ecosystem services. *Ecosystems*, 3, 24–30.
- Heal, O. W., Latter, P. M., and Howson, G. (1978). A study of the rates of decomposition of organic matter. In *Production Ecology of British Moors and Montane Grasslands*, eds. O. W. Heal and D. F. Perkins, pp. 136–59. Berlin, Germany: Springer-Verlag.
- Hellquist, C. B. and Crow, G. E. (1984). *Aquatic Vascular Plants of New England*, Part 7, *Cabombaceae*, *Nymphaeaceae*, *Nelumbonaceae*, and *Ceratophyllaceae*, Station Bulletin No. 527. Durham, NH: University of New Hampshire.
- Helsinki Commission. (2003). *The Baltic Marine Environment 1999–2002*, Baltic Sea Environment Proceedings No. 87. Helsinki: Helsinki Commission.
- Hemphill, N. and Cooper, S. D. (1983). The effect of physical disturbance on the relative abundances of two filter-feeding insects in a small stream. *Oecologia*, 58, 378–82.
- Henry, H. A. L. and Jeffries, R. L. (2009). Opportunist herbivores, migratory connectivity and catastrophic shifts in arctic coastal systems. In *Human Impacts on Salt Marshes: A Global Perspective*, eds. B. R. Silliman, E. D. Grosholz, and M. D. Bertness, pp. 85–102. Berkeley, CA: University of California Press.
- Herman, K. D., Masters, L. A., Penskar, M. R., Reznicek, A. A., Wilhelm, G. S., Brodovich, W. W., and Gardiner, K. P. (2001). *Floristic Quality Assessment with Wetland Categories and Examples of Computer Applications for the State of Michigan*, revd 2nd edn. Lansing, MI: Natural Heritage Program, Michigan Department of Natural Resources.
- Higgs, E. S. (1997). What is good ecological restoration? *Conservation Biology*, 11, 338–48.
- Hik, D. S., Jefferies, R. L., and Sinclair, A. R. E. (1992). Foraging by geese, isostatic uplift and asymmetry in the development of salt-marsh plant communities. *Journal of Ecology*, 80, 395–406.

- Hill, N. M. and Keddy, P. A. (1992). Prediction of rarities from habitat variables: coastal plain plants on Nova Scotian lakeshores. *Ecology*, **73**, 1852–9.
- Hill, N. M., Keddy, P. A., and Wisheu, I. C. (1998). A hydrological model for predicting the effects of dams on the shoreline vegetation of lakes and reservoirs. *Environmental Management*, **22**, 723–36.
- Hoagland, B. W. and Collins, S. L. (1997a). Gradient models, gradient analysis, and hierarchical structure in plant communities. *Oikos*, **78**, 23–30.
- Hoagland, B. W. and Collins, S. L. (1997b). Heterogeneity in shortgrass prairie vegetation: the role of playa lakes. *Journal of Vegetation Science*, **8**, 277–86.
- Hochachka, P. W., Fields, J., and Mustafa, T. (1973). Animal life without oxygen: basic biochemical mechanisms. *American Zoology*, **13**, 543–55.
- Hogenbirk, J. C. and Wein, R. W. (1991). Fire and drought experiments in northern wetlands: a climate change analogue. *Canadian Journal of Botany*, **69**, 1991–7.
- Hogg, E. H., Lieffers, V. J., and Wein, R. W. (1992). Potential carbon losses from peat profiles: effects of temperature, drought cycles, and fire. *Ecological Applications*, **2**, 298–306.
- Holling, C. S. (ed.) (1978). *Adaptive Environmental Assessment and Management*. Chichester, UK: John Wiley.
- Hook, D. D. (1984). Adaptations to flooding with fresh water. In *Flooding and Plant Growth*, ed. T. T. Kozlowski, pp. 265–94. Orlando, FL: Academic Press.
- Hook, D. D., McKee, W. H., Jr., Smith, H., Gregory, J., Burrell, V. J., Jr., DeVoe, W. R., Sojka, R. E., Gilbert, S., Banks, R., Stolzy, L. H., Brooks, C., Matthews, T. D., and Shear, T. H. (eds.) (1988). *The Ecology and Management of Wetlands*, Vol. 1, *Ecology of Wetlands*. Portland, OR: Timber Press.
- Hoover, J. J. and Killgore, K. J. (1998). Fish communities. In *Southern Forested Wetlands: Ecology and Management*, eds. M. G. Messina and W. H. Conner, pp. 237–60. Boca Raton, FL: Lewis Publishers.
- Horn, H. (1976). Succession. In *Theoretical Ecology: Principles and Applications*, ed. R. M. May, pp. 187–204. Philadelphia, PA: W. B. Saunders.
- Hou, H.-Y. (1983). Vegetation of China with reference to its geographical distribution. *Annals of the Missouri Botanical Garden*, **70**, 509–48.
- Houck, O. (2006). Can we save New Orleans? *Tulane Environmental Law Journal*, **19**, 1–68.
- Houlahan, J., Keddy, P., Makkey, K., and Findlay, C. S. (2006). The effects of adjacent land-use on wetland plant species richness and community composition. *Wetlands*, **26**, 79–96.
- House, J. and Brovkin, V. (eds.) (2005). Climate and air quality. In *Ecosystems and Human Well-Being: Current State and Trends – Findings of the Condition and Trends Working Group of the Millennium Ecosystem Assessment*, eds. R. Hassan, R. Scholes, and N. Ash, pp. 355–90. Washington, DC: Island Press.
- Howard, R. T. and Mendelssohn, I. A. (1999). Salinity as a constraint on growth of oligohaline marsh macrophytes. I. Species variation in stress tolerance. *American Journal of Botany*, **86**, 785–94.
- Howard-Williams, C. and Thompson, K. (1985). The conservation and management of African wetlands. In *The Ecology and Management of African Wetland Vegetation*, ed. P. Denny, pp. 203–30. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Howarth, R. W., Fruci, J. R., and Sherman, D. (1991). Inputs of sediment and carbon to an estuarine ecosystem: influence of land use. *Ecological Applications*, **1**, 27–39.
- Hubbell, S. P. and Foster, R. B. (1986). Biology, chance, and the history and structure of tropical rain forest tree communities. In *Community Ecology*, eds. J. Diamond and T. J. Case, pp. 314–29. New York: Harper and Row.
- Huber, O. (1982). Significance of savanna vegetation in the Amazon Territory of Venezuela. In *Biological Diversification in the Tropics*, ed. G. T. Prance, pp. 221–44. New York: Columbia University Press.
- Hughes, J. D. and Thirgood, J. V. (1982). Deforestation, erosion and forest management in ancient Greece and Rome. *Journal of Forestry*, **26**, 60–75.
- Hunter, M. D. and Price, P. W. (1992). Playing chutes and ladders: heterogeneity and the relative roles of bottom-up and top-down forces in natural communities. *Ecology*, **73**, 724–32.
- Hurlbert, S. H. (1984). Pseudoreplication and the design of ecological field experiments. *Ecological Monographs*, **54**, 187–211.
- Hurlbert, S. H. (1990). Spatial distribution of the montane unicorn. *Oikos*, **58**, 257–71.

- Huston, M. (1979). A general hypothesis of species diversity. *The American Naturalist*, 113, 81–101.
- Huston, M. (1994). *Biological Diversity: The Coexistence of Species on Changing Landscapes*. Cambridge, UK: Cambridge University Press.
- Hutchinson, G. E. (1959). Homage to Santa Rosalia or why are there so many kinds of animals? *The American Naturalist*, 93, 145–9.
- Hutchinson, G. E. (1975). *A Treatise on Limnology*, Vol. 3, *Limnological Botany*. New York: John Wiley.
- Ingebritsen, S. E., McVoy, C., Glaz, B., and Park, W. (1999). Florida Everglades: subsidence threatens agriculture and complicates ecosystem restoration. In *Land Subsidence in the United States*, U.S. Geological Survey Circular No. 1182, eds. D. Galloway, D. R. Jones, and S. E. Ingebritsen, pp. 95–106. Reston, VA: U.S. Geological Survey.
- Ingram, H. A. P. (1982). Size and shape in raised mire ecosystems: a geophysical model. *Nature*, 297, 300–3.
- Ingram, H. A. P. (1983). Hydrology. In *Ecosystems of the World*, Vol. 4A, *Mires: Swamp, Bog, Fen and Moor – General Studies*, ed. A. J. P. Gore, pp. 67–158. Amsterdam, the Netherlands: Elsevier.
- International Joint Commission. (1980). *Pollution in the Great Lakes Basin from Land Use Activities*. Detroit, MI and Windsor, ON: International Joint Commission.
- International Rice Research Institute (IRRI). (2009). Rough rice consumption, by country and geographical region: USA. <http://beta.irri.org/solutions/index.php?> (accessed Dec 4, 2009)
- Irion, G. M., Müller, J., de Mello, J. N., and Junk, W. J. (1995). Quaternary geology of the Amazon lowland. *Geo-Marine Letters*, 15, 172–8.
- Isabelle, P. S., Fooks, L. J., Keddy, P. A., and Wilson, S. D. (1987). Effects of roadside snowmelt on wetland vegetation: an experimental study. *Journal of Environmental Management*, 25, 57–60.
- IUCN. (2008) *Red List*. [www.iucnredlist.org](http://www.iucnredlist.org)
- Jackson, J. B. C. (1981). Interspecific competition and species distributions: the ghosts of theories and data past. *American Zoologist*, 21, 889–901.
- Jackson, M. B. and Drew, M. C. (1984). Effects of flooding on growth and metabolism of herbaceous plants. In *Flooding and Plant Growth*, ed. T. T. Kozlowski, pp. 47–128. Orlando, FL: Academic Press.
- Janis, C. (1976). The evolutionary strategy of the Equidae and the origins of rumen and cecal digestion. *Evolution*, 30, 757–74.
- Janzen, D. H. and Martin, P. S. (1982). Neotropical anachronisms: the fruits the gomphotheres ate. *Science*, 215, 19–27.
- Jean, M. and Bouchard, A. (1991). Temporal changes in wetland landscapes of a section of the St. Lawrence River, Canada. *Environmental Management*, 15, 241–50.
- Jefferies, R. L. (1977). The vegetation of salt marshes at some coastal sites in arctic North America. *Journal of Ecology*, 65, 661–72.
- Jefferies, R. L. (1988a). Pattern and process in Arctic coastal vegetation in response to foraging by lesser snow geese. In *Plant Form and Vegetation Structure*, eds. M. J. A. Werger, P. J. M. van der Aart, H. J. During, and J. T. A. Verhoeven, pp. 281–300. The Hague, the Netherlands: SPB Academic Publishing.
- Jefferies, R. L. (1988b). Vegetational mosaics, plant-animal interactions and resources for plant growth. In *Plant Evolutionary Biology*, eds. L. Gottlieb and S. K. Jain, pp. 341–69. London: Chapman and Hall.
- Jeglum, J. K. and He, F. (1995). Pattern and vegetation–environment relationships in a boreal forested wetland in northeastern Ontario, *Canadian Journal of Botany*, 73, 629–37.
- Jenkins, S. H. (1975). Food selection by beavers. *Oecologia*, 21, 157–73.
- Jenkins, S. H. (1979). Seasonal and year to year differences in food selection by beavers. *Oecologia*, 44, 112–16.
- Jenkins, S. H. (1980). A size–distance relation in food selection by beavers. *Ecology*, 61, 740–6.
- Jochimsen, D. M. (2006). Factors influencing the road mortality of snakes on the Upper Snake River Plain, Idaho. In *Proceedings of the 2005 International Conference on Ecology and Transportation*, eds. C. L. Irwin, P. Garrett, and K. P. McDermott, pp. 351–65. Raleigh, NC: Center for Transportation and the Environment, North Carolina State University.
- Johnsgard, P. A. (1980). Where have all the curlews gone? *Natural History*, 89(8), 30–3. Reprinted in *Papers in Ornithology*, <http://digitalcommons.unl.edu/Gioscienithology/23>
- Johnson, D. L., Lynch, W. E., Jr., and Morrison, T. W. (1997). Fish communities in a diked Lake Erie

- wetland and an adjacent undiked area. *Wetlands*, 17, 43–54.
- Johnson, M. G., Leach, J. H., Minns, C. K., and Oliver, C. H. (1977). Limnological characteristics of Ontario lakes in relation to associations of walleye (*Stizostedion vitreum*), northern pike (*Esox lucius*), lake trout (*Salvelinus namaycush*) and smallmouth bass (*Micropterus dolomieu*). *Journal of the Fisheries Research Board of Canada*, 34, 1592–601.
- Johnson, P. D. and Brown, K. M. (1998). Intraspecific life history variation in the threatened Louisiana pearlshell mussel, *Margaritifera hembeli*. *Freshwater Biology*, 40, 317–29.
- Johnson, W. B., Sasser, C. E., and Gosselink, J. G. (1985). Succession of vegetation in an evolving river delta, Atchafalaya Bay, Louisiana. *Journal of Ecology*, 73, 973–86.
- Johnson, W. C. (1994). Woodland expansion in the Platte River, Nebraska: patterns and causes. *Ecological Monographs*, 64, 45–84.
- Johnson, W. C., Burgess, R. L., and Keammerer, W. R. (1976). Forest overstory vegetation and environment on the Missouri River floodplain in North Dakota. *Ecological Monographs*, 46, 59–84.
- Johnston, A. J. B. (1983). *The Summer of 1744: A Portrait of Life in 18th-Century Louisbourg*. Hull, QC: Parks Canada.
- Johnston, C. A. and Naiman, R. J. (1990). Aquatic patch creation in relation to beaver population trends. *Ecology*, 71, 1617–21.
- Johnston, J. W., Thompson, T. A., Wilcox, D. A., and Baedke, S. J. (2007). Geomorphic and sedimentologic evidence for the separation of Lake Superior from Lake Michigan and Huron. *Journal of Paleolimnology*, 37, 349–64.
- Jones, C. G., Lawton, J. H., and Shachak, M. (1994). Organisms as ecosystem engineers. *Oikos*, 69, 373–86.
- Jones, M. (2003). *The Last Great Quest: Captain Scott's Antarctic Sacrifice*. New York: Oxford University Press.
- Jones, R. H., Sharitz, R. R., Dixon, P. M., Segal, D. S., and Schneider, R. L. (1994). Woody plant regeneration in four floodplain forests. *Ecological Monographs*, 64, 345–67.
- Jordan, W. R., III, Gilpin, M. E., and Aber, J. D. (1987). *Restoration Ecology: Synthetic Approach to Ecological Research*. Cambridge, UK: Cambridge University Press.
- Judson, S. (1968). Erosion of the land, or what's happening to our continents? *American Scientist*, 56, 356–74.
- Junk, W. J. (1983). Ecology of swamps on the Middle Amazon. In *Ecosystems of the World*, Vol. 4B, *Mires: Swamp, Bog, Fen and Moor – Regional Studies*, ed. A. J. P. Gore, pp. 98–126. Amsterdam, the Netherlands: Elsevier.
- Junk, W. J. (1984). Ecology of the várzea, floodplain of Amazonian white-water rivers. In *The Amazon: Limnology and Landscape Ecology of a Mighty Tropical River and its Basin*, ed. H. Sioli, pp. 215–43. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Junk, W. J. (1986). Aquatic plants of the Amazon system. In *The Ecology of River Systems*, eds. B. R. Davies and K. F. Walker, pp. 319–37. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Junk, W. J. (1993). Wetlands of tropical South America. In *Wetlands of the World*, Vol. 1, eds. D. F. Whigham, D. Dykyjova and S. Hejny, pp. 679–739. Dordrecht, the Netherlands: Kluwer.
- Junk, W. J. and Piedade, M. T. F. (1994). Species diversity and distribution of herbaceous plants in the floodplain of the middle Amazon. *Verhandlungen Internationale Vereinigung für theoretische und angewandte Limnologie*, 25, 1862–5.
- Junk, W. J. and Piedade, M. T. F. (1997). Plant life in the floodplain with special reference to herbaceous plants. In *The Central Amazon Floodplain*, ed. W. J. Junk, pp. 147–85. Berlin, Germany: Springer-Verlag.
- Junk, W. J. and Welcomme, R. L. (1990). Floodplains. In *Wetlands and Shallow Continental Water Bodies*, Vol. 1, *Natural and Human Relationships*, ed. B. C. Patten, pp. 491–524. The Hague, the Netherlands: SPB Academic Publishing.
- Junk, W. J., Bayley, P. B., and Sparks, R. E. (1989). The flood pulse concept in riverfloodplain systems. In *Proceedings of the International Large River Symposium*, ed. D. P. Dodge, pp. 110–27. *Canadian Journal of Fisheries and Aquatic Sciences*, Special Publication No. 106.
- Junk, W. J., Soares, M. G. M., and Saint-Paul, U. (1997). The fish. In *The Central Amazon Floodplain*, ed. W. J. Junk, pp. 385–408. Berlin, Germany: Springer-Verlag.

