US EPA ARCHIVE DOCUMENT

Nitrogen News is a summary of recent publications, news and reports related to the cycling, effects and management of nitrogen. Prepared by Mary O'Brien and Jana Compton. Contact Jana Compton with any questions (Compton.jana@epa.gov)

Please note: Most of these links are available to EPA staff through library access – not all links will be available to folks outside EPA, depending on your access to specific journals and websites.

Issue 9, February 2010

News

Fertilizer development is a "human issue" says Thomas Hager
IFDC Report, 34(3), Fall/Winter 2009. ISSN 0149-3434.
http://www.ifdc.org/PDF_Files/Fall-Winter%202009%20English%20Newsletter.pdf

European Commission: Nitrate pollution falling, but greater efforts still needed to meet water quality standards across the EU
Europa, February 11, 2010.
http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/154&format=HTML&aged=0&language=EN&guiLanguage=en

For *BNA* subscribers (including EPA staff):

Water pollution: Science advisers say EPA nutrient guidance needs improvement to help states, tribes
BNA Daily Environment Report, February 22, 2010.
http://news.bna.com/deln/DELNWB/split_display.adp?fedfid=16329909&vname=dennotallissues&wsn=496707500&searchid=10719789&doctypeid=1&type=date&mode=doc&split=0&scm=DELNWB&pg=0

Chesapeake Bay: Virginia Senate approves bill directing state agency to buy, sell nutrient credits
BNA Daily Environment Report, February 19, 2010.
http://news.bna.com/deln/DELNWB/split_display.adp?fedfid=16329909&vname=dennotallissues&wsn=496707500&searchid=10719789&doctypeid=1&type=date&mode=doc&split=0&scm=DELNWB&pg=0

For *Greenwire* subscribers (including EPA staff):

Water pollution: Industry gives EPA an earful on Florida rules
Greenwire, February 19, 2010.
http://www.eenews.net/Greenwire/2010/02/19/15/

US EPA ARCHIVE DOCUMENT

Science: A heated bog could predict next-century impacts of climate change
ClimateWire, February 8, 2010.
http://www.eenews.net/climatewire/2010/02/08/5/

For *Inside EPA* subscribers (including EPA staff):

Utilities raise concerns over use of invasive species in ammonia criteria
InsideEPA.com Documents, February 26, 2010.
http://insideepa.com/secure/docnum.asp?docnum=epa2010_0317&f=epa_2001.ask

EPA seeks advice on policies to cut climate 'forcers' soot and ozone
Inside EPA, February 26, 2010
http://insideepa.com/secure/docnum.asp?docnum=INSIDEEPA-31-8-16&f=epa_2001.ask

Activists seek EPA backing in push for strict state water quality criteria
Environmental Policy Alert, February 24, 2010
http://insideepa.com/secure/docnum.asp?docnum=POLICYALERT-27-4-20&f=epa_2001.ask

EPA explains NO2 monitor changes
The Inside Story, February 18, 2010
http://insideepa.com/secure/docnum.asp?docnum=2182010_changes&f=epa_2001.ask

EPA delays NO2 NAAQS implementation to establish monitoring network
InsideEPA.com Documents, February 17, 2010
http://insideepa.com/secure/data_extra/dir_10/epa2010_0263.pdf

Industry gears up to fight EPA's nutrient criteria for Florida waters
Risk Policy Report, February 16, 2010
http://insideepa.com/secure/docnum.asp?docnum=RISK-17-7-13&f=epa_2001.ask

Florida counties limit fertilizer use with eye toward strict nutrient criteria
Water Policy Report, February 15, 2010
http://insideepa.com/secure/docnum.asp?docnum=WATER-19-4-26&f=epa_2001.ask

Industry eyes guide for clarification of ammonia criteria implementation
Environmental Policy Alert, February 10, 2010
http://insideepa.com/secure/docnum.asp?docnum=POLICYALERT-27-3-23&f=epa_2001.ask

