

## **Nitrogen From The Air Workshop - Resource Materials included on CD**

### **Journal Articles**

- 1) Nitrogen saturation in temperate forest ecosystems. John Aber; William McDowell; Knute Nadelhoffer; Alison Magill; et al. *Bioscience*; Nov 1998; 48, 11.
- 2) Nitrogen Use in the United States from 1961–2000 and Potential Future Trends. Robert W. Howarth, Elizabeth W. Boyer, Wendy J. Pabich and James N. Galloway. *Ambio* Vol. 31 No. 2, March 2002
- 3) Estimating direct and episodic atmospheric nitrogen deposition to a coastal waterbody. H. Clark, J.N. Kremer. *Marine Environmental Research* 59 (2005) 349–366 (Also available online at [www.sciencedirect.com](http://www.sciencedirect.com))
- 4) The development of policy approaches for reducing nitrogen pollution to coastal waters of the USA, Robert W. Howarth. *Science in China Ser. C Life Sciences* 2005 Vol.48 Supp. 1-16
- 5) Sources of Nutrient Pollution to Coastal Waters in the United States: Implications for Achieving Coastal Water Quality Goals. Robert W. Howarth, Andrew Sharpley, and Dan Walker. *Estuaries* Vol. 25, No. 4b, p. 656–676 August 2002
- 6) Elevated NH<sub>3</sub> and NO<sub>2</sub> air concentrations and nitrogen deposition rates in the vicinity of a highway in Southern Bavaria. Manfred Kirchner, Gert Jakobia, Ernst Feichta., Markus Bernhardt, Anton Fischer. *Atmospheric Environment* 39 (2005) 4531–4542
- 7) Nutrient Management and Seagrass Restoration in Tampa Bay, Florida, USA - by Holly Greening.
- 8) Connecting Atmospheric Nitrogen Deposition to Coastal Eutrophication – Hans W. Paerl. August 1, 2002 / *Environmental Science & Technology* ■ 323 A
- 9) Atmospheric Deposition of Nitrogen: Implications for Nutrient Over-enrichment of Coastal Waters - Hans W. Paerl, Robin L. Dennis, and David R. Whitall. *Estuaries* Vol. 25, No. 4b, p. 677–693 August 2002
- 10) Evaluation of Total Nitrogen Loadings to Tampa Bay Due to Expected Nitrogen Air Emissions Reductions - Technical Report, July 2003. Prepared for the Tampa Bay Estuary Program by Raymond Pribble, Anthony Janicki, and Michele Winowitch, Janicki Environmental, Inc., St. Petersburg, Florida
- 11) Atmospheric Deposition of Nitrogen and Air Toxins to the Tampa Bay Estuary – Final Report, September 2002. Prepared for the Tampa Bay Estuary Program by Dr. Noreen D. Poor, University of South Florida College of Public Health.
- 12) Operationalizing Sustainability: Management and Risk Assessment of Land-Derived Nitrogen Loads to Estuaries. I. Valiela, G. Tomasky, J. Hauxwell, M. L. Cole, J. Cebrián, and K. D. Kroeger. *Ecological Applications*. 10(4), 2000, pp. 1006-1023.

- 13) Nitrogen Loading from Coastal Watersheds to Receiving Estuaries: New Method and Application. I. Valiela, G. Collins, J. Kremer, K. Lajtha, M. Geist, B. Seely, J. Brawley, and C. H. Sham. *Ecological Applications*. 7(2), 1997, pp. 358-380.
- 14) The ecological effects of urbanization of coastal watersheds: historical increases in nitrogen loads and eutrophication of Waquoit Bay estuaries. Jennifer L. Bowen and Ivan Valiela. *Canadian Journal of Fish and Aquatic Sciences*. 58: 1489-1500 (2001).

### **General Reading**

- 15) Cape Cod Sustainability Indicators Report 2003: An Uncertain Future. Cape Cod Sustainability Indicators Council. Produced in coordination with The Cape Cod Center for Sustainability.
- 16) 2006 Sustainability Indicators – Electricity and Emissions.
- 17) Inside Rain: A Look at the National Atmospheric Deposition Program.
- 18) Impacts of Atmospheric Pollution on Aquatic Ecosystems, Issues in Ecology, Number 12, Summer 2004. (*Copy provided in workshop folder*)
- 19) Nitrogen Pollution: From the Sources to the Sea. A Science Links Publication of the Hubbard Brook Research Foundation.
- 20) Nitrogen in the Nations Rain. National Atmospheric Deposition Program.

### **Power Point Presentation**

- 21) Atmospheric Nitrogen Deposition: An increasingly Important Source of “new” Nitrogen Supporting Coastal Eutrophication. H Paerl, D. Whitall and R. Dennis

### **Related Websites**

[http://www.epa.gov/oar/oaqps/gr8water/handbook/airdep\\_sept.pdf](http://www.epa.gov/oar/oaqps/gr8water/handbook/airdep_sept.pdf)  
EPA Handbook for Watershed Managers

[nadp.sws.uiuc.edu/](http://nadp.sws.uiuc.edu/)

National Atmospheric Deposition Network. On this site, you can find maps and publications related to the monitoring of the wet deposition of nitrogen and other compounds.

[www.epa.gov/castnet/](http://www.epa.gov/castnet/)

The website for CASTNET, which is a network to estimate the dry deposition of nitrogen and other compounds.

[www.epa.gov/airmarkets/articles/nitrogen.pdf](http://www.epa.gov/airmarkets/articles/nitrogen.pdf)

This is reader friendly paper about nitrogen effects etc that EPA published a few years ago.

[epa.gov/air/data/index.html](http://epa.gov/air/data/index.html)

[airnow.gov/](http://airnow.gov/)

These websites offer maps and data related to air quality. For example, at the first site, you can get a table of emissions sources of NO<sub>x</sub> in the state of Massachusetts.