- Junk, W. J., Brown, M., Campbell, I. C., Finlayson, M., Gopal, B., Ramberg, L., and Warner, B. G. (2006). The comparative biodiversity of seven globally important wetlands: a synthesis. *Aquatic Sciences*, **68**, 400–14.
- Jurik, T. M., Wang, S., and van der Valk, A. G. (1994). Effects of sediment load on seedling emergence from wetland seed banks. *Wetlands*, **14**, 159–65.
- Justin, S. H. F. W. and Armstrong, W. (1987). The anatomical characteristics of roots and plant response to soil flooding. *New Phytologist*, **106**, 465–95.
- Kajak, Z. (1993). The Vistula River and its riparian zones. *Hydrobiologia*, **251**, 149–57.
- Kalamees, K. (1982). The composition and seasonal dynamics of fungal cover on peat soils. In *Peatland Ecosystems: Researches into the Plant Cover of Estonian Bogs and Their Productivity*, ed. V. Masing, pp. 12–29. Tallinn, Estonia: Academy of Sciences of the Estonian S. S. R.
- Kalliola, R., Salo, J., Puhakka, M., and Rajasilta, M. (1991). New site formation and colonizing vegetation in primary succession on the Western Amazon floodplains. *Journal of Ecology*, **79**, 877–901.
- Kaminski, R. M. and Prince, H. H. (1981). Dabbling duck and aquatic macroinvertebrate responses to manipulated wetland habitat. *Journal of Wildlife Management*, **45**, 1–15.
- Kaminski, R. M., Murkin, H. M., and Smith, C. E. (1985). Control of cattail and bulrush by cutting and flooding. In *Coastal Wetlands*, eds. H. H. Prince and F. M. D'Itri, pp. 253–62. Chelsea, MI: Lewis Publishers.
- Kantrud, H. A., Millar, J. B., and van der Valk, A. G. (1989). Vegetation of the wetlands of the prairie pothole region. In *Northern Prairie Wetlands*, ed. A. G. van der Valk, pp. 132–87. Ames, IA: Iowa State University Press.
- Karrow, P. F. and P. E. Calkin (eds.) (1985). *Quaternary Evolution of the Great Lakes*, Special Paper No. 30. St John's, Nfld: Geological Association of Canada.
- Keddy, C. J. and McCrae, T. (1989). *Environmental Databases for State of the Environment Reporting*, Technical Report No. 19. Ottawa, ON: State of the Environment Reporting Branch, Environment Canada.
- Keddy, C. J. and Sharp, M. J. (1994). A protocol to identify and prioritize significant coastal plain plant assemblages for conservation. *Biological Conservation*, **68**, 269–74.
- Keddy, P. A. (1976). Lakes as islands: the distributional ecology of two aquatic plants, *Lemna minor* L. and *L. trisulca* L. *Ecology*, **57**, 353–9.
- Keddy, P. A. (1981). Vegetation with coastal plain affinities in Axe Lake, near Georgian Bay, Ontario. *Canadian Field Naturalist*, **95**, 241–8.
- Keddy, P. A. (1982). Quantifying within lake gradients of wave energy, substrate particle size and shoreline plants in Axe Lake, Ontario. *Aquatic Botany*, **14**, 41–58.
- Keddy, P. A. (1983). Shoreline vegetation in Axe Lake, Ontario: effects of exposure on zonation patterns. *Ecology*, **64**, 331–44.
- Keddy, P. A. (1984). Plant zonation on lakeshores in Nova Scotia: a test of the resource specialization hypothesis. *Journal of Ecology*, **72**, 797–808.
- Keddy, P. A. (1985a). Lakeshores in the Tusket River Valley, Nova Scotia: distribution and status of some rare species, including *Coreopsis rosea* Nutt. and *Sabtia kennedyana* Fern. *Rhodora*, **87**, 309–20.
- Keddy, P. A. (1985b). Wave disturbance on lakeshores and the within-lake distribution of Ontario's Atlantic coastal plain flora. *Canadian Journal of Botany*, **63**, 656–60.
- Keddy, P. A. (1989a). *Competition*. London: Chapman and Hall.
- Keddy, P. A. (1989b). Effects of competition from shrubs on herbaceous wetland plants: a 4-year field experiment. *Canadian Journal of Botany*, **67**, 708–16.
- Keddy, P. A. (1990a). Competitive hierarchies and centrifugal organization in plant communities. In *Perspectives on Plant Competition*, eds. J. B. Grace and D. Tilman, pp. 265–90. San Diego, CA: Academic Press.
- Keddy, P. A. (1990b). Is mutualism really irrelevant to ecology? *Bulletin of the Ecological Society of America*, **71**(2), 101–2.
- Keddy, P. A. (1991a). Biological monitoring and ecological prediction: from nature reserve management to national state of environment indicators. In *Biological Monitoring for Conservation*, ed. F. B. Goldsmith, pp. 249–67. London: Chapman and Hall.
- Keddy, P. A. (1991b). Water level fluctuations and wetland conservation. In *Wetlands of the Great*

- Lakes, eds. J. Kusler and R. Smardon, pp. 79–91. Proceedings of an International Symposium, Niagara Falls, NY, May 16–18, 1990. Berne, NY: Association of State Wetland Managers.
- Keddy, P. A. (1991c). Reviewing a festschrift: what are we doing with our scientific lives? *Journal of Vegetation Science*, 2, 419–24.
- Keddy, P. A. (1992a). Assembly and response rules: two goals for predictive community ecology. *Journal of Vegetation Science*, 3, 157–64.
- Keddy, P. A. (1992b). A pragmatic approach to functional ecology. *Functional Ecology*, 6, 621–6.
- Keddy, P. A. (1994). Applications of the Hertzprung–Russell star chart to ecology: reflections on the 21st birthday of Geographical Ecology. *Trends in Ecology and Evolution*, 9, 231–4.
- Keddy, P. A. (2001). *Competition*, 2nd edn. Dordrecht, the Netherlands: Kluwer.
- Keddy, P. A. (2007). *Plants and Vegetation: Origins, Processes, Consequences*. Cambridge, UK: Cambridge University Press.
- Keddy, P. A. (2009). Thinking big: a conservation vision for the Southeastern Coastal Plain of North America. *Southeastern Naturalist*, 7, 213–26.
- Keddy, P. A. and Constabel, P. (1986). Germination of ten shoreline plants in relation to seed size, soil particle size and water level: an experimental study. *Journal of Ecology*, 74, 122–41.
- Keddy, P. A. and Fraser, L. H. (2000). Four general principles for the management and conservation of wetlands in large lakes: the role of water levels, nutrients, competitive hierarchies and centrifugal organization. *Lakes and Reservoirs: Research and Management*, 5, 177–85.
- Keddy, P. A. and Fraser, L. H. (2002). The management of wetlands for biological diversity: four principles. In *Modern Trends in Applied Aquatic Ecology*, eds. R. S. Ambast and N. K. Ambast, pp. 21–42. New York: Kluwer.
- Keddy, P. A. and MacLellan, P. (1990). Centrifugal organization in forests. *Oikos*, 59, 75–84.
- Keddy, P. A. and Reznicek, A. A. (1982). The role of seed banks in the persistence of Ontario's coastal plain flora. *American Journal of Botany*, 69, 13–22.
- Keddy, P. A. and Reznicek, A. A. (1986). Great Lakes vegetation dynamics: the role of fluctuating water levels and buried seeds. *Journal of Great Lakes Research*, 12, 25–36.
- Keddy, P. A. and Shipley, B. (1989). Competitive hierarchies in herbaceous plant communities. *Oikos*, 54, 234–41.
- Keddy, P. A. and Wisheu, I. C. (1989). Ecology, biogeography, and conservation of coastal plain plants: some general principles from the study of Nova Scotian wetlands. *Rhodora*, 91, 72–94.
- Keddy, P. A., Lee, H. T., and Wisheu, I. C. (1993). Choosing indicators of ecosystem integrity: wetlands as a model system. In *Ecological Integrity and the Management of Ecosystems*, eds. S. Woodley, J. Kay, and G. Francis, pp. 61–79. Delray Beach, FL: St. Lucie Press.
- Keddy, P. A., Twolan-Strutt, L., and Wisheu, I. C. (1994). Competitive effect and response rankings in 20 wetland plants: are they consistent across three environments? *Journal of Ecology*, 82, 635–43.
- Keddy, P. A., Fraser, L. H., and Wisheu, I. C. (1998). A comparative approach to examine competitive responses of 48 wetland plant species. *Journal of Vegetation Science*, 9, 777–86.
- Keddy, P. A., Campbell, D., McFalls T., Shaffer, G., Moreau, R., Dranguet, C., and Heleniak, R. (2007). The wetlands of lakes Pontchartrain and Maurepas: past, present and future. *Environmental Reviews*, 15, 1–35.
- Keddy, P. A., Gough, L., Nyman, J. A., McFalls, T., Carter, J., and Siegnist, J. (2009a). Alligator hunters, pelt traders, and runaway consumption of Gulf coast marshes: a trophic cascade perspective on coastal wetland losses. In *Human Impacts on Salt Marshes: A Global Perspective*, eds. B. R. Silliman, E. D. Grosholz, and M. D. Bertness, pp. 115–33. Berkeley, CA: University of California Press.
- Keddy, P. A., Fraser, L. H., Solomeshch, A. I., Junk, W. J., Campbell, D. R., Arroyo, M. T. K., and Alho, C. J. R. (2009b). Wet and wonderful: the world's largest wetlands are conservation priorities. *BioScience*, 59, 39–51.
- Keeley, J. E., DeMason, D. A., Gonzalez, R., and Markham, K. R. (1994). Sediment based carbon nutrition in tropical alpine Isoetes. In *Tropical Alpine Environments Plant Form and Function*, eds. P. W. Rundel, A. P. Smith, and F. C. Meinzer, pp. 167–94. Cambridge, UK: Cambridge University Press.

- Keeling, C. D. and Whorf, T. P. (2005). Atmospheric CO<sub>2</sub> records from sites in the SIO air sampling network. In *Trends: A Compendium of Data on Global Change* eds. T.A. Boden *et al.*, pp. 16–26. Oak Ridge, TN: Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy.
- Keller, E. A. and Day, J. W. (2007). Untrammelled growth as an environmental “March of Folly”. *Ecological Engineering*, **30**, 206–14.
- Kelly, K. (1975). The artificial drainage of land in nineteenth-century southern Ontario. *Canadian Geographer*, **4**, 279–98.
- Kendall, R. L. (1969). An ecological history of the Lake Victoria Basin. *Ecological Monographs*, **39**, 121–76.
- Kenrick, P. and Crane, P. R. (1997). *The Origin and Early Diversification of Land Plants: A Cladistic Study*. Washington, DC: Smithsonian Institution Press.
- Keogh, T. M., Keddy, P. A., and Fraser, L. H. (1998). Patterns of tree species richness in forested wetlands. *Wetlands*, **19**, 639–47.
- Kercher, S. M., Carpenter, Q. J., and Zedler, J. B. (2004). Interrelationships of hydrologic disturbance, reed canary grass (*Phalaris arundinacea* L.), and native plants in Wisconsin wet meadows. *Natural Areas Journal*, **24**, 316–25.
- Kerr, R. A. (2006). A worrying trend of less ice, higher seas. *Science*, **311**, 1698–701.
- Kershaw, K. A. (1962). Quantitative ecological studies from Landmannahellir, Iceland. *Journal of Ecology*, **50**, 171–9.
- Kershner, J. L. (1997). Setting riparian/aquatic restoration objectives within a watershed context. *Restoration Ecology*, **5**, 15–24.
- Kirby, M. X. (2004). Fishing down the coast: historical expansion and collapse of oyster fisheries along continental margins. *Proceedings of the National Academy of Sciences of the USA*, **101**, 13 096–99.
- Kirk, K. L. and Gilbert, J. J. (1990). Suspended clay and the population dynamics of planktonic rotifers and cladocerans. *Ecology*, **71**, 1741–55.
- Klimas, C. V. (1988). River regulation effects on floodplain hydrology and ecology. In *The Ecology and Management of Wetlands*, Vol. 1, *Ecology of Wetlands*, eds. D. D. Hook, W. H. McKee, Jr., H. K. Smith, J. Gregory, V. G. Burrell, Jr., M. R. DeVoe, R. E. Sojka, S. Gilbert, R. Banks, L. H. Stolzy, C. Brooks, T. D. Matthews, and T. H. Shear, pp. 40–9. Portland, OR: Timber Press.
- Knight, R. L. and Kadlec, R. H. (2004). *Treatment Wetlands*. Boca Raton, FL: Lewis Publishers.
- Koerselman, W. and Verhoeven, J. T. A. (1995). Eutrophication of fen ecosystems: external and internal nutrient sources and restoration strategies. In *Restoration of Temperate Wetlands*, eds. S. Wheeler, S. Shaw, W. Fojt, and R. Robertson, pp. 91–112. Chichester, UK: John Wiley.
- Kozłowski, T. T. (ed.) (1984a). *Flooding and Plant Growth*. Orlando, FL: Academic Press.
- Kozłowski, T. T. (1984b). Responses of woody plants to flooding. In *Flooding and Plant Growth*, ed. T. T. Kozłowski, pp. 129–63. Orlando, FL: Academic Press.
- Kozłowski, T. T. and Pallardy, S. G. (1984). Effect of flooding on water, carbohydrate, and mineral relations. In *Flooding and Plant Growth*, ed. T. T. Kozłowski, pp. 165–93. Orlando, FL: Academic Press.
- Kramer, D. L., Lindsay, C. C., Moodie, G. E. E., and Stevens, E. D. (1978). The fishes and the aquatic environment of the Central Amazon basin, with particular reference to respiratory patterns. *Canadian Journal of Zoology*, **56**, 717–29.
- Krieger, J. (2001). *The Economic Value of Forest Ecosystem Services: A Review*. Washington, DC: The Wilderness Society.
- Kreutzweiser, R. D. (1981). The economic significance of the Long Point marsh, Lake Erie, as a recreational resource. *Journal of Great Lakes Research*, **7**, 105–10.
- Kuhry, P. (1994). The role of fire in the development of *Sphagnum*-dominated peatlands in western boreal Canada. *Journal of Ecology*, **82**, 899–910.
- Kuhry, P., Nicholson, B. J., Gignac, L. D., Vitt, D. H., and Bayley, S. E. (1993). Development of *Sphagnum*-dominated peatlands in boreal continental Canada. *Canadian Journal of Botany*, **71**, 10–22.
- Kurihara, Y. and Kikkawa, J. (1986). Trophic relations of decomposers. In *Community Ecology: Pattern and Process*, eds. J. Kikkawa and D. J. Anderson, pp. 127–60. Melbourne, Vic: Blackwell Scientific Publications.
- Kurimo, H. (1984). Simultaneous groundwater table fluctuation in different parts of the Virgin Pine Mires. *Silva Fennica*, **18**, 151–86.

- Kurtén, B. and Anderson, E. (1980). *Pleistocene Mammals of North America*. New York: Columbia University Press.
- Kusler, J. A. and Kentula, M. E. (eds.) (1990). *Wetland Creation and Restoration: Status of the Science*. Washington, DC: Island Press.
- Kusler, J. A., Willard, D. E., and Hull, H. C., Jr. (eds.) (1995). *Wetlands and Watershed Management: Science Applications and Public Policy*. A collection of papers from a national symposium and several workshops at Tampa, FL, Apr 23–26. Berne, NY: Association of State Wetland Managers.
- LaBaugh, J. W. (1989). Chemical characteristics of water in northern prairie wetlands. In *Northern Prairie Wetlands*, ed. A. G. van der Valk, pp. 56–90. Ames, IA: Iowa State University Press.
- Laing, H. E. (1940). Respiration of the rhizomes of *Nuphar advenum* and other water plants. *American Journal of Botany*, **27**, 574–81.
- Laing, H. E. (1941). Effect of concentration of oxygen and pressure of water upon growth of rhizomes of semi-submerged water plants. *Botanical Gazette*, **102**, 712–24.
- Lane, P. A. (1985). A food web approach to mutualism in lake communities. In *The Biology of Mutualism: Ecology and Evolution*, ed. D. H. Boucher, pp. 344–74. New York: Oxford University Press.
- Larcher, W. (1995). *Physiological Plant Ecology: Ecophysiology and Stress Physiology of Functional Groups*, 3rd edn. New York: Springer-Verlag.
- Laroche, F. B. and Baker, G. E. (2001). Vegetation management within the Everglades protection area. In *2001 Everglades Consolidated Report*, Appendix 14. Miami, FL: South Florida Water Management District.
- Larson, D. W. (1996). Brown's Woods: an early gravel pit forest restoration project, Ontario, Canada. *Restoration Ecology*, **4**, 11–18.
- Larson, J. S. (1988). Wetland creation and restoration: an outline of the scientific perspective. In *Increasing our Wetland Resources*, eds. J. Zelazny and J. S. Feierabend, pp. 73–9. Proceedings of a conference in Washington, DC, Oct 4–7, 1987. Reston, VA: National Wildlife Federation–Corporate Conservation Council.
- Larson, J. S. (1990). Wetland value assessment. In *Wetlands and Shallow Continental Water Bodies*, Vol. 1, *Natural and Human Relationships*, ed. B. C. Patten, pp. 389–400. The Hague, the Netherlands: SPB Academic Publishing.
- Larson, J. S., Mueller, A. J., and MacConnell, W. P. (1980). A model of natural and man-induced changes in open freshwater wetlands on the Massachusetts coastal plain. *Journal of Applied Ecology*, **17**, 667–73.
- Latham, P. J., Pearlstine, L. G., and Kitchens, W. M. (1994). Species association changes across a gradient of freshwater, oligohaline, and mesohaline tidal marshes along the lower Savannah River. *Wetlands*, **14**, 174–83.
- Latham, R. E. and Ricklefs, R. E. (1993). Continental comparisons of temperatezone tree species diversity. In *Species Diversity in Ecological Communities: Historical and Geographical Perspectives*, eds. R. E. Ricklefs and D. Schluter, pp. 294–314. Chicago, IL: University of Chicago Press.
- Laubhan, M. K. (1995). Effects of prescribed fire on moist-soil vegetation and soil macronutrients. *Wetlands*, **15**, 159–66.
- Lavelle, P., Dugdale, R., and Scholes, R. (eds.) (2005). Nutrient cycling. In *Ecosystems and Human Well-being: Current State and Trends – Findings of the Condition and Trends Working Group of the Millennium Ecosystem Assessment*, eds. R. Hassan, R. Scholes, and N. Ash, pp. 331–53. Washington, DC: Island Press.
- Lavoisier, A. (1789). *Elements of Chemistry*. In *Great Books of the Western World*, 2nd edn, 1990, ed. chief M. J. Adler, pp. 1–33. Chicago, IL: Encyclopaedia Britannica Inc.
- Lawler, A. (2005). Reviving Iraq's wetlands. *Science*, **307**, 1186–9.
- Leary, R. A. (1985). A framework for assessing and rewarding a scientist's research productivity. *Scientometrics*, **7**, 29–38.
- Leck, M. A. and Graveline, K. J. (1979). The seed bank of a freshwater tidal marsh. *American Journal of Botany*, **66**, 1006–15.
- Leck, M. A., Parker, V. T., and Simpson, R. L. (eds.) (1989). *Ecology of Soil Seed Banks*. San Diego, CA: Academic Press.
- Lee, R. (1980). *Forest Hydrology*. New York: Columbia University Press.
- Legendre, L. and Legendre, P. (1983). *Numerical Ecology*. Amsterdam, the Netherlands: Elsevier.

- Leitch, J. A. (1989). Politicoeconomic overview of prairie potholes. In *Northern Prairie Wetlands*, ed. A. van der Valk, pp. 2–14. Ames, IA: Iowa State University Press.
- Leith, H. (1975). Historical survey of primary productivity research. In *Primary Productivity of the Biosphere*, eds. H. Leith and R. H. Whittaker, pp. 7–16. New York: Springer-Verlag.
- Lemly, A. D. (1982). Modification of benthic insect communities in polluted streams: combined effects of sedimentation and nutrient enrichment. *Hydrobiologia*, **87**, 229–45.
- Lent, R. M., Weiskel, P. K., Lyford, F. P., and Armstrong, D. S. (1997). Hydrologic indices for nontidal wetlands. *Wetlands*, **17**, 19–30.
- Leonard, M. L. and Picman, J. (1986). Why are nesting marsh wrens and yellow-headed blackbirds spatially segregated? *Auk*, **103**, 135–40.
- Leopold, A. (1949). *A Sand County Almanac*. New York: Oxford University Press.
- Le Page, C. and Keddy, P. A. (1998). Reserves of buried seeds in beaver ponds. *Wetlands*, **18**, 242–8.
- Lévêque, C., Balian, E. V., and Martens, K. (2005). An assessment of animal species diversity in continental waters. *Hydrobiologia*, **542**, 39–67.
- Levin, H. L. (1992). *The Earth Through Time*, 4th edn. Fort Worth, TX: Saunders College Publishing.
- Levine, J., Brewer, J. S., and Bertness, M. D. (1998). Nutrients, competition and plant zonation in a New England salt marsh. *Journal of Ecology*, **86**, 285–92.
- Levitt, J. (1977). The nature of stress injury and resistance. In *Responses of Plants to Environmental Stresses*, ed. J. Levitt, pp. 11–21. New York: Academic Press.
- Levitt, J. (1980). *Responses of Plants to Environmental Stresses*, Vols. 1 and 2, 2nd edn. New York: Academic Press.
- Lewis, D. H. (1987). Evolutionary aspects of mutualistic associations between fungi and photosynthetic organisms. In *Evolutionary Biology of Fungi*, eds. A. D. M. Rayner, C. M. Brasier, and D. Moore, pp. 161–78. Cambridge, UK: Cambridge University Press.
- Lewis, R. R., III (ed.) (1982). *Creation and Restoration of Coastal Plant Communities*. Boca Raton, FL: CRC Press.
- Lieffers, V. J. (1984). Emergent plant communities of oxbow lakes in northeastern Alberta: salinity, water-level fluctuation, and succession. *Canadian Journal of Botany*, **62**, 310–16.
- Liu, K. and Fearn, M. L. (2000). Holocene history of catastrophic hurricane landfalls along the Gulf of Mexico coast reconstructed from coastal lake and marsh sediments. In *Current Stresses and Potential Vulnerabilities: Implications of Global Change for the Gulf Coast Region of the United States*, eds. Z. H. Ning and K. K. Abdolhai, pp. 38–47. Baton Rouge, LA: Franklin Press for Gulf Coast Regional Climate Change Council.
- Llewellyn, D. W., Shaffer, G. P., Craig, N. J., Creasman, L., Pashley, D., Swan, M., and Brown, C. (1996). A decision-support system for prioritizing restoration sites on the Mississippi River alluvial plain. *Conservation Biology*, **10**, 1446–55.
- Lockwood, J. L. and Pimm, S. L. (1999). When does restoration succeed? In *Ecological Assembly Rules: Perspectives, Advances, Retreats*, eds. E. Weiher and P. Keddy, pp. 363–92. Cambridge, UK: Cambridge University Press.
- Lodge, D. M. (1991). Herbivory on freshwater macrophytes. *Aquatic Botany*, **41**, 195–224.
- Löffler, H. and Malkhazova, S. (1990). Impacts of wetlands on man. In *Wetlands and Shallow Continental Water Bodies*, Vol. 1, *Natural and Human Relationships*, ed. B. C. Patten, pp. 347–62. The Hague, the Netherlands: SPB Academic Publishing.
- Loope, L., Duever, M., Herndon, A., Snyder, J., and Jansen, D. (1994). Hurricane impact on uplands and freshwater swamp forest. *BioScience*, **44**, 238–46.
- Louda, S. and Mole, S. (1991). Glucosinolates: chemistry and ecology. In *Herbivores: Their Interactions with Secondary Plant Metabolites*, eds. G. A. Rosenthal and M. R. Berenbaum, pp. 124–64. San Diego, CA: Academic Press.
- Louda, S. M., Keeler, K. H., and Holt, R. D. (1990). Herbivore influences on plant performance and competitive interactions. In *Perspectives in Plant Competition*, eds. J. B. Grace and D. Tilman, pp. 413–44. New York: Academic Press.
- Loveless, C. M. (1959). A study of the vegetation in the Florida everglades. *Ecology*, **40**, 1–9.
- Lowe-McConnell, R. H. (1975). *Fish Communities in Tropical Freshwaters: Their Distribution, Ecology and Evolution*. London: Longman.