Special Issues

Hagedorn, F., R. Jandl., and J. Mulder
Mountain soils under a changing climate and land-use
Biogeochemistry, 97(1), January 2010. ISSN 0168-2563.
http://springerlink.metapress.com/content/u54587017287/?p=eb0233943c7a4481a2ae3a84775579f2&pi=1

US EPA ARCHIVE DOCUMENT

Hickey, B. M., R. M. Kudela, J. D. Nash, K. W. Bruland, W. T. Peterson, P. MacCready, E. J. Lessard, D. A. Jay, N. S. Banas, A. M. Baptista, E. P. Dever, P. M. Kosro, L. K. Kilcher, A. R. Horner-Devine, E. D. Zaron, R. M. McCabe, J. O. Peterson, P. M. Orton, J. Pan, and M. C. Lohan.
River influences on shelf ecosystems: Introduction and synthesis
Journal of Geophysical Research-Oceans, 115, 2010. ISSN 0148-0227.
http://dx.doi.org/10.1029/2009JC005452

Articles

Aerts, R.
Nitrogen-dependent recovery of subarctic tundra vegetation after simulation of extreme winter warming damage to Empetrum hermaphroditum
Global Change Biology, 16(3): 1071-1081, 2010. ISSN 1354-1013.
http://dx.doi.org/10.1111/j.1365-2486.2009.01999.x

Arneth, A., S Sitch, A. Bondeau, K. Butterbach-Bahl, P. Foster, N. Gedney, N. de Noblet-Ducoudre, I. C. Prentice, M. Sanderson, K. Thonicke, R. Wania, and S. Zaehle,.
From biota to chemistry and climate: towards a comprehensive description of trace gas exchange between the biosphere and atmosphere
Biogeosciences, 7(1): 121-149, 2010. ISSN 1726-4170.
http://www.biogeosciences.net/7/121/2010/bg-7-121-2010.pdf

Arslan, H., G.Guleryuz, and S. Kirmizi.
Nitrogen mineralisation in the soil of indigenous oak and pine plantation forests in a Mediterranean environment
European Journal of Soil Biology, 46(1): 11-17, 2010. ISSN 1164-5563.
http://dx.doi.org/10.1016/j.ejsobi.2009.08.002

Bai, Y. F., J. G. Wu, C. M. Clark, S. Naeem, Q. M. Pan, J. H. Huang, L. X. Zhang, and X. G. Han.
Tradeoffs and thresholds in the effects of nitrogen addition on biodiversity and ecosystem functioning: evidence from inner Mongolia Grasslands
Global Change Biology, 16(1): 358-372, 2010. ISSN 1354-1013.
http://dx.doi.org/10.1111/j.1365-2486.2009.01950.x

Barlett, M. A. and L. G. Leff.
The effects of N:P ratio and nitrogen form on four major freshwater bacterial taxa in biofilms
Canadian Journal of Microbiology, 56(1): 32-43, 2010. ISSN 0008-4166.
http://dx.doi.org/10.1139/W09-099

Chen, F. S., T. J. Fahey, M. Y. Yu, and L. Gan.
Key nitrogen cycling processes in pine plantations along a short urban-rural gradient in Nanchang, China

US EPA ARCHIVE DOCUMENT

Forest Ecology and Management, 259(3): 477-486, 2010. ISSN 0378-1127.
http://dx.doi.org/10.1016/j.foreco.2009.11.003

Constantin, J., B. Mary, F. Laurent, G. Aubrion, A. Fontaine, P. Kerveillant, and N. Beaudoin.
Effects of catch crops, no till and reduced nitrogen fertilization on nitrogen leaching and balance in three long-term experiments
Agriculture Ecosystems & Environment, 135(4): 268-278, 2010. ISSN 0167-8809.
http://dx.doi.org/10.1016/j.agee.2009.10.005