- Lowe-McConnell, R. H. (1987). Fish of the Amazon System. In *The Ecology of River Systems*, eds. B. R. Davies and K. F. Walker, pp. 339–51. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Lowery, G. H. (1974). *The Mammals of Louisiana and its Adjacent Waters*. Baton Rouge, LA: Louisiana State University Press.
- Lu, J. (1995). Ecological significance and classification of Chinese wetlands. *Vegetatio*, 118, 49–56.
- Lugo, A. E. and Brown, S. (1988). The wetlands of Caribbean islands. *Acta Cientifica*, 2, 48–61.
- Lugo, A. E. and Snedaker, S. C. (1974). The ecology of mangroves. *Annual Review of Ecology and Systematics*, 5, 39–64.
- Lugo, A. E., Brown, S., and Brinson, M. M. (1988). Forested wetlands in freshwater and saltwater environments. *Limnology and Oceanography*, 33, 849–909.
- Lugo, A. E., Brinson, M. and Brown, S. (eds.) (1990). *Forested Wetlands*. Amsterdam, the Netherlands: Elsevier.
- Lutman, J. (1978). The role of slugs in an *Agrostis*–*Festuca* grassland. In *Production Ecology of British Moors and Montane Grasslands*, eds. O. W. Heal and D. F. Perkins, pp. 332–47. Berlin, Germany: Springer-Verlag.
- Lynch, J. A., Grimm, J. W., and Bowersox, V. C. (1995). Trends in precipitation chemistry in the United States: a national perspective, 1980–1992. *Atmospheric Environment*, 29, 1231–46.
- MacArthur, R. H. (1972). *Geographical Ecology*. New York: Harper and Row.
- MacArthur, R. H. and MacArthur, J. (1961). On bird species diversity. *Ecology*, 42, 594–8.
- MacArthur, R. and Wilson, E. O. (1967). *The Theory of Island Biogeography*. Princeton, NJ: Princeton University Press.
- MacRoberts, D. T., MacRoberts, B. R., and MacRoberts, M. H. (1997). *A Floristic and Ecological Interpretation of the Freeman and Custis Red River Expedition of 1806*. Shreveport, LA: Louisiana State University Press.
- Magnuson, J. J., Regier, H. A., Christie, W. J., and Sonzogni, W. C. (1980). To rehabilitate and restore Great Lake ecosystems. In *The Recovery Process in Damaged Ecosystems*, ed. J. Cairns, Jr., pp. 95–112. Ann Arbor, MI: Ann Arbor Science Publishers.
- Magnuson, J. J., Paszkowski, C. A., Rahel, F. J., and Tonn, W. M. (1989). Fish ecology in severe environments of small isolated lakes in northern Wisconsin. In *Freshwater Wetlands and Wildlife*, eds. R. Sharitz and J. W. Gibbons, pp. 487–515. Conf-8603101, DOE Symposium Series No. 61. Oak Ridge, TN: Office of Scientific and Technical Information, U.S. Department of the Environment.
- Maguire, L. A. (1991). Risk analysis for conservation biologists. *Conservation Biology*, 5, 123–5.
- Malmer, N. (1986). Vegetational gradients in relation to environmental conditions in northwestern European mires. *Canadian Journal of Botany*, 64, 375–83.
- Maltby, E. and Turner, R. E. (1983). Wetlands of the world. *Geographical Magazine*, 55, 12–17.
- Maltby, E., Legg, C. J., and Proctor, C. F. (1990). The ecology of severe moorland fire on the North York Moors: effects of the 1976 fires, and subsequent surface and vegetation development. *Journal of Ecology*, 78, 490–518.
- Mandossian, A. and McIntosh, R. P. (1960). Vegetation zonation on the shore of a small lake. *American Midland Naturalist*, 64, 301–8.
- Mancil, E. (1980). Pullboat logging. *Journal of Forest History*, 24, 135–41.
- Manfred, G. (1982). *World Energy Supply*. Berlin, Germany: Walter de Gruyter.
- Mark, A. F., Johnson, P. N., Dickinson, K. J. M., and McGlone, M. S. (1995). Southern hemisphere patterned mires, with emphasis on southern New Zealand. *Journal of the Royal Society of New Zealand*, 25, 23–54.
- Marquis, R. J. (1991). Evolution of resistance in plants to herbivores. *Evolutionary Trends in Plants*, 5, 23–9.
- Marschner, H. (1995). *Mineral Nutrition of Higher Plants*, 2nd edn. London: Academic Press.
- Martin, P. S. and Klein, R. J. (1984). *Quaternary Extinctions: A Prehistoric Revolution*. Tucson, AZ: University of Arizona Press.
- Martini, I. P. (1982). Introduction to scientific studies in Hudson and James Bay. *Naturaliste Canadien*, 109, 301–5.
- Maseuth, J. D. (1995). *Botany: An Introduction to Plant Biology*, 2nd edn. Philadelphia, PA: Saunders College Publishing.
- Matthews, E. and Fung, I. (1987). Methane emission from natural wetlands: global distribution, area,

- and environmental characteristics of sources. *Global Biogeochemical Cycles*, 1, 61–86.
- Matthews, W. J. (1998). *Patterns in Freshwater Fish Ecology*. New York: Chapman and Hall.
- Maun, M. A. and Lapierre, J. (1986). Effects of burial by sand on seed germination and seedling emergence of four dune species. *American Journal of Botany*, 73, 450–5.
- May, R. M. (1981). Patterns in multi-species communities. In *Theoretical Ecology*, ed. R. M. May, pp. 197–227. Oxford, UK: Blackwell Scientific Publications.
- May, R. M. (1986). The search for patterns in the balance of nature: advances and retreats. *Ecology*, 67, 1115–26.
- May, R. M. (1988). How many species are there on Earth? *Science*, 241, 1441–9.
- Mayewski, P. A., Lyons, W. B., Spencer, M. J., Twickler, M. S., Buck, C. F., and Whitlow, S. (1990). An ice-core record of atmospheric response to anthropogenic sulphate and nitrate. *Nature*, 346, 554–6.
- Mayr, E. (1982). *The Growth of Biological Thought: Diversity, Evolution, and Inheritance*, Cambridge, MA: Belknap Press of Harvard University Press.
- Mazzotti, F. J., Center, T. D., Dray, F. A. and Thayer, D. (1997). *Ecological Consequences of Invasion by Melaleuca quinquenervia in Southern Florida Wetlands: Paradise Damaged, Not Lost*. Gainesville, FL: University of Florida, Institute of Food and Agricultural Sciences.
- McAuliffe, J. R. (1984). Competition for space, disturbance, and the structure of a benthic stream community. *Ecology*, 65, 894–908.
- McCanny, S. J., Keddy, P. A., Arnason, T. J., Gaudet, C. L., Moore, D. R. J., and Shipley, B. (1990). Fertility and the food quality of wetland plants: a test of the resource availability hypothesis. *Oikos*, 59, 373–81.
- McCarthy, K. A. (1987). Spatial and temporal distributions of species in two intermittent ponds in Atlantic County, NJ. M.Sc. thesis, Rutgers University, Rutgers, NJ.
- McClure, J. W. (1970). Secondary constituents of aquatic angiosperms. In *Phytochemical Phylogeny*, ed. J. B. Harborne, pp. 233–65. New York: Academic Press.
- McDougall, D. (2008). Global warning's front line. *Guardian Weekly*, Apr 11, p. 42.
- McGeoch, M. A. and Gaston, K. J. (2002). Occupancy frequency distributions: patterns, artifacts and mechanism. *Biological Reviews*, 77, 311–31.
- McHarg, I. L. (1969). *Design with Nature*. Garden City, NJ: Natural History Press for American Museum of Natural History.
- McIntosh, R. P. (1967). The continuum concept of vegetation. *Botanical Review*, 33, 130–87.
- McIntosh, R. P. (1985). *The Background of Ecology: Concept and Theory*. Cambridge, UK: Cambridge University Press.
- McIver, S. B. (2003). *Death in the Everglades: The Murder of Guy Bradley, America's First Martyr to Environmentalism*. Gainesville, FL: University of Florida Press.
- McJannet, C. L., Keddy, P. A., and Pick, F. R. (1995). Nitrogen and phosphorus tissue concentrations in 41 wetland plants: a comparison across habitats and functional groups. *Functional Ecology*, 9, 231–8.
- McKee, K. L. and Mendelssohn, I. A. (1989). Response of a freshwater marsh plant community to increased salinity and increased water level. *Aquatic Botany*, 34, 301–16.
- McKenzie, D. H., Hyatt, D. E., and McDonald, V. J. (1992). *Ecological Indicators*, Vols. 1 and 2. London: Elsevier.
- McMillan, M. (2006). Bog turtles make new friends: landowners and livestock. *Environmental Defense Fund, Center for Conservation Incentives*. www.edf.org. May 27, 2004, updated: Sep 13, 2006. (accessed July 17, 2008)
- McNaughton, S. J., Russ, R. W., and Seagle, S. W. (1988). Large mammals and process dynamics in African ecosystems. *BioScience*, 38, 794–800.
- McPhee, J. (1989). *The Control of Nature*. New York: Farrar Straus Giroux.
- McWilliams, R. G. (transl. and ed.) (1981). *Iberville's Gulf Journals*. Tuscaloosa, AL: University of Alabama Press.
- Mead, K. (2003). *Dragonflies of the North Woods*. Duluth, MN: Kollath-Stensaas.
- Meadows, D. H., Meadows, D. L., Randers, J., and Behrens, W. W., III (1974). *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*, 2nd edn. New York: New American Library.
- Meave, J. and Kellman, M. (1994). Maintenance of rain forest diversity in riparian forests of tropical savannas: implications for species conservation during Pleistocene drought. *Journal of Biogeography*, 21, 121–35.

- Meave, J., Kellman, M., MacDougall, A., and Rosales, J. (1991). Riparian habitats as tropical refugia. *Global Ecology and Biogeography Letters*, 1, 69–76.
- Mendelssohn, I. A. and McKee, K. L. (1988). *Spartina alterniflora* die-back in Louisiana: time-course investigation of soil waterlogging effects. *Journal of Ecology*, 76, 509–21.
- Menges, E. S. and Gawler, S. C. (1986). Fourth-year changes in population size of the endemic Furbish's Lousewort: implications for endangerment and management. *Natural Areas Journal*, 6, 6–17.
- Merritt, R. W. and Cummins, K. W. (eds.) (1984). *An Introduction to the Aquatic Insects of North America*, 2nd edn. Dubuque, IA: Kendall/Hunt Publishing.
- Messina, M. G. and Conner, W. H. (eds.) (1998). *Southern Forested Wetlands: Ecology and Management*. Boca Raton, FL: Lewis Publishers.
- Michener, W. K., Blood, E. R., Bildstein, K. L., Brinson, M. M., and Gardner, L. R. (1997). Climate change, hurricanes and tropical storms, and rising sea level in coastal wetlands. *Ecological Applications*, 7, 770–801.
- Middleton, B. A. (ed.) (2002). *Flood Pulsing in Wetlands: Restoring the Natural Hydrological Balance*. New York: John Wiley.
- Millennium Ecosystem Assessment. (2005). *Ecosystems and Human Well-Being: Wetlands and Water Synthesis*. Washington, DC: World Resources Institute.
- Miller, G. R. and Watson, A. (1978). Heather productivity and its relevance to the regulation of red grouse populations. In *Production Ecology of British Moors and Montane Grasslands*, eds. O. W. Heal and D. F. Perkins, pp. 278–85. Berlin, Germany: Springer-Verlag.
- Miller, G. R. and Watson, A. (1983). Heather moorland in northern Britain. In *Conservation in Perspective*, eds. A. Warren and F. B. Goldsmith, pp. 101–17. Chichester, UK: John Wiley.
- Miller, M. W. and Nudds, T. D. (1996). Prairie landscape change and flooding in the Mississippi River valley. *Conservation Biology*, 10, 847–53.
- Miller, R. M., Smith, C. I., Jastrow, J. D., and Bever, J. D. (2001). Mycorrhizal status of the genus *Carex* (Cyperaceae). *American Journal of Botany*, 86, 547–53.
- Miller, R. S. (1967). Pattern and process in competition. *Advances in Ecological Research*, 4, 1–74.
- Miller, R. S. (1968). Conditions of competition between redwings and yellowheaded blackbirds. *Journal of Animal Ecology*, 37, 43–62.
- Milliman, J. D. and Meade, R. H. (1983). World-wide delivery of river sediment to the oceans. *Journal of Geology*, 91, 1–21.
- Mitchell, G. F. (1965). Littleton Bog, Tipperary: an Irish vegetational record. *Geological Society of America, Special Paper*, 84, 1–16.
- Mitsch, W. J. and Gosselink, J. G. (1986). *Wetlands*. New York: Van Nostrand Reinhold.
- Mitsch, W. J. and Wu, X. (1994). Wetlands and global change. In *Advances in Soil Science: Global Carbon Sequestration*, eds. B. A. Stewart, R. Lal, and J. M. Kimble, pp. 205–30. Chelsea, MI: Lewis Publishers.
- Mitsch, W. J., Day, J. W., Jr., Gilliam J. W., Groffman P. M., Hey, D. L., Randall, G. W., and Wang, N. (2001). Reducing nitrogen loading to the Gulf of Mexico from the Mississippi River Basin: strategies to counter a persistent ecological problem. *BioScience*, 51, 373–88.
- Moeller, R. E. (1978). Carbon-uptake by the submerged hydrophyte *Utricularia purpurea*. *Aquatic Botany*, 5, 209–16.
- Monda, M. J., Ratti, J. T., and McCabe, T. R. (1994). Reproductive ecology of tundra swans on the arctic national wildlife refuge, Alaska. *Journal of Wildlife Management*, 58, 757–73.
- Montague, C. L. and Wiegert, R. G. (1990). Salt marshes. In *Ecosystems of Florida*, eds. R. L. Myers and J. J. Ewel, pp. 481–516. Orlando, FL: University of Central Florida Press.
- Montgomery, K. G. (1958). *The Memoirs of Field-Marshal the Viscount Montgomery of Alamein*. London: Collins.
- Moore, D. R. J. (1998). The ecological component of ecological risk assessment: lessons from a field experiment. *Human and Ecological Risk Assessment*, 4, 1103–23.
- Moore, D. R. J. and Keddy, P. A. (1989). The relationship between species richness and standing crop in wetlands: the importance of scale. *Vegetatio*, 79, 99–106.
- Moore, D. R. J. and Wein, R. W. (1977). Viable seed populations by soil depth and potential site recolonization after disturbance. *Canadian Journal of Botany*, 55, 2408–12.

- Moore, D. R. J., Keddy, P. A., Gaudet, C. L., and Wisheu, I. C. (1989). Conservation of wetlands: do infertile wetlands deserve a higher priority? *Biological Conservation*, **47**, 203–17.
- Moore, P. D. (1973). The influence of prehistoric cultures upon the initiation and spread of blanket bog in upland Wales. *Nature*, **241**, 350–3.
- Moorhead, K. K. and Reddy, K. R. (1988). Oxygen transport through selected aquatic macrophytes. *Journal of Environmental Quality*, **17**, 138–42.
- Morgan, M. D. and Philipp, K. R. (1986). The effect of agricultural and residential development on aquatic macrophytes in the New Jersey Pine Barrens. *Biological Conservation*, **35**, 143–58.
- Morowitz, H. J. (1968). *Energy Flow in Biology*. New York: Academic Press.
- Morris, J. (1973). *Par Britannica*, 3 Vols. London: Faber and Faber. Reprinted 1992 by Folio Society, London.
- Mosepele, K., Moyle, P. B., Merron, G. S., Purkey, D. R., and Mosepele B. (2009). Fish, floods and ecosystem engineers: aquatic conservation in the Okavango Delta, Botswana. *BioScience*, **59**, 53–64.
- Moss, B. (1983). The Norfolk Broadland: experiments in the restoration of a complex wetland. *Biological Reviews of the Cambridge Philosophical Society*, **58**, 521–61.
- Moss, B. (1984). Medieval man-made lakes: progeny and casualties of English social history, patients of twentieth century ecology. *Transactions of the Royal Society of South Africa*, **45**, 115–28.
- Mountford, J. O., Lakhani, K. H., and Kirkham, F. W. (1993). Experimental assessment of the effects of nitrogen addition under hay-cutting and aftermath grazing on the vegetation of meadows on a Somerset peat moor. *Journal of Applied Ecology*, **30**, 321–32.
- Mueller-Dombois, D. and Ellenberg, H. (1974). *Aims and Methods of Vegetation Ecology*. New York: John Wiley.
- Müller, J., Rosenthal, G., and Uchtmann, H. (1992). Vegetationsveränderungen und Ökologie nordwestdeutscher Feuchtgrünlandbrachen. *Tuexenia*, **12**, 223–44.
- Müller, J., Irion, G., de Mello, J. N., and Junk, W. J. (1995). Hydrological changes of the Amazon during the last glacial–interglacial cycle in Central Amazonia (Brazil). *Naturwissenschaften*, **82**, 232–5.
- Murkin, H. R. (1989). The basis for food chains in prairie wetlands. In *Northern Prairie Wetlands*, ed. A. G. van der Valk, pp. 316–38. Ames, IA: Iowa State University Press.
- Mushet, D. M., Euliss, N. H., Jr., and Shaffer, T. L. (2002). Floristic quality assessment of one natural and three restored wetland complexes in North Dakota, USA. *Wetlands*, **22**, 126–38.
- Myers, J. G. (1935). Zonation of vegetation along river courses. *Journal of Ecology*, **3**, 356–60.
- Myers, N., Mittermeier, R. A., Mittermeier, C. G., da Fonseca, G. A. B., and Kent, J. (2000). Biodiversity hotspots for conservation priorities. *Nature*, **403**, 853–8.
- Myers, R. K. and van Lear, D. H. (1998). Hurricane–fire interactions in coastal forests of the south: a review and hypothesis. *Forest Ecology and Management*, **103**, 265–76.
- Myers, R. L. (1983). Site susceptibility to invasion by the exotic tree *Melaleuca quinquenervia* in southern Florida. *Journal of Applied Ecology*, **20**, 645–58.
- Myers, R. S., Shaffer, G. P., and Llewellyn, D. W. (1995). Baldcypress (*Taxodium distichum* (L.) Rich.) restoration in southeastern Louisiana: the relative effects of herbivory, flooding, competition and macronutrients. *Wetlands*, **15**, 141–8.
- Naiman, R. J., Johnston, C. A., and Kelley, J. C. (1988). Alteration of North American streams by beaver. *BioScience*, **38**, 753–62.
- Nanson, G. C. and Beach, H. F. (1977). Forest succession and sedimentation on a meandering-river floodplain, northeast British Columbia, Canada. *Journal of Biogeography*, **4**, 229–51.
- Navid, D. (1988). Developments under the Ramsar Convention. In *The Ecology and Management of Wetlands*, Vol. 2, *Management, Use and Value of Wetlands*, eds. D. D. Hook, W. H. McKee, Jr., H. K. Smith, J. Gregory, V. G. Burrell, Jr., M. R. DeVoe, R. E. Sojka, S. Gilbert, R. Banks, L. H. Stolzy, C. Brooks, T. D. Matthews, and T. H. Shear, pp. 21–7. Portland, OR: Timber Press.
- Neiff, J. J. (1986). Aquatic plants of the Parana system. In *The Ecology of River Systems*, eds. B. R. Davies and K. F. Walker pp. 557–71. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Neill, W. T. (1950). An estivating bowfin. *Copeia*, **3**, 240.

- Newman, S., Grace, J. B., and Koebel, J. W. (1996). The effects of nutrients and hydroperiod on mixtures of *Typha domingensis*, *Cladium jamaicense*, and *Eleocharis interstincta*: implications for Everglades restoration. *Ecological Applications*, 6, 774–83.
- Newman, S., Schuette, J., Grace, J. B., Rutchev, K., Fontaine, T., Reddy, K. R., and Pietrucha, M. (1998). Factors influencing cattail abundance in the northern Everglades. *Aquatic Botany*, 60, 265–80.
- New York Natural Heritage Program. (2008). *Online Conservation Guide for Glyptemys muhlenbergii*. [www.acris.nynhp.org/guide.php?id=7507](http://www.acris.nynhp.org/guide.php?id=7507). (accessed July 27, 2008)
- Nicholls, R. J. and Mimura, N. (1998). Regional issues raised by sea-level rise and their policy implications. *Climate Research*, 11, 5–18.
- Nichols, S. A. (1999). Floristic quality assessment of Wisconsin lake plant communities with example applications. *Journal of Lake and Reservoir Management*, 15, 133–41.
- Niering, W. A. and Warren, R. S. (1980). Vegetation patterns and processes in New England salt marshes. *BioScience*, 30, 301–7.
- Nilsson, C. (1981). Dynamics of the shore vegetation of a north Swedish hydroelectric reservoir during a 5-year period. *Acta Phytogeographica Suecica*, 69, 1–96.
- Nilsson, C. and Jansson, R. (1995). Floristic differences between riparian corridors of regulated and free-flowing boreal rivers. *Regulated Rivers: Research and Management*, 11, 55–66.
- Nilsson, C. and Keddy, P. A. (1988). Predictability of change in shoreline vegetation in a hydroelectric reservoir, northern Sweden. *Canadian Journal of Fisheries and Aquatic Sciences*, 45, 1896–904.
- Nilsson, C. and Wilson, S. D. (1991). Convergence in plant community structure along disparate gradients: are lakeshores inverted mountainsides? *The American Naturalist*, 137, 774–90.
- Nilsson, C., Grelsson, G., Johansson, M., and Sperens, U. (1989). Patterns of plant species richness along riverbanks. *Ecology*, 70, 77–84.
- Nilsson, C., Grelsson, G., Dynesius, M., Johansson, M. E., and Sperens, U. (1991). Small rivers behave like large rivers: effects of postglacial history on plant species richness along riverbanks. *Journal of Biogeography*, 18, 533–41.
- Norgress, R. E. (1947). The history of the cypress lumber industry in Louisiana. *Louisiana Historical Quarterly*, 30, 979–1059.
- Noss, R. (1995). *Maintaining Ecological Integrity in Representative Reserve Networks*, A World Wildlife Fund Canada/World Wildlife Fund United States Discussion Paper. Washington, DC: WWF.
- Noss, R. F. and Cooperrider, A. (1994). *Saving Nature's Legacy: Protecting and Restoring Biodiversity*. Washington, DC: Defenders of Wildlife and Island Press.
- Novacek, J. M. (1989). The water and the wetland resources of the Nebraska sandhills. In *Northern Prairie Wetlands*, ed. A. G. van der Valk, pp. 340–84. Ames, IA: Iowa State University Press.
- Noy-Meir, I. (1975). Stability of grazing systems: an application of predator–prey graphs. *Journal of Ecology*, 63, 459–81.
- Nudds, T. D., Sjöberg, K., and Lundberg, P. (1994). Ecomorphological relationships among Palearctic dabbling ducks on Baltic coastal wetlands and a comparison with the Nearctic. *Oikos*, 69, 295–303.
- Nuttle, W. K., Brinson, M. M., Cahoon, D., Callaway, J. C., Christian, R. R., Chmura, G. L., Conner, W. H., Day, R. H., Ford, M., Grace, J., Lynch, J. C., Orson, R. A., Parkinson, R. W., Reed, D., Rybczyk, J. M., Smith, T. J., III, Stumpf, R. P., and Williams, K. (1997). The Working Group on Sea Level Rise and Wetland Systems: conserving coastal wetlands despite sea level rise. *Eos*, 78, 257–62.
- Odum, E. P. (1971). *Principles of Ecology*. Philadelphia, PA: W. B. Saunders.
- Odum, E. P. (1985). Trends expected in stressed ecosystems. *BioScience*, 35, 419–22.
- Odum, W. E. and McIvor, C. C. (1990). Mangroves. In *Ecosystems of Florida*, eds. R. L. Myers and J. J. Ewel, pp. 517–48. Orlando, FL: University of Central Florida Press.
- Oksanen, L. (1990). Predation, herbivory, and plant strategies along gradients of primary production. In *Perspectives on Plant Competition*, eds. J. B. Grace and D. Tilman, pp. 445–74. New York: Academic Press.
- Oksanen, L., Fretwell, S. D., Arruda, J., and Niemela, P. (1981). Exploitation ecosystems in gradients of primary productivity. *The American Naturalist*, 118, 240–261.

- O'Neil, T. (1949). *The Muskrat in the Louisiana Coastal Marshes*. New Orleans, LA: Louisiana Department of Wildlife and Fisheries.
- Ontario Ministry of Natural Resources. (1993). *Ontario Wetland Evaluation System: Southern Manual*, 3rd edn, revised 2002. Toronto, ON: Ontario Ministry of Natural Resources.
- Ontario Ministry of Natural Resources. (2007). *Significant Wetlands and the Ontario Wetland Evaluation System*. Peterborough, ON: Ontario Ministry of Natural Resources.
- Oomes, M. J. M. and Elberse, W. T. (1976). Germination of six grassland herbs in microsites with different water contents. *Journal of Ecology*, **64**, 745–55.
- Orson, R. A., Simpson, R. L., and Good, R. E. (1990). Rates of sediment accumulation in a tidal freshwater marsh. *Journal of Sedimentary Petrology*, **60**, 859–69.
- Orson, R. A., Simpson, R. L., and Good, R. E. (1992). The paleoecological development of a late Holocene, tidal freshwater marsh of the Upper Delaware River estuary. *Estuaries*, **15**, 130–46.
- Osborne, P. L. and Polunin, N. V. C. (1986). From swamp to lake: recent changes in a lowland tropical swamp. *Journal of Ecology*, **74**, 197–210.
- Ostrofsky, M. L. and Zettler, E. R. (1986). Chemical defenses in aquatic plants. *Journal of Ecology*, **74**, 279–87.
- Padgett, D. J. and Crow, G. E. (1993). A comparison of floristic composition and species richness within and between created and natural wetlands of southeastern New Hampshire. In *Proceedings of the 20th Annual Conference on Wetlands Restoration and Creation*, ed. F. J. Webb, Jr., pp. 171–86. Tampa, FL: Hillsborough Community College.
- Padgett, D. J. and Crow, G. E. (1994). Foreign plant stock: concerns for wetland mitigation. *Restoration and Management Notes*, **12**, 168–71.
- Painter, S. and Keddy, P. A. (1992). *Effects of Water Level Regulation on Shoreline Marshes: A Predictive Model Applied to the Great Lakes*. Burlington, ON: Environment Canada, National Water Research Institute.
- Painter, T. J. (1991). Lindow Man, Tollund Man, and other peat-bog bodies: the preservative and antimicrobial action of sphagnum, a reactive glycuronoglycan with tanning and sequestering properties. *Carbohydrate Polymers*, **15**, 123–42.
- Palczynski, A. (1984). Natural differentiation of plant communities in relation to hydrological conditions of the Biebrza valley. *Polish Ecological Studies*, **10**, 347–85.
- Parmalee, P. W. and Graham, R. W. (2002). Additional records of the Giant Beaver, *Castoroides*, from the mid-South: Alabama, Tennessee, and South Carolina. *Smithsonian Contributions to Paleobiology*, **93**, 65–71.
- Partow, H. (2001). *The Mesopotamian Marshlands: Demise of an Ecosystem*, Early Warning and Assessment Technical Report. Nairobi, Kenya: United Nations Environment Programme.
- Partridge, T. R. and Wilson, J. B. (1987). Salt tolerance of salt marsh plants of Otago, New Zealand. *New Zealand Journal of Botany*, **25**, 559–66.
- Patrick, W. H., Jr. and Reddy, C. N. (1978). Chemical changes in rice soils. In *Soils and Rice*, pp. 361–79. Los Baños, Philippines: International Rice Research Institute.
- Patten, B. C. (ed.) (1990). *Wetlands and Shallow Continental Water Bodies*, Vol. 1, *Natural and Human Relationships*. The Hague, the Netherlands: SPB Academic Publishing.
- Patten, D. T. (1998). Riparian ecosystems of semi-arid North America: diversity and human impacts. *Wetlands*, **18**, 498–512.
- Peace–Athabasca Delta Implementation Committee. (1987). *Peace–Athabasca Delta Water Management Works Evaluation: Final Report*. Ottawa, ON: Environment Canada, Alberta Environment and Saskatchewan Water Corporation.
- Peace–Athabasca Delta Project Group. (1972). *The Peace–Athabasca Delta Summary Report, 1972*. Ottawa, ON: Department of the Environment.
- Peach, M. and Zedler, J. B. (2006). How tussocks structure sedge meadow vegetation. *Wetlands*, **26**, 322–35.
- Pearce, F. (1991). The rivers that won't be tamed. *New Scientist*, **1764**, 38–41.
- Pearce, F. (1993). Draining life from Iraq's marshes. *New Scientist*, **1869**, 11–12.
- Pearman, P. B. (1997). Correlates of amphibian diversity in an altered landscape of Amazonian Ecuador. *Conservation Biology*, **11**, 1211–25.
- Pearsall, W. H. (1920). The aquatic vegetation of the English Lakes. *Journal of Ecology*, **8**, 163–201.

- Pearse, P. H., Bertrand, F. X., and MacLaren, J. W. (1985). *Currents of Change, Final Report*. Ottawa, ON: Inquiry on Federal Water Policy.
- Peat, H. J. and Fitter, A. H. (1993). The distribution of arbuscular mycorrhizae in the British flora. *New Phytologist*, 125, 845–54.
- Pechmann, J. H. K., Scott, D. E., Gibbons, J. W., and Semlitsch, R. D. (1989). Influence of wetland hydroperiod on diversity and abundance of metamorphosing juvenile amphibians. *Wetlands Ecology and Management*, 1, 3–11.
- Pedersen, O., Sand-Jensen, K., and Revsbech, N. P. (1995). Diel pulses of O<sub>2</sub> and CO<sub>2</sub> in sandy lake sediments inhabited by *Lobelia dortmanna*. *Ecology*, 76, 1536–45.
- Peet, R. K. (1974). The measurement of species diversity. *Annual Review of Ecology and Systematics*, 5, 285–307.
- Peet, R. K. and Allard, D. J. (1993). Longleaf pine vegetation of the southern Atlantic and eastern Gulf Coast regions: a preliminary classification. In *The Longleaf Pine Ecosystem: Ecology, Restoration and Management*, ed. S. M. Hermann, pp. 45–81. Tallahassee, FL: Tall Timbers Research Station.
- Pehek, E. L. (1995). Competition, pH, and the ecology of larval *Hyla andersonii*. *Ecology*, 76, 1786–93.
- Pemberton, R. W., Goolsby, J. A., and Wright, T. (2002). Old world climbing fern. In *Biological Control of Invasive Plants in the Eastern United States*, Publication No. FHTET-2002-04, eds. R. Van Driesche, S. Lyon, B. Blossey, M. Hoddle, and R. Reardon, pp. 139–47. Morgantown, WV: U.S. Department of Agriculture Forest Service.
- Pengelly, J. W., Tinkler, K. J., Parkins, W. G., and McCarthy, F. M. (1997). 12 600 years of lake level changes, changing sills, ephemeral lakes and Niagara gorge erosion in the Niagara Peninsula and Eastern Lake Erie basin. *Journal of Paleolimnology*, 17, 377–402.
- Penland, S., Boyd, R., and Suter, J. R. (1988). The transgressive depositional systems of the Mississippi delta plain: a model for barrier shoreline and shelf sand development. *Journal of Sedimentary Petrology*, 58, 932–49.
- Pennings, S. C. and Callaway, R. M. (1992). Salt marsh zonation: the relative importance of competition and physical factors. *Ecology*, 73, 681–90.
- Pennings, S. C., Carefoot, T. H., Siska, E. L., Chase, M. E., and Page, T. A. (1998). Feeding preferences of a generalist salt-marsh crab: relative importance of multiple plant traits. *Ecology*, 79, 1968–79.
- Perkins, D. F. (1978). Snowdonia grassland: introduction, vegetation and climate. In *Production Ecology of British Moors and Montane Grasslands*, eds. O. W. Heal and D. F. Perkins, pp. 290–6. Berlin, Germany: Springer-Verlag.
- Peters, R. H. (1980a). From natural history to ecology. *Perspectives in Biology and Medicine*, 23, 191–203.
- Peters, R. H. (1980b). Useful concepts for predictive ecology. In *Conceptual Issues in Ecology*, ed. E. Saarinen, pp. 63–99. Dordrecht, the Netherlands: D. Reidel.
- Peterson, L. P., Murkin, H. R., and Wrubleski, D. A. (1989). Waterfowl predation on benthic macroinvertebrates during fall drawdown of a northern prairie marsh. In *Freshwater Wetlands and Wildlife*, eds. R. R. Sharitz and J. W. Gibbons, pp. 661–96. Washington, DC: U.S. Department of Energy.
- Petr, T. (1986). The Volta River system. In *The Ecology of River Systems*, eds. B. R. Davies and K. F. Walker, pp. 163–83. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Pezeshki, S. R., Delaune, R. D., and Patrick, W. H., Jr. (1987a). Effects of flooding and salinity on photosynthesis of *Sagittaria lancifolia*. *Marine Ecology Progress Series*, 41, 87–91.
- Pezeshki, S. R., Delaune, R. D., and Patrick, W. H., Jr. (1987b). Response of the freshwater marsh species *Panicum hemitomon* Schult. to increased salinity. *Freshwater Biology*, 1, 195–200.
- Pfadenhauer, J. and Klotzli, F. (1996). Restoration experiments in middle European wet terrestrial ecosystems: an overview. *Vegetatio*, 126, 101–15.
- Phillips, G. L., Eminson, D., and Moss, B. (1978). A mechanism to account for macrophyte decline in progressively eutrophicated fresh-waters. *Aquatic Botany*, 4, 103–26.
- Phipps, R. W. (1883). *On the Necessity of Preserving and Replanting Forests*. Toronto, ON: Blackett and Robinson.
- Pianka, E. R. (1981). Competition and niche theory. In *Theoretical Ecology*, ed. R. M. May, pp. 114–41. Oxford, UK: Blackwell Scientific Publications.
- Pickett, S. T. A. (1980). Non-equilibrium coexistence of plants. *Bulletin of the Torrey Botanical Club*, 107, 238–48.

- Pickett, S. T. A. and White, P. S. (1985). *The Ecology of Natural Disturbance and Patch Dynamics*. Orlando, FL: Academic Press.
- Picman, J. (1984). Experimental study on the role of intra- and inter-specific behaviour in marsh wrens. *Canadian Journal of Zoology*, **62**, 2353–6.
- Pieczynska, E. (1986). Littoral communities and lake eutrophication. In *Land Use Impacts on Aquatic Ecosystems*, eds. J. Lauga, H. Decamps, and M. M. Holland, Proceedings of the Toulouse Workshop organized by MAB-UNESCO and PIREN-CNRS, pp. 191–201 Paris: UNESCO.
- Pielou, E. C. (1975). *Ecological Diversity*. New York: John Wiley.
- Pielou, E. C. (1977). *Mathematical Ecology*. New York: John Wiley.
- Pielou, E. C. and Routledge, R. D. (1976). Salt marsh vegetation: latitudinal gradients in the zonation patterns. *Oecologia*, **24**, 311–21.
- Pietropaolo, J. and Pietropaolo, P. (1986). *Carnivorous Plants of the World*. Portland, OR: Timber Press.
- Pimental, D., Hurd, L. E., Bellotti, A. C., Forster, M. J., Oka, I., Sholes, O. D., and Whitman, W. J. (1973). Food production and the energy crisis. *Science*, **182**, 443–9.
- Poiana, K. A. and Johnson, W. C. (1993). A spatial simulation model of hydrology and vegetation dynamics in semi-permanent prairie wetlands. *Ecological Applications*, **3**, 279–93.
- Polunin, N. V. C. (1984). The decomposition of emergent macrophytes in fresh water. *Advances in Ecological Research*, **14**, 115–66.
- Pomeroy, L. R. and Wiegert, R. J. (eds.) (1981). *The Ecology of a Salt Marsh*. Berlin, Germany: Springer-Verlag.
- Ponnamperuma, F. N. (1972). The chemistry of submerged soils. *Advances in Agronomy*, **24**, 29–96.
- Ponnamperuma, F. N. (1984). Effects of flooding on soils. In *Flooding and Plant Growth*, ed. T. T. Kozłowski, pp. 9–45. Orlando, FL: Academic Press.
- Poole, R. W. and Rathcke, B. J. (1979). Regularity, randomness, and aggregation in flowering phenologies. *Science*, **203**, 470–1.
- Power, M. E. (1992). Top-down and bottom-up forces in food webs: do plants have primacy? *Ecology*, **73**, 733–46.
- Prance, G. T. and Schaller, J. B. (1982). Preliminary study of some vegetation types of the Pantanal, Mato Grosso, Brazil. *Brittonia*, **34**, 228–51.
- Pressey, R. L., Humphries, C. J., Margules, C. R., Vane-Wright, R. I., and Williams, P. H. (1993). Beyond opportunism: key principles for systematic reserve selection. *Trends in Ecology and Evolution*, **8**, 124–8.
- Preston, F. W. (1962a). The canonical distribution of commonness and rarity: Part I. *Ecology*, **43**, 185–215.
- Preston, F. W. (1962b). The canonical distribution of commonness and rarity: Part II. *Ecology*, **43**, 410–32.
- Price, M. V. (1980). On the significance of test form in benthic salt-marsh foraminifera. *Journal of Foraminiferal Research*, **10**, 129–35.
- Prince, H. H. and D'Itri, F. M. (eds.) (1985). *Coastal Wetlands*. Chelsea, MI: Lewis Publishers.
- Prince, H. H. and Flegel, C. S. (1995). Breeding avifauna of Lake Huron. In *The Lake Huron Ecosystem: Ecology, Fisheries and Management*, eds. M. Munawar, T. Edsall, and J. Leach, pp. 247–72. Amsterdam, the Netherlands: SPB Academic Publishing.
- Prince, H. H., Padding, P. I., and Knapton, R. W. (1992). Waterfowl use of the Laurentian Great Lakes. *Journal of Great Lakes Research*, **18**, 673–99.
- Prowse, T. D. and Culp, J. M. (2003). Ice breakup: a neglected factor in river ecology. *Canadian Journal of Civil Engineering*, **30**, 128–44.
- Radford, A. E., Ahles H. E., and Bell, C. R. (1968). *Manual of the Vascular Flora of the Carolinas*. Chapel Hill, NC: University of North Carolina Press.
- Rapport, D. J. (1989). What constitutes ecosystem health? *Perspectives in Biology and Medicine*, **33**, 120–32.
- Rapport, D. J., Thorpe, C., and Hutchinson, T. C. (1985). Ecosystem behaviour under stress. *The American Naturalist*, **125**, 617–40.
- Rasker, R. and Hackman, A. (1996). Economic development and the conservation of large carnivores. *Conservation Biology*, **10**, 991–1002.
- Raunkiaer, C. (1908). The statistics of life forms as a basis for biological plant geography. In *The Life Forms of Plants and Statistical Plant Geography: Being the Collected Papers of Raunkiaer*, pp. 111–47. Oxford, UK: Clarendon Press.
- Raunkiaer, C. (1937). *Plant Life Forms*, translated by H. Gilbert-Cater. Oxford, UK: Clarendon Press.
- Raup, H. M. (1975). Species versatility in shore habitats. *Journal of the Arnold Arboretum*, **56**, 126–63.
- Raven, P. H., Evert, R. F., and Eichhorn, S. E. (1992). *Biology of Plants*, 5th edn. New York: Worth Publishers.