Corriveau, J., E. van Bochove, M. M. Savard, D. Cluis, and D. Paradis.
Occurrence of high in-stream nitrite levels in a temperate region agricultural watershed
Water Air and Soil Pollution, 206(1-4): 335-347, 2010. ISSN 0049-6979.
http://dx.doi.org/10.1007/s11270-009-0109-6

Deng, Q., G. Zhou, J. Liu, S. Liu, H. Duan, and D. Zhang.
Responses of soil respiration to elevated carbon dioxide and nitrogen addition in young subtropical forest ecosystems in China
Biogeosciences, 7(1): 315-328, 2010. ISSN 1726-4170.
http://www.biogeosciences.net/7/315/2010/bg-7-315-2010.pdf

Dimitriou, E., and E. Moussoulis.
Hydrological and nitrogen distributed catchment modeling to assess the impact of future climate change at Trichonis Lake, western Greece
Hydrogeology Journal, 18(2): 441-454, March 2010. ISSN 1431-2174.
http://dx.doi.org/10.1007/s10040-009-0535-y

Dupre, C., C. J. Stevens, T. Ranke, A. Bleeker, C. Peppler-Lisbach, D. J. G. Gowing, N. B. Dise, E. Dorland, R. Bobbink, and M. Diekmann.
Changes in species richness and composition in European acidic grasslands over the past 70 years: the contribution of cumulative atmospheric nitrogen deposition
Global Change Biology, 16(1): 344-357, 2010. ISSN 1354-1013.
http://dx.doi.org/10.1111/j.1365-2486.2009.01982.x

Frasier, R., S. Ullah, and T. R. Moore.
Nitrous oxide consumption potentials of well-drained forest soils in southern Quebec, Canada
Geomicrobiology Journal, 27(1): 53-60, 2010. ISSN 0149-0451.
http://dx.doi.org/10.1080/01490450903232199

Gautam, S. and M. Z. Iqbal.
Using stable isotopes of nitrogen to study its source and transformation in a heavily farmed watershed
Environmental Earth Sciences, 60(1): 11-20, 2010. ISSN 1866-6280.
http://dx.doi.org/10.1007/s12665-009-0165-7

US EPA ARCHIVE DOCUMENT

Goedhart, C. M., D. E. Pataki, and S. A. Billings.
Seasonal variations in plant nitrogen relations and photosynthesis along a grassland to shrubland gradient in Owens Valley, California
Plant and Soil, 327(1-2): 213-223, 2010.
ISSN 0032-079X.
http://dx.doi.org/10.1007/s11104-009-0048-4

Goldberg, S. D., K. H. Knorr, C. Blodau, G. Lischeid, and G. Gebauer.
Impact of altering the water table height of an acidic fen on N2O and NO fluxes and soil concentrations
Global Change Biology, 16(1): 220-233, 2010. ISSN 1354-1013.
http://dx.doi.org/10.1111/j.1365-2486.2009.02015.x

Gonzalez-Miqueo, L., D. Elustondo, E. Lasheras, R. Bermejo, and J. M. Santamaria.
Spatial trends in heavy metals and nitrogen deposition in Navarra (Northern Spain) based on moss analysis
Journal of Atmospheric Chemistry, 62(1): 59-72, January 2009. ISSN 0167-7764.
http://dx.doi.org/10.1007/s10874-009-9139-0

Heathwaite, A. L.
Multiple stressors on water availability at global to catchment scales: understanding human impact on nutrient cycles to protect water quality and water availability in the long term
Freshwater Biology, 55: 241-257, 2010. ISSN 0046-5070.
http://dx.doi.org/10.1111/j.1365-2427.2009.02368.x

Hietz, P., O. Dunisch, W. Wanek.
Long-term trends in nitrogen isotope composition and nitrogen concentration in Brazilian rainforest trees suggest changes in nitrogen cycle
Environmental Science & Technology, 44(4): 1191-1196, February 15, 2010. ISSN 0013-936X.
http://dx.doi.org/10.1021/es901383g