- Ravera, O. (1989). Lake ecosystem degradation and recovery studied by the enclosure method. In *Ecological Assessment of Environmental Degradation, Pollution and Recovery*, ed. O. Ravera. Amsterdam, the Netherlands: Elsevier.
- Rawes, M. and Heal, O. W. (1978). The blanket bog as part of a Pennine moorland. In *Production Ecology of British Moors and Montane Grasslands*, eds. O. W. Heal and D. F. Perkins, pp. 224–43. Berlin, Germany: Springer-Verlag.
- Rayamajhi, M. B., Purcell, M. F., Van, T. K., Center, T. D., Pratt, P. D., and Buckingham, G. R. (2002). Australian paperbark tree (*Melaleuca*). In *Biological Control of Invasive Plants in the Eastern United States*, Publication No. FHTET-2002-04, eds. R. Van Driesche, S. Lyon, B. Blossey, M. Hoddle, and R. Reardon, pp. 117–30. Morgantown, WV: U.S. Department of Agriculture Forest Service.
- Read, D. J., Kouckeki, H. K., and Hodgson, J. (1976). Vesicular-arbuscular mycorrhizae in natural vegetation systems. I. The occurrence of infection. *New Phytologist*, **77**, 641–53.
- Read, D. J., Francis, R., and Finlay, R. D. (1985). Mycorrhizal mycelia and nutrient cycling in plant communities. In *Ecological Interactions in Soil*, ed. A. H. Fitter, pp. 193–217. Oxford: Blackwell Scientific Publications.
- Reddoch, J. and Reddoch, A. (1997). The orchids in the Ottawa district. *Canadian Field-Naturalist*, **111**, 1–185.
- Reddy, K. R. and Patrick, W. H. (1984). Nitrogen transformations and loss in flooded soils and sediments. *CRC Critical Reviews in Environmental Control*, **13**, 273–309.
- Reid, D. M. and Bradford, K. J. (1984). Effect of flooding on hormone relations. In *Flooding and Plant Growth*, ed. T. W. Kozlowski, pp. 195–219. Orlando, FL: Academic Press.
- Reid, W. V., McNeely, J. A., Tunstall, J. B., Bryant, D. A., and Winograd, M. (1993). *Biodiversity Indicators for Policymakers*. Washington, DC: World Resources Institute.
- Rejmankova, E., Pope, K. O., Pohl, M. D., and Rey-Benayas, J. M. (1995). Freshwater wetland plant communities of northern Belize: implications for paleoecological studies of Maya wetland agriculture. *Biotropica*, **27**, 28–36.
- Reuss, M. (1998). *Designing the Bayous: The Control of Water in the Atchafalaya Basin 1800–1995*. Alexandria, VA: U.S. Army Corps of Engineers Office of History.
- Reynoldson, T. B. and Zarull, M. A. (1993). An approach to the development of biological sediment guidelines. In *Ecological Integrity and the Management of Ecosystems*, eds. S. Woodley, J. Kay, and G. Francis, pp. 177–200. Delray Beach, FL: St. Lucie Press.
- Reznicek, A. A. and Catling, P. M. (1989). Flora of Long Point. *Michigan Botanist*, **28**, 99–175.
- Richardson, C. J. (ed.) (1981). *Pocosin Wetlands: An Integrated Analysis of Coastal Plain Freshwater Bogs in North Carolina*. Stroudsburg, PA: Hutchinson Ross.
- Richardson, C. J. (1985). Mechanisms controlling phosphorus retention capacity in freshwater wetlands. *Science*, **228**, 1424–7.
- Richardson, C. J. (1989). Freshwater wetlands: transformers, filters, or sinks? In *Freshwater Wetlands and Wildlife*, eds. R. R. Sharitz and J. W. Gibbons, pp. 25–46. Proceedings of a symposium held at Charleston, South Carolina, Mar 24–27, 1986. Washington, DC: U.S. Department of Energy.
- Richardson, C. J. (1991). Pocosins: an ecological perspective. *Wetlands*, **11**, 335–54.
- Richardson, C. J. (1995). Wetlands ecology. In *Encyclopedia of Environmental Biology*, Vol. 3, ed. W. A. Nierenberg, pp. 535–50. San Diego, CA: Academic Press.
- Richardson, C. J. and Gibbons, J. W. (1993). Pocosins, Carolina bays and mountain bogs. In *Biodiversity of the Southeastern United States*, eds. W. H. Martin, S. G. Boyce, and A. C. Echternacht, pp. 257–310. New York: John Wiley.
- Richey, J. E., Meade, R. H., Salati, E., Devol, A. H., Nordin, C. F., and dos Santos, U. (1986). Water discharge and suspended sediment concentrations in the Amazon River: 1982–1984. *Water Resources Research*, **23**, 756–64.
- Richter, B. D., Braun, D. P., Mendelson, M. A., and Master, L. L. (1997). Threats to imperiled freshwater fauna. *Conservation Biology*, **11**, 1081–93.
- Richter, K. O. and Azous, A. L. (1995). Amphibian occurrence and wetland characteristics in the Puget Sound Basin. *Wetlands*, **15**, 305–12.
- Richter, S. C. and Seigel, R. A. (2002). Annual variation in the population ecology of the endangered gopher

- frog, *Rana sevosa* Goin and Netting. *Copeia*, 2002, 962–72.
- Richter, S. C., Young, J. E., Seigel, R. A., and Johnson, G. N. (2001). Postbreeding movements of the dark gopher frog, *Rana sevosa* Goin and Netting: implications for conservation and management. *Journal of Herpetology*, 35, 316–21.
- Richter, S. C., Young, J. E., Johnson, G. N., and Seigel, R. A. (2003). Stochastic variation in reproductive success of a rare frog, *Rana sevosa*: implications for conservation and for monitoring amphibian populations. *Biological Conservation*, 111, 171–7.
- Rickerl, D. H., Sancho, F. O., and Ananth, S. (1994). Vesicular-arbuscular endomycorrhizal colonization of wetland plants. *Journal of Environmental Quality*, 23, 913–16.
- Ricklefs, R. E. (1987). Community diversity: relative roles of local and regional processes. *Science*, 235, 167–71.
- Rigler, F. H. (1982). Recognition of the possible: an advantage of empiricism in ecology. *Canadian Journal of Fisheries and Aquatic Sciences*, 39, 1323–31.
- Rigler, F. H. and Peters, R. H. (1995). *Science and Limnology*. Oldendorf/Lutje, Germany: Ecology Institute.
- Riley, J. L. (1982). Hudson Bay lowland floristic inventory, wetlands catalogue and conservation strategy. *Naturaliste Canadien*, 109, 543–55.
- Riley, J. L. (1989). Southern Ontario bogs and fens off the Canadian Shield. In *Wetlands: Inertia or Momentum?* Conference Proceedings, Oct 21–22, pp. 355–67. Toronto, ON: Federation of Ontario Naturalists.
- Riley, T. Z. and Bookhout, T. A. (1990). Responses of aquatic macroinvertebrates to early-spring drawdown in nodding smartweed marshes. *Wetlands*, 10, 173–85.
- Ritchie, J. C. (1987). *Postglacial Vegetation of Canada*. New York: Cambridge University Press.
- Roberts, J. and Ludwig, J. A. (1991). Riparian vegetation along current-exposure gradients in floodplain wetlands of the River Murray, Australia. *Journal of Ecology*, 79, 117–27.
- Robertson, P. A., Weaver, G. T., and Cavanaugh, J. A. (1978). Vegetation and tree species patterns near the northern terminus of the southern floodplain forest. *Ecological Monographs*, 48, 249–67.
- Robertson, R. J. (1972). Optimal niche space of the redwinged blackbird (*Agelaius phoeniceus*). I. Nesting success in marsh and upland habitat. *Canadian Journal of Zoology*, 50, 247–63.
- Robins, R. H. (n.d.). Walking catfish. [www.flmnh.ufl.edu/fish/Gallery/Descript/WalkingCatfish/WalkingCatfish.html](http://www.flmnh.ufl.edu/fish/Gallery/Descript/WalkingCatfish/WalkingCatfish.html) (accessed June 1, 2008)
- Robinson, A. R. (1973). Sediment, our greatest pollutant? In *Focus on Environmental Geology*, ed. R. W. Tank, pp. 186–92. London: Oxford University Press.
- Rogers, D. R., Rogers, B. D., and Herke, W. H. (1992). Effects of a marsh management plan on fishery communities in coastal Louisiana. *Wetlands*, 12, 53–62.
- Rolston, H. (1994). Foreword. In *An Environmental Proposal for Ethics: The Principle of Integrity*, ed. L. Westra, pp. xi–xiii. Lanham, MD: Rowman and Littlefield. In Noss, R. (1995). *Maintaining Ecological Integrity in Representative Reserve Networks*, A World Wildlife Fund Canada/World Wildlife Fund United States Discussion Paper. Washington, DC: WWF.
- Roni, P., Hanson, K., Beechie, T., Pess, G., Pollock, M., and Bartley, D. M. (2005). *Habitat Rehabilitation for Inland Fisheries: Global Review of Effectiveness and Guidance for Rehabilitation of Freshwater Ecosystems*, FAO Fisheries Technical Paper No. 484. Rome, Italy: Food and Agriculture Organization.
- Rood, S. B. and Mahoney, J. M. (1990). Collapse of riparian poplar forests downstream from dams in western prairies: probable causes and prospects for mitigation. *Environmental Management*, 14, 451–64.
- Root, R. (1967). The niche exploitation pattern of the blue-grey gnatcatcher. *Ecological Monographs*, 37, 317–50.
- Rørslett, B. (1984). Environmental factors and aquatic macrophyte response in regulated lakes: a statistical approach. *Aquatic Botany*, 19, 199–220.
- Rørslett, B. (1985). Regulation impact on submerged macrophytes in the oligotrophic lakes of Setesdal, South Norway. *International Association for Theoretical and Applied Limnology*, 22, 2927–36.
- Rosen, B. H., Gray, S., and Flaig, E. (1995). Implementation of Lake Okeechobee watershed management strategies to control phosphorus load. In *Wetlands and Watershed Management: Science Applications and Public Policy*, eds. J. A. Kusler, D. E. Willard, and H. C. Hull, Jr., pp. 199–207.

- A collection of papers from a national symposium and several workshops at Tampa, FL, Apr 23–26. Berne, NY: Association of State Wetland Managers.
- Rosenberg, D. M. and Barton, D. R. (1986). The Mackenzie river system. In *The Ecology of River Systems*, eds. B. R. Davies and K. F. Walker, pp. 425–33. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Rosenberg, D. M., Bodaly, R. A., and Usher, P. J. (1995). Environmental and social impacts of large scale hydro-electric development: who is listening? *Global Environmental Change*, 5, 127–48.
- Rosenthal, G. A. and Berenbaum, M. R. (eds.) (1991). *Herbivores: Their Interactions with Secondary Plant Metabolites*. San Diego, CA: Academic Press.
- Rosenzweig, M. L. (1995). *Species Diversity in Space and Time*. Cambridge, UK: Cambridge University Press.
- Rosgen, D. L. (1994). A classification of natural rivers. *Catena*, 22, 169–99.
- Rosgen, D. L. (1995). River restoration utilizing natural stability concepts. In *Wetlands and Watershed Management: Science Applications and Public Policy*, eds. J. A. Kusler, D. E. Willard, and H. C. Hull, Jr., pp. 55–62. A collection of papers from a national symposium and several workshops at Tampa, FL, Apr 23–26. Berne, NY: Association of State Wetland Managers.
- Rosswall, T. (1983). The nitrogen cycle. In *The Major Biogeochemical Cycles and Their Interactions*, SCOPE Report No. 21, eds. B. Bolin and R. B. Cook, pp. 46–50. Chichester, UK: John Wiley.
- Rothhaupt, K. O. (1990). Resource competition of herbivorous zooplankton: a review of approaches and perspectives. *Archives in Hydrobiology*, 118, 1–29.
- Rowe, C. L. and W. A. Dunson. (1995). Impacts of hydroperiod on growth and survival of larval amphibians in temporary ponds of Central Pennsylvania, USA. *Oecologia*, 102, 397–403.
- Rozan, T. F., Hunter, K. S., and Benoit, G. (1994). Industrialization as recorded in floodplain deposits of the Quinnipiac River, Connecticut. *Marine Pollution Bulletin*, 28, 564–9.
- Ryan, P. A. (1991). Environmental effects of sediment on New Zealand streams: a review. *New Zealand Journal of Marine and Freshwater Research*, 25, 207–21.
- Rybicki, N. B. and Carter, V. (1986). Effect of sediment depth and sediment type on the survival of *Vallisneria americana* Michx. grown from tubers. *Aquatic Botany*, 24, 233–40.
- Salisbury, F. B. and Ross, C. W. (1988). *Plant Physiology*, 3rd edn. Belmont, CA: Wadsworth.
- Salisbury, S. E. (1970). The pioneer vegetation of exposed muds and its biological features. *Philosophical Transactions of the Royal Society of London Series B*, 259, 207–55.
- Salo, J., Kalliola, R., Hakkinen, I., Makinen, Y., Niemela, P., Puhakka, M., and Coley, P. D. (1986). River dynamics and the diversity of Amazon lowland forest. *Nature*, 322, 254–8.
- Sanders, N. K. (1972). *The Epic of Gilgamesh*, an English version with an introduction by N. K. Sanders, rev edn. London: Penguin Books.
- Sand-Jensen, K. and Krause-Jensen, D. (1997). Broad-scale comparison of photosynthesis in terrestrial and aquatic plant communities. *Oikos*, 80, 203–8.
- Sansen, U. and Koedam, N. (1996). Use of sod cutting for restoration of wet heathlands: revegetation and establishment of typical species in relation to soil conditions. *Journal of Vegetation Science*, 7, 483–6.
- Santelmann, M. V. (1991). Influences on the distribution of *Carex exilis*: an experimental approach. *Ecology*, 72, 2025–37.
- Sanzone, S. and McElroy, A. (eds.) (1998). *Ecological Impacts and Evaluation Criteria for the Use of Structures in Marsh Management*, EPA-SAB-EPEC-98-003. Washington, DC: U.S. Environmental Protection Agency Science Advisory Board.
- Sather, J. H. and Smith, R. D. (1984). *An Overview of Major Wetland Functions*, FWS/OBS-84/18. Washington, DC: U.S. Fish and Wildlife Service.
- Sather, J. H., Smith, R. D., and Larson, J. S. (1990). Natural values of wetlands. In *Wetlands and Shallow Continental Water Bodies*, Vol. 1, *Natural and Human Relationships*, ed. B. C. Patten, pp. 373–87. The Hague, the Netherlands: SPB Academic Publishing.
- Saucier, R. T. (1963). *Recent Geomorphic History of the Pontchartrain Basin*. Baton Rouge, LA: Louisiana State University Press.
- Saunders, D. A., Hobbs, R. J., and Ehrlich, P. R. (eds.) (1993). *Nature Conservation 3: Reconstruction of Fragmented Ecosystems Global and Regional Perspectives*. Chipping Norton, NSW: Surrey Beatty.

- Savile, D. B. O. (1956). Known dispersal rates and migratory potentials as clues to the origin of the North American biota. *American Midland Naturalist*, **56**, 434–53.
- Scagel, R. F., Bandoni, R. J., Rouse, G. E., Schofield, W. B., Stein, J. R., and Taylor, T. M. C. (1966). *Plant Diversity: An Evolutionary Approach*. Belmont, CA: Wadsworth.
- Scharf, F. S., Juanes, F., and Sutherland, M. (1998). Inferring ecological relationships from the edges of scatter diagrams: comparison of regression techniques. *Ecology*, **79**, 448–60.
- Schiemer, F., Baumgartner, C., and Tockner, K. (1999). Restoration of floodplain rivers: the 'Danube Restoration Project'. *Regulated Rivers: Research and Management*, **15**, 231–44.
- Schindler, D. W. (1977). Evolution of phosphorus limitation in lakes. *Science*, **195**, 260–2.
- Schindler, D. W. (1987). Detecting ecosystem responses to anthropogenic stress. *Canadian Journal of Fisheries and Aquatic Sciences*, **44**, 6–25.
- Schneider, E., Tudor, M., and Staras, M. M. (eds.) (2008). *Evolution of Babina Polder after Restoration Works: Agricultural Polder Babina, A Pilot Project of Ecological Restoration*. Frankfurt am Main, Germany: WWF Germany, and Tulcea, Romania: Danube Delta National Institute for Research and Development.
- Schneider, R. (1994). The role of hydrologic regime in maintaining rare plant communities of New York's coastal plain pondshores. *Biological Conservation*, **68**, 253–60.
- Schnitzler, A. (1995). Successional status of trees in gallery forest along the river Rhine. *Journal of Vegetation Science*, **6**, 479–86.
- Schoener, T. W. (1974). Resource partitioning in ecological communities. *Science*, **185**, 27–39.
- Schoener, T. W. (1985). Some comments on Connell's and my reviews of field experiments on interspecific competition. *The American Naturalist*, **125**, 730–40.
- Scholander, P. F., Hammel, H. T., Bradstreet, E. D., and Hemmingsen, E. A. (1965). Sap pressure in vascular plants. *Science*, **148**, 339–46.
- Schröder, H. K., Andersen, H. E., Kiehl, K., and Kenkel, N. (2005). Rejecting the mean: estimating the response of fen plant species to environmental factors by non-linear quantile regression. *Journal of Vegetation Science*, **16**, 373–82.
- Schubel, J. R., Shen, H., and Park, M. (1986). Comparative analysis of estuaries bordering the Yellow Sea. In *Estuarine Variability*, ed. D. A. Wolfe, pp. 43–62. San Diego, CA: Academic Press.
- Schuyt, K. and Brander, L. (2004). *Living Waters: Conserving the Source of Life – The Economic Values of the World's Wetlands*. Amsterdam, the Netherlands: European Union, and Gland, Switzerland: World Wildlife Fund.
- Scott, W. S. and Wylie, N. P. (1980). The environmental effects of snow dumping: a literature review. *Journal of Environmental Management*, **10**, 219–40.
- Sculthorpe, C. D. (1967). *The Biology of Aquatic Vascular Plants*. Reprinted 1985 Edward Arnold, by London.
- Segers, R. (1998). Methane production and methane consumption: a review of processes underlying wetland methane fluxes. *Biogeochemistry*, **41**, 23–51.
- Seidl, A. F. and Moraes, A. S. (2000). Global valuation of ecosystem services: application to the Pantanal da Nhecolandia, Brazil. *Ecological Economics*, **33**, 1–6.
- Serbesoff-King, K. (2003). Melaleuca in Florida: a literature review on the taxonomy, distribution, biology, ecology, economic importance and control measures. *Journal of Aquatic Plant Management*, **41**, 98–112.
- Severinghaus, W. D. (1981). Guild theory development as a mechanism for assessing environmental impact. *Environmental Management*, **5**, 187–90.
- Seward, A. C. (1931). *Plant Life Through the Ages*. London: Cambridge University Press.
- Shaffer, G. P., Sasser, C. E., Gosselink, J. G., and Rejmanek, M. (1992). Vegetation dynamics in the emerging Atchafalaya Delta, Louisiana, USA. *Journal of Ecology*, **80**, 677–87.
- Shankman, D., Keim, B. D., and Song, J. (2006). Flood frequency in China's Poyang Lake region: trends and teleconnections. *International Journal of Climatology*, **26**, 1255–66.
- Shannon, R. D., White, J. R., Lawson, J. E., and Gilmour, B. S. (1996). Methane efflux from emergent vegetation in peatlands. *Journal of Ecology*, **84**, 239–46.
- Sharitz, R. R. and McCormick, J. F. (1973). Population dynamics of two competing annual plant species. *Ecology*, **54**, 723–40.
- Sharitz, R. R. and Gibbons, J. W. (eds.) (1989). *Freshwater Wetlands and Wildlife*. Proceedings