Hill, B. H., C. M. Elonen, T. M. Jicha, D. W. Bolgrien, and M. F. Moffett.
Sediment microbial enzyme activity as an indicator of nutrient limitation in the great rivers of the Upper Mississippi River basin
Biogeochemistry, 97(2-3): 195-209, 2010. ISSN 0168-2563
http://dx.doi.org/10.1007/s10533-009-9366-0

Hollinger, D. Y., S. V. Ollinger, A. D. Richardson, T. P. Meyers, D. B. Dail, M. E. Martin, N. A. Scott, T. J. Arkebauer, D. D. Baldocchi, K. L. Clark, P. S. Curtis, K. J. Davis, A. R. Desai, D. Dragoni, M. L. Goulden, L. Gu, G. G. Katul, S. G. Pallardy, K. T. Paw, H. P. Schmid, P. C. Stoy, A. E. Suyker, and S. B. Verma.
Albedo estimates for land surface models and support for a new paradigm based on foliage nitrogen concentration
Global Change Biology, 16(2): 696-710, 2010. ISSN 1354-1013.
http://dx.doi.org/10.1111/j.1365-2486.2009.02028.x

US EPA ARCHIVE DOCUMENT

Houlton, B. Z., and C. B. Field.
Nutrient limitations of carbon uptake: From leaves to landscapes in a California rangeland ecosystem
Rangeland Ecology & Management, 63(1): 120-127, 2010. ISSN 1550-7424.
http://dx.doi.org/10.2111/REM-D-09-00098.1

Houser, J. N., and W. B. Richardson.
Nitrogen and phosphorus in the Upper Mississippi River: transport, processing, and effects on the river ecosystem
40th Annual Meeting of the Mississippi-River-Research-Consortium, April 24-25, 2008, Dubuque, IA
Hydrobiologia, 640(1): 71-88, 2010. ISSN 0018-8158.
http://dx.doi.org/10.1007/s10750-009-0067-4

Hvistendahl, Mara.
China's push to add by subtracting fertilizer
Science, 327(5967): 801, February 12, 2010. ISSN 1095-9203.
doi: 10.1126/science.327.5967.801
http://www.sciencemag.org/cgi/content/full/327/5967/801?sa_campaign=Email/sntw/12-February-2010/10.1126/science.327.5967.801

Ishida, T. A., and A. Nordin.
No evidence that nitrogen enrichment affect fungal communities of Vaccinium roots in two contrasting boreal forest types
Soil Biology & Biochemistry, 42(2): 234-243, 2010. ISSN 0038-0717.
http://dx.doi.org/10.1016/j.soilbio.2009.10.021

Jarvie, H. P., P. J. A. Withers, M. J. Bowes, E. J. Palmer-Felgate, D. M. Harper, K. Wasiak, P. Wasiak, R. A. Hodgkinson, A. Bates, C. Stoate, M. Neal, H. D. Wickham, S. A. Harman, and L. K. Armstrong.
Streamwater phosphorus and nitrogen across a gradient in rural-agricultural land use intensity
Agriculture Ecosystems & Environment, 135(4): 238-252, 2010. ISSN 0167-8809.
http://dx.doi.org/10.1016/j.agee.2009.10.002

Jones, M. L. M., G. Hodges, and G. Mills.
Nitrogen mediates above-ground effects of ozone but not below-ground effects in a rhizomatous sedge
Environmental Pollution, 158(2): 559-565, 2010. ISSN 0269-7491.
http://dx.doi.org/10.1016/j.envpol.2009.08.002

Lorz, C., C. Eissner, J. Lethmate, and B. Schneider.
Spatial and temporal small-scale variability of nitrogen mobilization in a forest ecosystem with high N deposition in NW-Germany
Environmental Pollution, 158(2): 424-439, February 2010. ISSN 0269-7491.