- of a symposium held at Charleston, South Carolina, Mar 24–27, 1986. Washington, DC: U.S. Department of Energy.
- Sharitz, R. R. and Mitsch, W. J. (1993). Southern floodplain forests. In *Biodiversity of the Southeast United States/Lowland Terrestrial Communities*, eds. W. H. Martin, S. G. Boyce, and A. C. Echternacht, pp. 311–71. New York: John Wiley.
- Sharp, M. J. and Keddy, P. A. (1985). Biomass accumulation by *Rhexia virginica* and *Triadenum fraseri* along two lakeshore gradients: a field experiment. *Canadian Journal of Botany*, **63**, 1806–10.
- Shay, J. M. and Shay, C. T. (1986). Prairie marshes in western Canada, with specific reference to the ecology of five emergent macrophytes. *Canadian Journal of Botany*, **64**, 443–54.
- Sheail, J. and Wells, T. C. E. (1983). The Fenlands of Huntingdonshire, England: a case study in catastrophic change. In *Ecosystems of the World*, Vol. 4B, *Mires: Swamp, Bog, Fen and Moor – Regional Studies*, ed. A. J. P. Gore, pp. 375–93. Amsterdam, the Netherlands: Elsevier.
- Sheldon, S. P. (1987). The effects of herbivorous snails on submerged macrophyte communities in Minnesota lakes. *Ecology*, **68**, 1920–31.
- Sheldon, S. P. (1990). More on freshwater snail herbivory: a reply to Bronmark. *Ecology*, **71**, 1215–16.
- Shimwell, D. W. (1971). *The Description and Classification of Vegetation*. Seattle, WA: University of Washington Press.
- Shipley, B. (2000). *Cause and Correlation in Biology*. Cambridge, UK: Cambridge University Press.
- Shipley, B. and Keddy, P. A. (1987). The individualistic and community-unit concepts as falsifiable hypotheses. *Vegetatio*, **69**, 47–55.
- Shipley, B. and Keddy, P. A. (1994). Evaluating the evidence for competitive hierarchies in plant communities. *Oikos*, **69**, 340–5.
- Shipley, B. and Parent, M. (1991). Germination responses of 64 wetland species in relation to seed size, minimum time to reproduction and seedling relative growth rate. *Functional Ecology*, **5**, 111–18.
- Shipley, B. and Peters, R. H. (1990). A test of the Tilman model of plant strategies: relative growth rate and biomass partitioning. *The American Naturalist*, **136**, 139–53.
- Shipley, B., Keddy, P. A., Moore, D. R. J., and Lemky, K. (1989). Regeneration and establishment strategies of emergent macrophytes. *Journal of Ecology*, **77**, 1093–110.
- Shipley, B., Keddy, P. A., Gaudet, C., and Moore, D. R. J. (1991a). A model of species density in shoreline vegetation. *Ecology*, **72**, 1658–67.
- Shipley, B., Keddy, P. A., and Lefkovitch, L. P. (1991b). Mechanisms producing plant zonation along a water depth gradient: a comparison with the exposure gradient. *Canadian Journal of Botany*, **69**, 1420–4.
- Shrader-Frechette, K. S. and McCoy, E. D. (1993). *Methods in Ecology: Strategies for Conservation*. Cambridge, UK: Cambridge University Press.
- Siegel, S. (1956). *Nonparametric Statistics for the Behavioral Sciences*. New York: McGraw-Hill.
- Silander, J. A. and Antonovics, J. (1982). Analysis of interspecific interactions in a coastal plant community: a perturbation approach. *Nature*, **298**, 557–60.
- Silliman, B. R. and Zieman, J. C. (2001). Top-down control of *Spartina alterniflora* production by periwinkle grazing in a Virginia salt marsh. *Ecology*, **82**, 2830–845.
- Silliman, B. R., Grosholz, E. D., and Bertness, M. D. (eds.) (2009). *Human Impacts on Salt Marshes: A Global Perspective*. Berkeley, CA: University of California Press.
- Silvola, J., Alm, J., Ahlholm, U., Nykanen, H., and Martikainen, P. J. (1996). CO<sub>2</sub> fluxes from peat in boreal mires under varying temperature and moisture conditions. *Journal of Ecology*, **84**, 219–28.
- Simberloff, D. and Dayan, T. (1991). The guild concept and the structure of ecological communities. *Annual Review of Ecology and Systematics*, **22**, 115–43.
- Simons, M. (1997). Big, bold effort revives the Danube wetlands. *The New York Times*, Oct 19, 1997, pp. 1, 8.
- Sinclair, A. R. E. (1983). The adaptations of African ungulates and their effects on community function. In *Tropical Savannas*, ed. F. Boulière, pp. 401–22. Amsterdam, the Netherlands: Elsevier.
- Sinclair, A. R. E. and Fryxell, J. M. (1985). The Sahel of Africa: ecology of a disaster. *Canadian Journal of Zoology*, **63**, 987–94.
- Sinclair, A. R. E., Hik, D. S., Schmitz, O. J., Scudder, G. G. E., Turpin, D. H., and Larter, N. C. (1995).

- Biodiversity and the need for habitat renewal. *Ecological Applications*, 5, 579–87.
- Sioli, H. (1964). General features of the limnology of Amazonia. *Verhandlungen Internationale Vereinigung für theoretische und angewandte Limnologie*, 15, 1053–8.
- Sioli, H. (1986). Tropical continental aquatic habitats. In *Conservation Biology: The Science of Scarcity and Diversity*, ed. M. E. Soulé, pp. 383–93. Sunderland, MA: Sinauer Associates.
- Sippel, S. J., Hamilton, S. K., Melack, J. M., and Novo, E. M. M. (1998). Passive microwave observations of inundation area and the area/stage relation in the Amazon River floodplain. *International Journal of Remote Sensing*, 19, 3055–74.
- Skellam, J. G. (1951). Random dispersal in theoretical populations. *Biometrika*, 38, 196–218.
- Sklar, F. H. and van der Valk, A. G. (eds.) (2002). *Tree Islands of the Everglades*. Dordrecht, the Netherlands: Kluwer.
- Sklar, F. H., Chimney, M. J., Newman, S., McCormick, P., Gawlick, D., Miao, S., McVoy, C., Said, W., Newman, J., Coronado, C., Crozier, G., Korvela, M., and Rutchey, K. (2005). The ecological–societal underpinnings of Everglades restoration. *Frontiers in Ecology and Environment*, 3, 161–9.
- Slack, N. G., Vitt, D. H., and Horton, D. G. (1980). Vegetation gradients of minerotrophically rich fens in western Alberta. *Canadian Journal of Botany*, 58, 330–50.
- Slovic, P. (1987). Perception of risk. *Science*, 236, 280–5.
- Smart, R. M. and Barko, J. W. (1978). Influence of sediment salinity and nutrients on the physiological ecology of selected salt marsh plants. *Estuarine and Coastal Marine Science*, 7, 487–95.
- Smith, D. C. and Douglas, A. E. (1987). *The Biology of Symbiosis*. London: Edward Arnold.
- Smith, D. W. and Cooper, S. D. (1982). Competition among Cladocera. *Ecology*, 63, 1004–15.
- Smith, E. K. (2006). *Bog Turtle (Clemmys muhlenbergii), Fish and Wildlife Habitat Management Leaflet No. 44*. Natural Resources Conservation Service, Washington, D.C. and Wildlife Habitat Council, Silver Spring, MD. [ftp-fc.sc.egov.usda.gov/WHMI/WEB/pdf/TechnicalLeaflets/bog\\_turtle\\_Oct%2023.pdf](http://ftp-fc.sc.egov.usda.gov/WHMI/WEB/pdf/TechnicalLeaflets/bog_turtle_Oct%2023.pdf)
- Smith, L. M. (2003). *Playas of the Great Plains*. Austin, TX: University of Texas Press.
- Smith, L. M. and Kadlec, J. A. (1983). Seed banks and their role during the drawdown of a North American marsh. *Journal of Applied Ecology*, 20, 673–84.
- Smith, L. M. and Kadlec, J. A. (1985a). Fire and herbivory in a Great Salt Lake marsh. *Ecology*, 66, 259–65.
- Smith, L. M. and Kadlec, J. A. (1985b). Comparisons of prescribed burning and cutting of Utah marsh plants. *Great Basin Naturalist*, 45, 463–6.
- Smith, P. G. R., Glooschenko, V., and Hagen, D. A. (1991). Coastal wetlands of three Canadian Great Lakes: inventory, current conservation initiatives, and patterns of variation. *Canadian Journal of Fisheries and Aquatic Sciences*, 48, 1581–94.
- Smith, V. H. (1982). The nitrogen and phosphorus dependence of algal biomass in lakes: an empirical and theoretical analysis. *Limnology and Oceanography*, 27, 1101–12.
- Smith, V. H. (1983). Low nitrogen to phosphorus ratios favor dominance by bluegreen algae in lake phytoplankton. *Science*, 221, 669–71.
- Snodgrass, J. W., Komoroski, M. J., Bryan, A. L., Jr., and Burger, J. (2000). Relationships among isolated wetland size, hydroperiod, and amphibian species richness: implications for wetland regulations. *Conservation Biology*, 14, 414–19.
- Snow, A. A. and Vince, S. W. (1984). Plant zonation in an Alaskan salt marsh. II. An experimental study of the role of edaphic conditions. *Journal of Ecology*, 72, 669–84.
- Society for Ecological Restoration International Science and Policy Working Group (SER). (2004). *The SER International Primer on Ecological Restoration*. Tucson, AZ: Society for Ecological Restoration. [www.ser.org](http://www.ser.org)
- Sousa, W. P. (1984). The role of disturbance in natural communities. *Annual Review of Ecology and Systematics*, 15, 353–91.
- Southwood, T. R. E. (1977). Habitat, the templet for ecological strategies? *Journal of Animal Ecology*, 46, 337–65.
- Southwood, T. R. E. (1988). Tactics, strategies, and templets. *Oikos*, 52, 3–18.
- Specht, A. and Specht, R. L. (1993). Species richness and canopy productivity of Australian plant communities. *Biodiversity and Conservation*, 2, 152–67.
- Spence, D. H. N. (1964). The macrophytic vegetation of freshwater lochs, swamps and associated fens.

- In *The Vegetation of Scotland*, ed. J. H. Burnett, pp. 306–425. Edinburgh, UK: Oliver and Boyd.
- Spence, D. H. N. (1982). The zonation of plants in freshwater lakes. *Advances in Ecological Research*, 12, 37–125.
- Spencer, D. F. and Ksander, G. G. (1997). Influence of anoxia on sprouting of vegetative propagules of three species of aquatic plants. *Wetlands*, 17, 55–64.
- Springuel, I. (1990). Riverain vegetation in the Nile valley in Upper Egypt. *Journal of Vegetation Science*, 1, 595–8.
- Starfield, A. M. and Bleloch, A. L. (1991). *Building Models for Conservation and Wildlife Management*, 2nd edn. Edina, MN: Burgers International Group.
- Stead, I. M., Bourke, J. B., and Brothwell, D. (1986). *Lindow Man: The Body in the Bog*. London: British Museum Publications.
- Steedman, R. J. (1988). Modification and assessment of an index of biotic integrity to quantify stream quality in southern Ontario. *Canadian Journal of Fisheries and Aquatic Sciences*, 45, 492–501.
- Stevens, P. W., Fox, S. L., and Montague, C. L. (2006). The interplay between mangroves and saltmarshes at the transition between temperate and subtropical climate in Florida. *Wetlands Ecology and Management*, 14, 435–44.
- Stevenson, J. C., Ward, L. G., and Kearney, M. S. (1986). Vertical accretion in marshes with varying rates of sea level rise. In *Estuarine Variability*, ed. D. A. Wolfe, pp. 241–59. San Diego, CA: Academic Press.
- Stewart, R. E. and Kantrud, H. A. (1971). *Classification of Natural Ponds and Lakes in the Glaciated Prairie Region*, Resource Publication No. 92. Washington, DC: U.S. Fish and Wildlife Service.
- Stewart, W. N. and Rothwell, G. W. (1993). *Paleobotany and the Evolution of Plants*, 2nd edn. New York: Cambridge University Press.
- Strahler, A. N. (1971). *The Earth Sciences*, 2nd edn. New York: Harper and Row.
- Street, F. A. and Grove, A. T. (1979). Global maps of lake-level fluctuations since 30 000 yrs B.P. *Quaternary Research*, 12, 83–118.
- Stuart, S. A., Choat, B., Martin, K. C., Holbrook, N. M., and Ball, M. C. (2007). The role of freezing in setting the latitudinal limits of mangrove forests. *New Phytologist*, 173, 576–83.
- Stuckey, R. L. (1975). A floristic analysis of the vascular plants of a marsh at Perry's Victory Monument, Lake Erie. *Michigan Botanist*, 14, 144–66.
- Sutter, R. D. and Kral, R. (1994). The ecology, status, and conservation of two nonalluvial wetland communities in the south Atlantic and eastern Gulf coastal plain, USA. *Biological Conservation*, 68, 235–43.
- Swink, F. and Wilhelm, G. (1994). *Plants of the Chicago Region* 4th edn. Indianapolis, IN: Indiana Academy of Science.
- Szalay, F. A. de and Resh, V. H. (1997). Responses of wetland invertebrates and plants important in waterfowl diets to burning and mowing of emergent vegetation. *Wetlands*, 17, 149–56.
- Szczepanski, A. J. (1990). Forested wetlands of Poland. In *Forested Wetlands*, ed. A. E. Lugo, M. Brinson and S. Brown, pp. 437–46. Amsterdam, the Netherlands: Elsevier.
- Taiz, L. and Zeiger, E. (1991). *Plant Physiology*. Menlo Park, CA: Benjamin Cummings.
- Talling, J. F. (1992). Environmental regulation in African shallow lakes and wetlands. *Revue d'Hydrobiologie Tropicale*, 25, 87–144.
- Tallis, J. H. (1983). Changes in wetland communities. In *Ecosystems of the World*, Vol. 4A, *Mires: Swamp, Bog, Fen and Moor – General Studies*, ed. A. J. P. Gore, pp. 311–47. Amsterdam, the Netherlands: Elsevier.
- Tans, P. (2009). Recent monthly mean CO<sub>2</sub> at Mauna Loa. [www.esol.noaa.gov/gmd/ccgg/trends](http://www.esol.noaa.gov/gmd/ccgg/trends) (accessed May 7, 2009)
- Tansley, A. G. (1939). *The British Islands and Their Vegetation*. Cambridge, UK: Cambridge University Press.
- Tansley, A. G. and Adamson, R. S. (1925). Studies of the vegetation of the English chalk. III. The chalk grasslands of the Hampshire–Sussex border. *Journal of Ecology*, 13, 177–223.
- Tarr, T. L., Baber, M. J., and Babbitt, K. J. (2005). Invertebrate community structure across a wetland hydroperiod gradient in southern New Hampshire, USA. *Wetlands Ecology and Management*, 13, 321–34.
- Taylor, D. R., Aarssen, L. W., and Loehle, C. (1990). On the relationship between *r/K* selection and environmental carrying capacity: a new habitat

- templet for plant life history strategies. *Oikos*, **58**, 239–50.
- Taylor, J. A. (1983). The peatlands of Great Britain and Ireland. In *Ecosystems of the World*, Vol. 4B, *Mires: Swamp, Bog, Fen and Moor – Regional Studies*, ed. A. J. P. Gore, pp. 1–46. Amsterdam, the Netherlands: Elsevier.
- Taylor, K. L. and Grace, J. B. (1995). The effects of vertebrate herbivory on plant community structure in the coastal marshes of the Pearl River, Louisiana, USA. *Wetlands*, **15**, 68–73.
- Taylor, R. B., Josenhans, H., Balcom, B. A., and Johnston, A. J. B. (2000). *Louisbourg Harbour through Time, Geological Survey of Canada Open File Report 3896*. Ottawa, ON: Geological Survey of Canada.
- Teller, J. T. (1988). Lake Agassiz and its contribution to flow through the Ottawa–St. Lawrence system. In *The Late Quaternary Development of the Champlain Sea Basin*, Geological Association of Canada Special Paper No. 35, ed. N. R. Gadd, pp. 281–9. St. John's, Nfld: Geological Association of Canada.
- Teller, J. T. (2003). Controls, history, outbursts and impact of large late-Quaternary proglacial lakes in North America. In *The Quaternary Period in the United States*, eds. A. Gillespie, S. Porter, and B. Atwater, pp. 45–61. Amsterdam, the Netherlands: Elsevier.
- Terborgh, J. and Robinson, S. (1986). Guilds and their utility in ecology. In *Community Ecology: Pattern and Process*, eds. J. Kikkawa and D. J. Anderson, pp. 65–90. Melbourne, Vic: Blackwell Scientific Publications.
- Thibodeau, F. R. and Ostro, B. D. (1981). An economic analysis of wetland protection. *Journal of Environmental Management*, **12**, 19–30.
- Thirgood, J. V. (1981). *Man and the Mediterranean Forest: A History of Resource Depletion*. London: Academic Press.
- Thomas, J. D. (1982). Chemical ecology of the snail hosts of Schistosomiasis: snail–snail and snail–plant interactions. *Malacologia*, **22**, 81–91.
- Thomas, J. and Nygard, J. (eds.) (2007). *The Importance of Habitat Created by Molluscan Shellfish to Managed Species along the Atlantic Coast of the United States*, Habitat Management Series No. 8. Washington, DC: Atlantic States Marine Fisheries Commission.
- Thompson, D. J. and Shay, J. M. (1988). First-year response of a *Phragmites* marsh community to seasonal burning. *Canadian Journal of Botany*, **67**, 1448–55.
- Thompson, K. (1985). Emergent plants of the permanent and seasonally-flooded wetlands. In *The Ecology and Management of African Wetland Vegetation*, ed. P. Denny, pp. 43–107. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Thompson, K. and Hamilton, A. C. (1983). Peatlands and swamps of the African continent. In *Ecosystems of the World*, Vol. 4B, *Mires: Swamp, Bog, Fen and Moor – Regional Studies*, ed. A. J. P. Gore, pp. 331–73. Amsterdam, the Netherlands: Elsevier.
- Thoreau, H. D. (1854). Republished 1965 as *Walden and Civil Disobedience*. New York: Airmont.
- Tilman, D. (1982). *Resource Competition and Community Structure*. Princeton, NJ: Princeton University Press.
- Tilman, D. (1986). Evolution and differentiation in terrestrial plant communities: the importance of the soil resource: light gradient. In *Community Ecology*, eds. J. Diamond and T. J. Case, pp. 359–80. New York: Harper and Row.
- Tilman, D. (1988). *Plant Strategies and the Dynamics and Structure of Plant Communities*. Princeton, NJ: Princeton University Press.
- Tiner, R. W. (1999). *Wetland Indicators: A Guide to Wetland Identification, Delineation, Classification and Mapping*. Boca Raton, FL: CRC Press.
- Tinkle, W. J. (1939). *Fundamentals of Zoology*. Grand Rapids, MI: Zondervan.
- Todd, T. N. and Davis, B. M. (1995). Effects of fish density and relative abundance on competition between larval lake herring and lake whitefish for zooplankton. *Archiv für Hydrobiologie, Special Issues in Advanced Limnology*, **46**, 163–71.
- Tomlinson, P. B. (1986). *The Botany of Mangroves*. Cambridge, UK: Cambridge University Press.
- Toner, M. and Keddy, P. A. (1997). River hydrology and riparian wetlands: a predictive model for ecological assembly. *Ecological Applications*, **7**, 236–46.
- Tonn, W. M. and Magnuson, J. J. (1982). Patterns in the species composition and richness of fish assemblages in northern Wisconsin lakes. *Ecology*, **63**, 1149–66.
- Tonn, W. M., Magnuson, J. J., and Forbes, A. M. (1983). Community analysis in fishery management:

- an application with northern Wisconsin lakes. *Transactions of the American Fisheries Society*, 112, 368–77.
- Toth, L. A. (1993). The ecological basis of the Kissimmee River restoration plan. *Florida Scientist*, 1, 25–51.
- Townsend, A. R., Braswell, B. H., Holland, E. A., and Penner, J. E. (1996). Spatial and temporal patterns in terrestrial carbon storage due to deposition of fossil fuel nitrogen. *Ecological Applications*, 6, 806–14.
- Townsend, G. H. (1984). *Simulating the Effect of Water Regime Restoration Measures on Wildlife Populations and Habitat within the Peace–Athabasca Delta*, Technical report No. 13. Saskatoon, Sask.: Western and Northern Region, Canadian Wildlife Service.
- Trombulak, S. C. and Frissell, C. A. (2000). Review of ecological effects of roads on terrestrial and aquatic communities. *Conservation Biology*, 14, 18–30.
- Tsuyuzaki, S. and Tsujii, T. (1990). Preliminary study on grassy marshland vegetation, western part of Sichuan Province, China, in relation to yak-grazing. *Ecological Research*, 5, 271–6.
- Tsuyuzaki, S., Urano, S., and Tsujii, T. (1990). Vegetation of alpine marshland and its neighboring areas, northern part of Sichuan Province, China. *Vegetatio*, 88, 79–86.
- Tuchman, B. (1984). *The March of Folly*. New York: Ballantine Books.
- Turner, C. E., Center, T. D., Burrows, D. W., and Buckingham, G. R. (1998). Ecology and management of *Melaleuca quinquenervia*, an invader of wetlands in Florida, U.S.A. *Wetlands Ecology and Management*, 5, 165–78.
- Turner, R. E. (1977). Intertidal vegetation and commercial yields of penaeid shrimp. *Transactions of the American Fisheries Society*, 106, 411–16.
- Turner, R. E. (1982). Protein yields from wetlands. In *Wetlands: Ecology and Management*, Proceedings of the First International Wetlands Conference, New Delhi, India, Sept 10–17, 1980.
- Turner, R. E. and Rabelais, N. N. (2003). Linking landscape and water quality in the Mississippi River Basin for 200 years. *BioScience*, 53, 563–72.
- Turner, R. E. and Streever, B. (2002). *Approaches to Coastal Wetland Restoration: Northern Gulf of Mexico*. The Hague, the Netherlands: SPB Academic Publishing.
- Turner, R. E., Baustian, J. J., Swenson, E. M., and Spicer, J. S. (2006). Wetland sedimentation from hurricanes Katrina and Rita. *Science*, 314, 449–52.
- Turner, R. M. and Karpiscak, M. M. (1980). *Recent Vegetation Changes along the Colorado River between Glen Canyon Dam and Lake Mead, Arizona*, Geological Survey Professional Paper No. 1132. Washington, DC: U.S. Government Printing Office.
- Tyler, G. (1971). Hydrology and salinity of Baltic sea-shore meadows: studies in the ecology of Baltic sea-shore meadows III. *Oikos*, 22, 1–20.
- Twolan-Strutt, L. and Keddy, P. A. (1996). Above- and below-ground competition intensity in two contrasting wetland plant communities. *Ecology*, 77, 259–70.
- Underwood, A. J. (1978). The detection of non-random patterns of distribution of species along a gradient. *Oecologia*, 36, 317–26.
- Underwood, A. J. (1986). The analysis of competition by field experiments. In *Community Ecology: Pattern and Process*, eds. J. Kikkawa and D. J. Anderson, pp. 240–68. Melbourne, Vic: Blackwell Scientific Publications.
- Urban, D. L. and Shugart H. H. (1992). Individual based models of forest succession. In *Plant Succession*, eds. D. C. Glenn-Lewin, R. K. Peet, and T. T. Veblen, pp. 249–92. London: Chapman and Hall.
- U.S. Army Coastal Engineering Research Centre. (1977). *Shore Protection Manual*, Vol. 1, 3rd edn. Washington, DC: U.S. Government Printing Office.
- U.S. Army Corps of Engineers. (1987). *Corps of Engineers Wetlands Delineation Manual*, Technical Report No. Y-87–1. Vicksburg, MS: Department of the Army, Waterways Experiment Station.
- U.S. Army Corps of Engineers. (2004). *The Mississippi River and Tributaries Project*. U.S. ACE, New Orleans District. [www.mvn.usace.army.mil/pao/bro/misstrib.htm](http://www.mvn.usace.army.mil/pao/bro/misstrib.htm) (accessed Apr 7, 2009)
- U.S. Environmental Protection Agency. (2004). *Constructed Treatment Wetlands*, EPA 843-F-03–013. Washington, DC: U.S. Government Printing Office.
- U. S. Fish and Wildlife Service. (1989). *Louisiana Pearlshell (Margaritifera hembeli) Recovery Plan*. Jackson, MS: U.S. Fish and Wildlife Service.
- U.S. Fish and Wildlife Service. (2001). *Bog Turtle (Clemmys muhlenbergii), Northern Population*,

- Recovery Plan*. Hadley, MA: U.S. Fish and Wildlife Service.
- U.S. Geological Survey. (1996). <http://earthshots.usgs.gov/Knife/Knife>. (accessed June 15, 2009)
- U.S. Geological Survey. (2000). *Sea Level and Climate*, U.S.G.S. Fact Sheet No. 002-00. Reston, VA: U.S. Department of the Interior.
- Valiela, I., Foreman, K., LaMontagne, M., Hersh, D., Costa, J., D'Avanzo, C., Babione, M., Sham, C., Brawley, J., Peckol, P., DeMeo-Anderson, B., and Lajtha, K. (1992). Couplings of watersheds and coastal waters: sources and consequences of nutrient enrichment in Waquoit Bay, Massachusetts. *Estuaries*, 15, 443–57.
- Valentine, D. L. (2002). Biogeochemistry and microbial ecology of methane oxidation in anoxic environments: a review. *Journal Antonie van Leeuwenhoek*, 81, 271–82.
- Vallentyne, J. R. (1974). *The Algal Bowl: Lakes and Man*, Miscellaneous Special Publication No. 22. Ottawa, ON: Department of the Environment, Fisheries and Marine Service.
- van Breeman, N. (1995). How *Sphagnum* bogs down [sic] other plants. *Trends in Ecology and Evolution*, 10, 270–5.
- van de Kieft, C. (1991). The Low Countries. In *The New Encyclopedia Britannica*, 15th edn, Vol. 23, 314–25. Chicago, IL: Encyclopedia Britannica Inc.
- van de Rijt, C. W. C. J., Hazelhoff, L., and Blom, C. W. P. M. (1996). Vegetation zonation in a former tidal area: a vegetation-type response model based on DCA and logistic regression using GIS. *Journal of Vegetation Science*, 7, 505–18.
- van der Leeden, F., Troise, F., and Tood, D. K. (eds.) (1990). *The Water Encyclopedia*, 2nd edn. Chelsea, MI: Lewis Publishers.
- van der Pijl, L. (1972). *Principles of Dispersal in Higher Plants*. New York: Springer-Verlag.
- van der Toorn, J., Verhoeven, J. T. A., and Simpson, R. L. (1990). Fresh water marshes. In *Wetlands and Shallow Continental Water Bodies*, Vol. 1, ed. B. C. Patten, pp. 445–65. The Hague, the Netherlands: SPB Academic Publishing.
- van der Valk, A. G. (1981). Succession in wetlands: a Gleasonian approach. *Ecology*, 62, 688–96.
- van der Valk, A. G. (1988). From community ecology to vegetation management: providing a scientific basis for management. In *Transactions of the 53 North American Wildlife and Natural Resources Conference*, pp. 463–70. Washington, DC: Wildlife Management Institute.
- van der Valk, A. G. (1989). *Northern Prairie Wetlands*. Ames, IA: Iowa State University Press.
- van der Valk, A. G. and Davis, C. B. (1976). The seed banks of prairie glacial marshes. *Canadian Journal of Botany*, 54, 1832–8.
- van der Valk, A. G. and Davis, C. B. (1978). The role of seed banks in the vegetation dynamics of prairie glacial marshes. *Ecology*, 59, 322–35.
- van der Valk, A. G., Swanson, S. D., and Nuss, R. F. (1983). The response of plant species to burial in three types of Alaskan wetlands. *Canadian Journal of Botany*, 61, 1150–64.
- van der Valk, A. G., Pederson, R. L., and Davis, C. B. (1992). Restoration and creation of freshwater wetlands using seed banks. *Wetlands Ecology and Management*, 1, 191–7.
- Van Wijck, C. and de Groot, C. J. (1993). The impact of desiccation of a freshwater marsh (Garcines Nord, Camargue, France) on sediment–water–vegetation interactions. *Hydrobiologia*, 252, 95–103.
- Vasseur, L. and Catto, N. R. (2008). Atlantic Canada. In *From Impacts to Adaptation: Canada in a Changing Climate 2007*, eds. D. S. Lemmen, F. J. Warren, J. Lacroix, and E. Bush, pp. 119–70. Ottawa, ON: Government of Canada.
- Verhoeven, J. T. A. and Liefveld, W. M. (1997). The ecological significance of organochemical compounds in *Sphagnum*. *Acta Botanica Neerlandica*, 46, 117–30.
- Verhoeven, J. T. A., Kemmers, R. H. and Koerselman, W. (1993). Nutrient enrichment of freshwater wetlands. In *Landscape Ecology of a Stressed Environment*, eds. C. C. Vos and P. Opdam, pp. 33–59. London: Chapman and Hall.
- Verhoeven, J. T. A., Koerselman, W., and Meuleman, A. F. M. (1996). Nitrogen- or phosphorus-limited growth in herbaceous, wet vegetation: relations with atmospheric inputs and management regimes. *Trends in Ecology and Evolution*, 11, 493–7.
- Verry, E. S. 1989. Selection and management of shallow water impoundments for wildlife. In *Freshwater Wetlands and Wildlife*, eds. R. R. Sharitz and J. W. Gibbons, pp. 1177–94. Washington, DC: U.S. Department of Energy.

- Vesey-FitzGerald, D. F. (1960). Grazing succession among East African game animals. *Journal of Mammalogy*, **41**, 161–72.
- Vijayakumar, S. P., Vasudevan, K., and Ishwar, N. M. (2001). Herpetofaunal mortality on roads in the Anamalai Hills, Southern Western Ghats. *Hamadryad*, **26**, 265–72.
- Vince, S. W. and Snow, A. A. (1984). Plant zonation in an Alaskan salt marsh. I. Distribution, abundance, and environmental factors. *Journal of Ecology*, **72**, 651–67.
- Vitousek, P. M. (1982). Nutrient cycling and nitrogen use efficiency. *The American Naturalist*, **119**, 553–72.
- Vitousek, P. M., Aber, J., Howarth, R. W., Likens, G. E., Matson, P. A., Schindler, D. W., Schlesinger, W. H., and Tilman, G. D. (1997). *Human Alteration of Global Nitrogen Cycle: Causes and Consequences*, Issues in Ecology No. 1, Washington, DC: Ecological Society of America.
- Vitt, D. H. (1990). Growth and production dynamics of boreal mosses over climatic, chemical and topographic gradients. *Botanical Journal of the Linnean Society*, **104**, 35–59.
- Vitt, D. H. (1994). An overview of factors that influence the development of Canadian peatlands. *Memoirs of the Entomological Society of Canada*, **169**, 7–20.
- Vitt, D. H. and Chee, W. (1990). The relationships of vegetation to surface water chemistry and peat chemistry in fens of Alberta, Canada. *Vegetatio*, **89**, 87–106.
- Vitt, D. H. and Slack, N. G. (1975). An analysis of the vegetation of *Sphagnum*-dominated kettle-hole bogs in relation to environmental gradients. *Canadian Journal of Botany*, **53**, 332–59.
- Vitt, D. H. and Slack, N. G. (1984). Niche diversification of *Sphagnum* relative to environmental factors in northern Minnesota peatlands. *Canadian Journal of Botany*, **62**, 1409–30.
- Vitt, D. H., Yenhung, L., and Belland, R. J. (1995). Patterns of bryophyte diversity in peatlands of continental western Canada. *The Bryologist*, **98**, 218–27.
- Vivian-Smith, G. (1997). Microtopographic heterogeneity and floristic diversity in experimental wetland communities. *Journal of Ecology*, **85**, 71–82.
- Vogl, R. (1969). One hundred and thirty years of plant succession in a southeastern Wisconsin lowland. *Ecology*, **50**, 248–55.
- Vogl, R. (1973). Effects of fire on the plants and animals of a Florida wetland. *American Midland Naturalist*, **89**, 334–47.
- Vörösmarty, C. J., Fekete, B., and Tucker, B. A. (1996). *River Discharge Database*, Version 1.0, vols. 0–6. Paris: UNESCO.
- Walker, B. H. and Wehrhahn, C. F. (1971). Relationships between derived vegetation gradients and measured environmental variables in Saskatchewan wetlands. *Ecology*, **52**, 85–95.
- Walker, D. (1970). Direction and rate in some British post-glacial hydroses. In *Studies in the Vegetational History of the British Isles*, eds. D. Walker and R. G. West, pp. 117–39. Cambridge, UK: Cambridge University Press.
- Walters, C. (1997). Challenges in adaptive management of riparian and coastal ecosystems. *Conservation Ecology*, **1**(2), [www.consecol.org/vol1/iss2/art1/](http://www.consecol.org/vol1/iss2/art1/) (accessed June 15, 2008)
- Wang, S., Jurik, T. M., and van der Valk, A. G. (1994). Effects of sediment load on various stages in the life and death of cattail (*Typha × glauca*). *Wetlands*, **14**, 166–73.
- Ward, A. and S. W. Trimble. (2004). *Environmental Hydrology*, 2nd edn. Boca Raton, FL: CRC Press.
- Wassen, M. J., Barendregt, A., Palczynski, A., de Smidt, J. T., and de Mars, H. (1990). The relationship between fen vegetation gradients, groundwater flow and flooding in undrained valley mire at Biebrza, Poland. *Journal of Ecology*, **78**, 1106–22.
- Waterkeyn, A., Grillas, P., Vanschoenwinkel, B., and Brendonck, L. (2008). Invertebrate community patterns in Mediterranean temporary wetlands along hydroperiod and salinity gradients. *Freshwater Biology*, **53**, 1808–22.
- Waters, T. F. (1995). *Sediment in Streams: Sources, Biological Effects, and Control*, American Fisheries Society Monograph No. 7. Nashville, TN: American Fisheries Society.
- Watts, W. A. and Winter, T. C. (1966). Plant macrofossils from Kirchner Marsh, Minnesota: a paleoecological study. *Geological Society of America Bulletin* **77**, 1339–60.
- Weaver, J. E. and Clements, F. E. (1938). *Plant Ecology*, 2nd edn. New York: McGraw-Hill.
- Weber, W. and Rabinowitz, A. (1996). A global perspective on large carnivore conservation. *Conservation Biology*, **10**, 1046–54.

- Weddle, R. S. (1991). *The French Thorn: Rival Explorers in the Spanish Sea, 1682–1762*. College Station, TX: Texas A&M University Press.
- Weiher, E. (1999). The combined effects of scale and productivity on species richness. *Journal of Ecology*, **87**, 1005–11.
- Weiher, E. and Boylen, C. W. (1994). Patterns and prediction of a and b diversity of aquatic plants in Adirondack (New York) lakes. *Canadian Journal of Botany*, **72**, 1797–804.
- Weiher, E. and Keddy, P. A. (1995). The assembly of experimental wetland plant communities. *Oikos*, **73**, 323–35.
- Weiher, E. and Keddy, P. A. (eds.) (1999). *Assembly Rules in Ecological Communities: Perspectives, Advances, Retreats*. Cambridge, UK: Cambridge University Press.
- Weiher, E., Wisheu, I. C., Keddy, P. A., and Moore, D. R. J. (1996). Establishment, persistence, and management implications of experimental wetland plant communities. *Wetlands*, **16**, 208–18.
- Weiher, E., Clarke, G. D. P., and Keddy, P. A. (1998). Community assembly rules, morphological dispersion, and the coexistence of plant species. *Oikos*, **81**, 309–22.
- Weiher, E., van der Werf, A., Thompson, K., Roderick, M., Garnier E., and Eriksson, O. (1999). Challenging Theophrastus: a common core list of plant traits for functional ecology. *Journal of Vegetation Science*, **10**, 609–20.
- Wein, R. W. (1983). Fire behaviour and ecological effects in organic terrain. In *The Role of Fire in Northern Circumpolar Ecosystems*, eds. R. W. Wein and D. A. Maclean, pp. 81–95. New York: John Wiley.
- Weinberg, G. M. (1975). *An Introduction to General Systems Thinking*. New York: John Wiley.
- Weisner, S. E. B. (1990). *Emergent Vegetation in Eutrophic Lakes: Distributional Patterns and Ecophysiological Constraints*. Lund, Sweden: Grahns Boktryckeri.
- Welcomme, R. L. (1976). Some general and theoretical considerations on the fish yield of African rivers. *Journal of Fish Biology*, **8**, 351–64.
- Welcomme, R. L. (1979). *Fisheries Ecology of Floodplain Rivers*. London: Longman.
- Welcomme, R. L. (1986). Fish of the Niger system. In *The Ecology of River Systems*, eds. B. R. Davies and K. F. Walker, pp. 25–48. Dordrecht, the Netherlands: Dr. W. Junk Publishers.
- Weller, M. W. (1978). Management of freshwater marshes for wildlife. In *Freshwater Wetlands: Ecological Processes and Management Potential*, eds. R. E. Good, D. F. Whigham, and R. L. Simpson, pp. 267–84. New York: Academic Press.
- Weller, M. W. (1994a). *Freshwater Marshes: Ecology and Wildlife Management*, 3rd edn. Minneapolis, MN: University of Minnesota Press.
- Weller, M. W. (1994b). Bird–habitat relationships in a Texas estuarine marsh during summer. *Wetlands*, **14**, 293–300.
- Weller, M. W. (1999). *Wetland Birds: Habitat Resources and Conservation Implications*. Cambridge, UK: Cambridge University Press.
- Wetly, J. C. (1982). *The Life of Birds*, 3rd edn. New York: Saunders College Publishing.
- Werner, E. E. (1984). The mechanisms of species interactions and community organization in fish. In *Ecological Communities: Conceptual Issues and the Evidence*, eds. D. R. Strong, Jr., D. Simberloff, L. G. Abele, and A. B. Thistle, pp. 360–82. Princeton, NJ: Princeton University Press.
- Werner, E. E. and Hall, D. J. (1976). Niche shifts in sunfishes: experimental evidence and significance. *Science*, **191**, 404–6.
- Werner, E. E. and Hall, D. J. (1977). Competition and habitat shift in two sunfishes (Centrarchidae). *Ecology*, **58**, 869–76.
- Werner, E. E. and Hall, D. J. (1979). Foraging efficiency and habitat switching in competing sunfishes. *Ecology*, **60**, 256–64.
- Werner, E. E., Skelly, D. K., Relyea R. A., and Yurewicz, K. L. (2007). Amphibian species richness across environmental gradients. *Oikos*, **116**, 1697–712.
- Werner, K. J. and Zedler, J. B. (1997). Microtopographic heterogeneity and floristic diversity in experimental wetland communities. *Journal of Ecology*, **85**, 71–82.
- Western, D. (1975). Water availability and its influence on the structure and dynamics of a savannah large mammal community. *African Wildlife Journal*, **13**, 265–86.
- Westhoff, V. and Van der Maarel, E. (1973). The Braun–Blanquet approach. In *Ordination and Classification of Communities*, ed. R. H. Whittaker, pp. 617–726. The Hague, the Netherlands: Dr. W. Junk Publishers.
- Wetzel, R. G. (1975). *Limnology*. Philadelphia, PA: W. B. Saunders.