US EPA ARCHIVE DOCUMENT

http://dx.doi.org/10.1016/j.envpol.2009.08.031

Ma, B. L., T. Y. Wu, N. Tremblay, W. Deen, M. J. Morrison, N. B. Mclaughlin, E. G. Gregorich, and G. Stewart.
Nitrous oxide fluxes from corn fields: on-farm assessment of the amount and timing of nitrogen fertilizer
Global Change Biology, 16(1): 156-170, 2010. ISSN 1354-1013.
http://dx.doi.org/10.1111/j.1365-2486.2009.01932.x

Maskell, L. C., S. M. Smart, J. M. Bullock, K. Thompson, and C. J. Stevens.
Nitrogen deposition causes widespread loss of species richness in British habitats
Global Change Biology, 16(2): 671-679, 2010. ISSN 1354-1013.
http://dx.doi.org/10.1111/j.1365-2486.2009.02022.x

Massad, R. S., A. Tuzet, B. oubet, A. Perrier, and P. Cellier.
Model of stomatal ammonia compensation point (STAMP) in relation to the plant nitrogen and carbon metabolisms and environmental conditions
Ecological Modelling, 221(3): 479-494, 2010. ISSN 0304-3800.
http://dx.doi.org/10.1016/j.ecolmodel.2009.10.029

Mendes, M. P. and L. Ribeiro.
Nitrate probability mapping in the northern aquifer alluvial system of the river Tagus (Portugal) using Disjunctive Kriging
Science of the Total Environment, 408(5): 1021-1034, February 1, 2010. ISSN 0048-9697.
http://dx.doi.org/10.1016/j.scitotenv.2009.10.069

Mian, I. A., S. Begum, M. Riaz, M. Ridealgh, C. J. McClean, and M. S. Cresser
Spatial and temporal trends in nitrate concentrations in the River Derwent, North Yorkshire, and its need for NVZ status
Science of the Total Environment, 408(4): 702-712, 2010. ISSN 0048-9697.
http://dx.doi.org/10.1016/j.scitotenv.2009.11.020

Minamikawa, K., S. Nishimura, T. Sawamoto, Y. Nakajima, and K. Yagi.
Annual emissions of dissolved CO2, CH4, and N2O in the subsurface drainage from three cropping systems
Global Change Biology, 16(2): 796-809, 2010. ISSN 1354-1013.
http://dx.doi.org/10.1111/j.1365-2486.2009.01931.x

Moisander, Pia H., Roxanne A. Beinart, Ian Hewson, Angelicque E. White, Kenneth S. Johnson, Craig A. Carlson, Joseph P. Montoya, Jonathan P. Zehr.
Unicellular cyanobacterial distributions broaden the oceanic N2 fixation domain
Science Express, published online February 25, 2010. ISSN 1095-9203.
doi: 10.1126/science.1185468
http://www.sciencemag.org/cgi/content/abstract/science.1185468

Nangia, V., P. H. Gowda, D. J. Mulla, and G. R. Sands.

US EPA ARCHIVE DOCUMENT

Modeling impacts of tile drain spacing and depth on nitrate-nitrogen losses
Vadose Zone Journal, 9(1): 61-72, 2010. ISSN 1539-1663.
http://dx.doi.org/10.2136/vzj2008.0158

Naples, B. K., and M. C. Fisk.
Belowground insights into nutrient limitation in northern hardwood forests
Biogeochemistry, 97(2-3): 109-121, 2010. ISSN 0168-2563.
http://dx.doi.org/10.1007/s10533-009-9354-4

Olsen, H. B., K. Berthelsen, H. V. Andersen, and U. Sochting.
Xanthoria parietina as a monitor of ground-level ambient ammonia concentrations
Environmental Pollution, 158(2): 455-461, 2010. ISSN 0269-7491.
http://dx.doi.org/10.1016/j.envpol.2009.08.025

Palmer, K., H. L. Drake, H. L., and M. A. Horn.
Association of novel and highly diverse acid-tolerant denitrifiers with N2O fluxes of an acidic fen
Applied and Environmental Microbiology, 76(4): 1125-1134, 2010. ISSN 0099-2240.
http://dx.doi.org/10.1128/AEM.02256-09

Palviainen, M., L. Finer, R. Laiho, E. Shorohova, E. Kapitsa, and I. Vanha-Majamaa.
Carbon and nitrogen release from decomposing Scots pine, Norway spruce and silver birch stumps
Forest Ecology and Management, 259(3): 390-398, 2010, ISSN 0378-1127.
http://dx.doi.org/10.1016/j.foreco.2009.10.034

Park, J. H., L. Duan, B. Kim, M. J. Mitchell, and H. Shibata.
Potential effects of climate change and variability on watershed biogeochemical processes and water quality in Northeast Asia
Environment International, 36(2): 212-225, February 2010. ISSN 0160-4120.
http://dx.doi.org/10.1016/j.envint.2009.10.008

Pinzer, B. R., M. Kerbrat, T. Huthwelker, H. W. Gaggeler, M. Schneebeli, and M. Ammann.
Diffusion of NOx and HONO in snow: A laboratory study
Journal of Geophysical Research-Atmospheres, 115: D03304, February 13, 2010.
http://dx.doi.org/10.1029/2009JD012459

Ros, Gerard H., Clement Tschudy, Wim J. Chardon, Erwin J. M. Temminghoff, Caroline van der Salm, Gerwin F. Koopmans.
Speciation of water-extractable organic nutrients in grassland soils
Soil Science, 175(1): 15-26, January 2010. ISSN 1538-9243.
doi: 10.1097/SS.0b013e3181c8ef3c
http://journals.lww.com/soilsci/Abstract/2010/01000/Speciation_of_Water_Extractable_Organic_Nutrients.4.aspx

Rothwell, J. J., N. B. Dise, K. G. Taylor, T. E. H. Allott, P. Scholefield, H. Davies, and C. Neal.

US EPA ARCHIVE DOCUMENT

A spatial and seasonal assessment of river water chemistry across North West England
Science of the Total Environment, 408(4): 841-855, 2010. ISSN 0048-9697.
http://dx.doi.org/10.1016/j.scitotenv.2009.10.041

Schmidt, S., K. Mackintosh, R. Gillett, A. Pudmenzky, D. E. Allen, H. Rennenberg, and J. F. Mueller.
Atmospheric concentrations of ammonia and nitrogen dioxide at a tropical coral cay with high seabird density
Journal of Environmental Monitoring, 12(2): 460-465, 2010. ISSN 1464-0325.
http://dx.doi.org/10.1039/b910922f

Smith, J., C. Wagner-Riddle, and K. Dunfield.
Season and management related changes in the diversity of nitrifying and denitrifying bacteria over winter and spring
Applied Soil Ecology, 44(2): 138-146, February 2010. ISSN 0929-1393.
http://dx.doi.org/10.1016/j.apsoil.2009.11.004

Townsend, Alan R., and Robert W. Howarth.
Fixing the global nitrogen problem
Scientific American, 302(2): 64-71, February 2010. ISSN: 0036-8733.
doi:10.1038/scientificamerican0210-64
http://www.nature.com/scientificamerican/journal/v302/n2/full/scientificamerican0210-64.html

Verity, P. G.
Expansion of potentially harmful algal taxa in a Georgia Estuary (USA)
Harmful Algae, 9(2): 144-152, 2010. ISSN 1568-9883.
http://dx.doi.org/10.1016/j.hal.2009.08.009

Vikman, A., S. Sarkkola, H. Koivusalo, T. Sallantaus, J. Laine, N. Silvan, H. Nousiainen, and M. Nieminen.
Nitrogen retention by peatland buffer areas at six forested catchments in southern and central Finland
Hydrobiologia, 641(1): 171-183, 2010. ISSN 0018-8158.
http://dx.doi.org/10.1007/s10750-009-0079-0