- Wetzel, R. G. (1989). Wetland and littoral interfaces of lakes: productivity and nutrient regulation in the Lawrence Lake ecosystem. In *Freshwater Wetlands and Wildlife*, eds. R. R. Sharitz and J. W. Gibbons, pp. 283–302. Proceedings of a Symposium held at Charleston, South Carolina, Mar 24–27, 1986. Washington, DC: U.S. Department of Energy.
- Whalen, S. C. (2005). Biogeochemistry of methane exchange between natural wetlands and the atmosphere. *Environmental Engineering Science*, 22, 73–94.
- Wheeler, B. D. and Giller, K. E. (1982). Species richness of herbaceous fen vegetation in Broadland, Norfolk in relation to the quantity of above-ground plant material. *Journal of Ecology*, 70, 179–200.
- Wheeler, B. D. and Proctor, M. C. F. (2000). Ecological gradients, subdivisions and terminology of north-west European mires. *Journal of Ecology*, 88, 187–203.
- Wheeler, B. D. and Shaw, S. C. (1991). Above-ground crop mass and species richness of the principal types of herbaceous rich-fen vegetation of lowland England and Wales. *Journal of Ecology*, 79, 285–301.
- Whigham, D. F., Dykyjova, D., and Hejny, S. (eds.) (1992). *Wetlands of the World*, Vol. 1. Dordrecht, the Netherlands: Kluwer.
- White, P. S. (1979). Pattern, process and natural disturbance in vegetation. *Botanical Review*, 45, 229–99.
- White, P. S. (1994). Synthesis: vegetation pattern and process in the Everglades ecosystem. In *Everglades: The Ecosystem and its Restoration*, eds. S. Davis and J. Ogden, pp. 445–60. DelRay Beach, FL: St. Lucie Press.
- White, P. S., Wilds, S. P., and Thunhorst, G. A. (1998). Southeast. In *Status and Trends of the Nation's Biological Resources*, eds. M. J. Mac, P. A. Opler, C. E. Puckett Haecker, and P. D. Doran, pp. 255–314. Reston, VA: U.S. Department of the Interior, U.S. Geological Survey.
- White, T. C. R. (1993). *The Inadequate Environment*. Berlin, Germany: Springer-Verlag.
- Whiting, G. J. and Chanton, J. P. (1993). Primary production control of methane emission from wetlands. *Nature*, 364, 794–5.
- Whitney, D. M., Chalmers, A. G., Haines, E. B., Hanson, R. B., Pomeroy, L. R., and Sherr, B. (1981). The cycles of nitrogen and phosphorus. In *The Ecology of a Salt Marsh*, eds. L. R. Pomeroy and R. G. Wiegert, pp. 161–78. New York: Springer-Verlag.
- Whittaker, R. H. (1956). Vegetation of the Great Smoky Mountains. *Ecological Monographs*, 26, 1–80.
- Whittaker, R. H. (1962). Classification of natural communities. *Botanical Review*, 28, 1–160.
- Whittaker, R. H. (1967). Gradient analysis of vegetation. *Biological Reviews*, 42, 207–64.
- Whittaker, R. H. (1975). *Communities and Ecosystems*. New York: Macmillan.
- Whittaker, R. H. and Likens, G. E. (1973). Carbon in the biota. In *Carbon in the Biosphere*, eds. G. M. Woodwell and E. R. Peacan, pp. 281–302. Springfield, VA: National Technical Information Service.
- Wickware, G. M. and Rubec, C. D. A. (1989). *Ecoregions of Ontario*, Ecological Land Classification Series No. 26. Ottawa, ON: Environment Canada, Sustainable Development Branch.
- Wiegert, J. (1990). Forested wetlands in western Europe. In *Forested Wetlands*, eds. A. E. Lugo, M. Brinson, and S. Brown, pp. 407–36. Amsterdam, the Netherlands: Elsevier.
- Wiegert, R. G. L., Pomeroy, R., and Wiebe, W. J. (1981). Ecology of salt marshes: an introduction. In *The Ecology of a Salt Marsh*, eds. L. R. Pomeroy and R. G. Wiegert, pp. 3–20. New York: Springer-Verlag.
- Wiens, J. A. (1965). Behavioral interactions of red-winged blackbirds and common grackles on a common breeding ground. *The Auk*, 82, 356–74.
- Wiens, J. A. (1983). Avian community ecology: an iconoclastic view. In *Perspectives in Ornithology*, essays presented for the centennial of the American Ornithologists' Union, eds. A. H. Brush and G. A. Clark, Jr., pp. 355–403. Cambridge, UK: Cambridge University Press.
- Wikramanayake, E. D. (1990). Ecomorphology and biogeography of a tropical stream fish assemblage: evolution of assemblage structure. *Ecology*, 71, 1756–64.
- Wilbur, H. M. (1972). Competition, predation and the structure of the *Ambystoma-Rana sylvatica* community. *Ecology*, 53, 3–21.
- Wilbur, H. M. (1984). Complex life cycles and community organization in amphibians. In *A New*

- Ecology: Novel Approaches to Interactive Systems*, eds. P. W. Price, C. N. Slobodchikoff, and W. S. Gaud, pp. 195–225. New York: John Wiley.
- Wilcox, D. A. and Meeker, J. E. (1991). Disturbance effects on aquatic vegetation in regulated and unregulated lakes in northern Minnesota. *Canadian Journal of Botany*, **69**, 1542–51.
- Wilcox, D. A. and Simonin, H. A. (1987). A chronosequence of aquatic macrophyte communities in dune ponds. *Aquatic Botany*, **28**, 227–42.
- Wilcox, D. A. and Xie, Y. (2007). Predicting wetland plant responses to proposed water-level-regulation plans for Lake Ontario: GIS-based modeling. *Journal of Great Lakes Research*, **33**, 751–73.
- Wilcox, D. A., Kowalski, K. P., Hoare, H. L., Carlson, M. L., and Morgan, H. N. (2008) Cattail invasion of sedge/grass meadows in Lake Ontario: photointerpretation analysis of sixteen wetlands over five decades. *Journal of Great Lakes Research*, **34**, 301–23.
- Wild Earth. (1992). *The Wildlands Project*, Special Issue. Richmond, VT: Wild Earth.
- Williams, C. B. (1964). *Patterns in the Balance of Nature*. London: Academic Press.
- Williams, M. (1989). The lumberman's assault on the southern forest, 1880–1920. In *Americans and Their Forests: A Historical Geography*, ed. M. Williams, pp. 238–88. Cambridge, UK: Cambridge University Press.
- Williamson, G. B. (1990). Allelopathy, Koch's postulates and the neck riddle. In *Perspectives on Plant Competition*, eds. J. B. Grace and D. Tilman, pp. 143–62. San Diego, CA: Academic Press.
- Willis, A. J. (1963). Branton Burrows: the effects on the vegetation of the addition of mineral nutrients to the dune soils. *Journal of Ecology*, **51**, 353–74.
- Wilsey, B. J., Chabreck, R. H., and Linscombe, R. G. (1991). Variation in nutria diets in selected freshwater forested wetlands of Louisiana. *Wetlands*, **11**, 263–78.
- Wilson, E. O. (1993). *The Diversity of Life*. New York: W.W. Norton.
- Wilson, E. O. and Bossert, W. H. (1971). *A Primer of Population Biology*. Sunderland, MA: Sinauer Associates.
- Wilson, J. A. (1972). *Principles of Animal Physiology*. New York: Macmillan.
- Wilson, J. B., Wells, T. C. E., Trueman, I. C., Jones, G., Atkinson, M. D., Crawley, M. J., Dodds, M. E., and Silvertown, J. (1996). Are there assembly rules for plant species abundance? An investigation in relation to soil resources and successional trends. *Journal of Ecology*, **84**, 527–38.
- Wilson, S. D. and Keddy, P. A. (1985). Plant zonation on a shoreline gradient: physiological response curves of component species. *Journal of Ecology*, **73**, 851–60.
- Wilson, S. D. and Keddy, P. A. (1986a). Species competitive ability and position along a natural stress/disturbance gradient. *Ecology*, **67**, 1236–42.
- Wilson, S. D. and Keddy, P. A. (1986b). Measuring diffuse competition along an environmental gradient: results from a shoreline plant community. *The American Naturalist*, **127**, 862–9.
- Wilson, S. D. and Keddy, P. A. (1988). Species richness, survivorship, and biomass accumulation along an environmental gradient. *Oikos*, **53**, 375–80.
- Wilson, S. D. and Keddy, P. A. (1991). Competition, survivorship and growth in macrophyte communities. *Freshwater Biology*, **25**, 331–7.
- Winemiller, K. O. (1991). Ecomorphological diversification in lowland freshwater fish assemblages from five biotic regions. *Ecological Monographs*, **61**, 343–65.
- Winter, T. C. and Rosenberry, D. O. (1995). The interaction of ground water with prairie pothole wetlands in the Cottonwood Lake area, east-central North Dakota, 1979–1990. *Wetlands*, **15**, 193–211.
- Wisheu, I. C. (1998). How organisms partition habitats: different types of community organization can produce identical patterns. *Oikos*, **83**, 246–58.
- Wisheu, I. C. and Keddy, P. A. (1989a). Species richness – standing crop relationships along four lakeshore gradients: constraints on the general model. *Canadian Journal of Botany*, **67**, 1609–17.
- Wisheu, I. C. and Keddy, P. A. (1989b). The conservation and management of a threatened coastal plain plant community in eastern North America (Nova Scotia, Canada). *Biological Conservation*, **48**, 229–38.
- Wisheu, I. C. and Keddy, P. A. (1991). Seed banks of a rare wetland plant community: distribution patterns and effects of human-induced disturbance. *Journal of Vegetation Science*, **2**, 181–8.
- Wisheu, I. C. and Keddy, P. A. (1992). Competition and centrifugal organization of plant communities:

- theory and tests. *Journal of Vegetation Science*, **3**, 147–56.
- Wisheu, I. C. and Keddy, P. A. (1996). Three competing models for predicting the size of species pools: a test using eastern North American wetlands. *Oikos*, **76**, 253–8.
- Wisheu, I. C., Keddy, P. A., Moore, D. J., McCanny, S. J., and Gaudet, C. L. (1990). Effects of eutrophication on wetland vegetation. In *Wetlands of the Great Lakes*, eds. J. Kusler and R. Smardon, pp. 112–21. Berne, NY: Association of State Wetland Managers.
- Wium-Anderson, S. (1971). Photosynthetic uptake of free CO<sub>2</sub> by the roots of *Lobelia dortmanna*. *Plantarum*, **25**, 245–8.
- Wolff, W. J. (1993). Netherlands wetlands. *Hydrobiologia*, **265**, 1–14.
- Woo, M., Rowsell, R. D., and Clark, R. G. (1993). *Hydrological Classification of Canadian Prairie Wetlands and Prediction of Wetland Inundation in Response to Climatic Variability*, Occasional Paper No. 79. Ottawa, ON: Canadian Wildlife Service.
- Woodley, S., Kay, J., and Francis, G. (eds.) (1993). *Ecological Integrity and the Management of Ecosystems*. Delray Beach, FL: St. Lucie Press.
- Woodward, F. I. and Kelly, C. K. (1997). Plant functional types: towards a definition by environmental constraints. In *Plant Functional Types*, eds. T. M. Smith, H. H. Shugart, and F. I. Woodward, pp. 47–65. Cambridge, UK: Cambridge University Press.
- Woodwell, G. M. and Whittaker, R. H. (1968). Effects of chronic gamma radiation on plant communities. *Quarterly Review of Biology*, **43**, 42–55.
- Woodwell, G. M., Mackenzie, F. T., Houghton, R. A., Apps, A. J., Gorham, E., and Davidson, E. A. (1995). Will the warming speed the warming? In *Biotic Feedbacks in the Global Climatic System*, eds. G. M. Woodwell and F. T. Mackenzie, pp. 393–411. New York: Oxford University Press.
- Wootton, R. J. (1990). Biotic interaction. II. Competition and mutualism. In *Ecology of Teleost Fishes*, ed. R. J. Wootton, pp. 216–37. London: Chapman and Hall.
- World Commission on Environment and Development. (1987). *Our Common Future*. Oxford, UK: Oxford University Press.
- World Conservation Monitoring Centre. (1992). *Global Biodiversity: Status of the Earth's Living Resources*. London: Chapman and Hall.
- World Resources Institute. (1992). *World Resources 1992–1993*. Oxford, UK: Oxford University Press.
- World Wildlife Fund (WWF). (1999). *Evaluation of Wetlands and Floodplain Areas in the Danube River Basin: Final Report*. Sofia, Bulgaria: WWF Danube–Carpathian Programme, and Rastatt, Germany: WWF Auen-Institut.
- World Wildlife Fund (WWF). (2003). Dikes bulldozed in Danube Delta, news release Oct 30, 2003. [assets.panda.org/downloads/danube\\_delta\\_fact\\_sheet\\_en.pdf](https://assets.panda.org/downloads/danube_delta_fact_sheet_en.pdf)
- Wright, H. E. and Bent, A. M. (1968). Vegetation bands around Dead Man Lake, Chuska Mountain, New Mexico. *American Midland Naturalist*, **79**, 8–30.
- Wright, R. A. (2004). *A Short History of Progress*. Toronto, ON: Anansi Press.
- Wu, Y., Rutchey, K., Wang, N., and Godin, J. (2006). The spatial pattern and dispersion of *Lygodium microphyllum* in the Everglades wetland ecosystem. *Biological Invasions*, **8**, 1483–93.
- Yabe, K. (1993). Wetlands of Hokkaido. In *Biodiversity and Ecology in the Northernmost Japan*, eds. S. Higashi, A. Osawa, and K. Kanagawa, pp. 38–49. Hokkaido, Japan: Hokkaido University Press.
- Yabe, K. and Numata, M. (1984). Ecological studies of the Mobawa–Yatsumi marsh: main physical and chemical factors controlling the marsh ecosystem. *Japanese Journal of Ecology*, **34**, 173–86.
- Yabe, K. and Onimaru, K. (1997). Key variables controlling the vegetation of a cool-temperate mire in northern Japan. *Journal of Vegetation Science*, **8**, 29–36.
- Yang, S. L., Belkin, I. M., Belkina, A. I., Zhao, Q. Y., Zhu, J., and Ding, P. X. (2003). Delta response to decline in sediment supply from the Yangtze River: evidence of the recent four decades and expectations for the next half-century. *Estuarine, Coastal and Shelf Science*, **57**, 689–99.
- Yodzis, P. (1986). Competition, mortality, and community structure. In *Community Ecology*, eds. J. Diamond and T. J. Case, pp. 480–92. New York: Harper and Row.
- Yodzis, P. (1989). *Introduction to Theoretical Ecology*. New York: Harper and Row.
- Yu, Z., McAndrews, J. H., and Siddiqi, D. (1996). Influences of Holocene climate and water levels on

- vegetation dynamics of a lakeside wetland. *Canadian Journal of Botany*, **74**, 1602–15.
- Zagwijn, W. H. (1986). *Geologie van Nederland*, Vol. 1, *Nederland in het Holoceen*. Haarlem, the Netherlands: Staatssuitgeverij, and The Hague: Rijks Geologische Dienst.
- Zalidis, G. C., Mantzavelas, A. L., and Gourvelou, E. (1997). Environmental impacts on Greek wetlands. *Wetlands*, **17**, 339–45.
- Zampella, R. A., Bunnell, J. F., Laidig, K. J., and Procopio, N. A. (2006). Using multiple indicators to evaluate the ecological integrity of a coastal plain stream system. *Ecological Indicators*, **6**, 644–63.
- Zedler, J. B. (1988). Why it's so difficult to replace wetland functions. In *Increasing our Wetland Resources*, eds. J. Zelazny and J. S. Feierabend. Proceedings of a conference in Washington, DC, Oct 4–7, 1987. Reston, VA: National Wildlife Federation–Corporate Conservation Council.
- Zedler, J. B. (1996). Ecological issues in wetland mitigation: an introduction to the forum. *Ecological Applications*, **6**, 33–7.
- Zedler, J. B. and Beare, P. A. (1986). Temporal variability of salt marsh vegetation: the role of low-salinity gaps and environmental stress. In *Estuarine Variability*, ed. D. A. Wolfe, pp. 295–306. San Diego, CA: Academic Press.
- Zedler, J. B. and Kercher, S. (2004). Causes and consequences of invasive plants in wetlands: opportunities, opportunists, and outcomes. *Critical Reviews in Plant Sciences*, **23**, 431–52.
- Zedler, J. B. and Kercher, S. (2005). Wetland resources: status, ecosystem services, degradation, and restorability. *Annual Review of Environment and Resources*, **30**, 39–74.
- Zedler, J. B. and Onuf, C. P. (1984). Biological and physical filtering in arid-region estuaries: seasonality, extreme events, and effects of watershed modification. In *The Estuary as a Filter*, ed. V. S. Kennedy, pp. 415–32. New York: Academic Press.
- Zedler, J. B., Paling, E., and McComb, A. (1990). Differential responses to salinity help explain the replacement of native *Juncus kraussii* by *Typha orientalis* in Western Australian salt marshes. *Australian Journal of Ecology*, **15**, 57–72.
- Zelazny, J. and Feierabend, J. S. (eds.) (1988). *Increasing our Wetland Resources*. Proceedings of a conference in Washington, DC Oct 4–7, 1987. Reston, VA: National Wildlife Federation–Corporate Conservation Council.
- Zhao, S. and Fang, J. (2004). Impact of impoldering and lake restoration on land-cover changes in Dongting Lake area, Central Yangtze. *Amtio*, **33**, 311–15.
- Zhulidov, A. V., Headley, J. V., Roberts, R. D., Nikanorov, A. M., and Ischenko, A. A. (1997). *Atlas of Russian Wetlands*, eds. M. J. Branned, translated by Y. V. Flingefferman and O. V. Zhulidov. Saskatoon, Sask.: Environment Canada, National Hydrology Research Institute.
- Zobel, M. (1988). Autogenic succession in boreal mires: a review. *Folia Geobotanica & Phytotaxonomica*, **23**, 417–45.