Walker, John T., Craig A. Stow, and Chris Geron.
Nitrous oxide emissions from the Gulf of Mexico hypoxic zone
Environmental Science & Technology, 44(5): 1617–1623, February 4, 2010. ISSN 1520-5851.
doi: 10.1021/es902058t
http://pubs.acs.org/doi/full/10.1021/es902058t

Weand, M. P., M. A. Arthur, G. M. Lovett, F. Sikora, and K. C. Weathers.
The phosphorus status of northern hardwoods differs by species but is unaffected by nitrogen fertilization
Biogeochemistry, 97(2-3): 159-181, 2010. ISSN 0168-2563.
http://dx.doi.org/10.1007/s10533-009-9364-2

US EPA ARCHIVE DOCUMENT

US EPA ARCHIVE DOCUMENT

Yao, Z. S., Z. X. Zhou, X H. Zheng, B. H. Xie, B. L. Mei, R. Wang, K. Butterbach-Bahl, and J. G. Zhu.
Effects of organic matter incorporation on nitrous oxide emissions from rice-wheat rotation ecosystems in China
Plant and Soil, 327(1-2): 315-330, 2010. ISSN 0032-079X.
http://dx.doi.org/10.1007/s11104-009-0056-4

Zaehle, S., and A. D. Friend.
Carbon and nitrogen cycle dynamics in the O-CN land surface model: 1. Model description, site-scale evaluation, and sensitivity to parameter estimates
Global Biogeochemical Cycles, 24: GB1005, February 11, 2010. ISSN 0886-6236.
http://dx.doi.org/10.1029/2009GB003521

Zaehle, S., A. D. Friend, P. Friedlingstein, F. Dentener, P. Peylin, and Schulz, M.
Carbon and nitrogen cycle dynamics in the O-CN land surface model: 2. Role of the nitrogen cycle in the historical terrestrial carbon balance
Global Biogeochemical Cycles, 24: GB1006, February 11, 2010. ISSN 0886-6236.
http://dx.doi.org/10.1029/2009GB003522

Zhong, J. C., C. X. Fan, L. Zhang, E. Hall, S. M. Ding, B. Li, G. F. Liu.
Significance of dredging on sediment denitrification in Meiliang Bay, China: A year long simulation study
Journal of Environmental Sciences-China, 22(1): 68-75, 2010. ISSN 1001-0742.
http://dx.doi.org/10.1016/S1001-0742(09)60076-0

Zhu, W., L. Wan, and L. F. Zhao.
Effect of nutrient level on phytoplankton community structure in different water bodies
Journal of Environmental Sciences-China, 22(1): 32-39, 2010. ISSN 1001-0742.
http://dx.doi.org/10.1016/S1001-0742(09)60071-1

Zou, J. W., Y. Y. Lu, and Y. Huang.
Estimates of synthetic fertilizer N-induced direct nitrous oxide emission from Chinese croplands during 1980-2000
Environmental Pollution, 158(2): 631-635, 2010. ISSN 0269-7491.
http://dx.doi.org/10.1016/j.envpol.2009.08.026

Books

Sinclair, Thomas R., and Carol Janas Sinclair.
Bread, beer and the seeds of change: agriculture's impact on world history
Wallingford, UK: CABI, September 2010. ISBN 9781845937041 (pbk.) 9781845937058 (hbk.)
http://bookshop.cabi.org/default.aspx?site=191&page=2633&pid=2223

Web Pages

River influences on shelf ecosystems
http://www.ocean.washington.edu/rise/
RISE is a 5-year interdisciplinary study of the Columbia River plume, funded by the Coastal Ocean Program of the National Science Foundation.

REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT
On implementation of Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources based on Member State reports for the period 2004-2007
http://ec.europa.eu/environment/water/water-nitrates/pdf/com_2010_47.pdf
Source: European Commission

US EPA ARCHIVE DOCUMENT