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List of Publications by Gertrud K. Nürnberg

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Tammeorg O, Nürnberg GK, Nõges P, Niemistö J. 2022. The role of humic substances in sediment phosphorus release in northern lakes. Science of The Total Environment. 833:155257. https://doi.org/10.1016/j.scitotenv.2022.155257

Tammeorg O, Nürnberg G, Tõnno I, Kisand A, Tuvikene L, Nõges T, Nõges P. 2022. Sediment phosphorus mobility in Võrtsjärv, a large shallow lake: Insights from phosphorus sorption experiments and long-term monitoring. Science of The Total Environment. 154572. https://doi.org/10.1016/j.scitotenv.2022.154572

Tammeorg O, Nürnberg G, Horppila J, Haldna M, Niemistö J, 2020. Redox-related release of phosphorus from sediments in large and shallow Lake Peipsi: Evidence from sediment studies and long-term monitoring data. Journal of Great Lakes Research 46(6): 1595-1603 DOI:10.1016/j.jglr.2020.08.023

Tammeorg O, Nürnberg G, Niemistö J, Haldna M, Horppila J. 2020. Internal phosphorus loading due to sediment anoxia in shallow areas: implications for lake aeration treatments. Aquatic Sciences. 82: 000-000. DOI 10.1007/s00027-020-00724-0

Nürnberg GK. 2020. Internal phosphorus loading models: A critical review. Chapter 3 in: A.D. Steinman and B.M. Spears (Eds.), Internal Phosphorus Loading: Causes, case studies, and management. Plantation, FL: J. Ross Publishing. p. 45-62.

Nürnberg GK. 2020. Observed and modelled internal phosphorus loads in stratified and polymictic basins of a mesotrophic lake. Chapter 6 in: A.D. Steinman and B.M. Spears (Eds.), Internal Phosphorus Loading: Causes, case studies, and management. Plantation, FL: J. Ross Publishing. p. 111-123.

Nürnberg GK. 2019/2020. Hypolimnetic withdrawal as a lake restoration technique: Determination of feasibility and continued benefits. Hydrobiologia 847(21): 4487-4501. DOI 10.1007/s10750-019-04094-z

Nürnberg GK. 2019. Quantification of Anoxia and Hypoxia in Water Bodies (2). In: Water Encyclopedia. John Wiley & Sons, Inc. DOI 10.1002/9781119300762.wsts0081.

Nürnberg GK, Howell T, Palmer M. 2019. Long-term impact of Central Basin hypoxia and internal phosphorus loading on north shore water quality in Lake Erie. Inland Waters 9: 362-373. DOI:10.1080/20442041.2019.1568072.

Nürnberg, G.K., Fischer R, Paterson A.M. 2018. Reduced phosphorus retention by anoxic bottom sediments after the remediation of an industrial acidified lake area: Indications from P, Al, and Fe sediment fractions. Science of the Total Environment 626: 412–422. DOI: 10.1016/j.scitotenv.2018.01.103

Nürnberg, G.K. 2017. Attempted management of cyanobacteria by Phoslock (lanthanum-modified clay) in Canadian lakes, water quality results and predictions. Lake and Reservoir Management 33, 163-170. DOI 10.1080/10402381.2016.1265618

Nürnberg, G.K., LaZerte, B.D. 2016. Trophic state decrease after lanthanum-modified bentonite (Phoslock) application to a hyper-eutrophic polymictic urban lake frequented by Canada geese (*Branta canadensis*). Lake and Reservoir Management 32, 74-88. DOI: 10.1080/10402381.2015.1133739

Nürnberg, G.K., LaZerte, B.D. 2016. More than 20 years of estimated internal phosphorus loading in polymictic, eutrophic Lake Winnipeg, Manitoba. J. Great Lakes Res. 42, 18-27. DOI:10.1016/j.jglr.2015.11.003

Spears, B.M., Mackay, E.B., Yasseri, S., Gunn, I.D.M., Waters, K.E., Andrews, C., Cole, S., de Ville, M., Kelly, A., Meis, S., Moore, A.L., Nürnberg, G.K., van Oosterhout, F., Pitt, J.-A., Madgwick, G., Woods, H.J., Lürling, M. 2016. A meta-analysis of water quality and aquatic macrophyte responses in 18 lakes treated with lanthanum modified bentonite (PHOSLOCK®). Water Research. DOI: 10.1016/j.watres.2015.08.020

Nürnberg, G.K., Molot, L.A., O'Connor, E., Jarjanazi, H., Winter, J.G., Young, J.D., 2013. Evidence for internal phosphorus loading, hypoxia and effects on phytoplankton in partially polymictic Lake Simcoe, Ontario. J Great Lakes Res 39, 259–270.

Nürnberg, G.K., LaZerte, B.D., Loh, P.S., Molot, L.A., 2013. Quantification of internal phosphorus load in large, partially polymictic and mesotrophic Lake Simcoe, Ontario. J Great Lakes Res 39, 271–279.

Loh, P.S., Molot, L.A., Nürnberg, G.K., Watson, S.B., Ginn, B., 2013. Evaluating relationships between sediment chemistry and anoxic phosphorus and iron release across three different water bodies. Inland Waters 3, 105-117.

Nürnberg, G.K., Tarvainen, M., Ventelä, A.-M., Sarvala, J., 2012. Internal phosphorus load estimation during biomanipulation in a large polymictic and mesotrophic lake. Inland Waters 2, 147-162.

Labrecque V, Nürnberg G.K., Tremblay R, Pienitz R. 2012. Caractérisation de la charge interne de phosphore du lac Nairne, Charlevoix, Québec (*in French*. Internal phosphorus load assessment of Lake Nairne, Charlevoix, Quebec). Revue des Sciences de l'Eau: 25, 77-93.

Nürnberg, G.K. 2009. Assessing internal phosphorus load – problems to be solved. Lake and Reservoir Management 25(4): 419-432.

Conley, D. J., S. Björck, E. Bonsdorff, J. Carstensen, G. Destouni, B. G. Gustafsson, S. Hietanen, M. Kortekaas, H. Kuosa, H. E. M. Meier, B. Müller-Karulis, K. Nordberg, A. Norkko, G. Nürnberg, H. Pitkänen, N. N. Rabalais, R. Rosenberg, O. P. Savchuk, C. P. Slomp, M. Voss, F. Wulff and L. Zillén. 2009. Critical Review: Hypoxia-related processes in the Baltic Sea. Environmental Science & Technology 43: 3412-3420.

Cyr, H., S. K. McCabe and G. K. Nürnberg. 2009. Phosphorus sorption experiments and the potential for internal phosphorus loading in littoral areas of a stratified lake. Water Research 43:1654-1666.

Nürnberg, G.K. 2007. Low-Nitrate-Days (LND), a potential indicator of cyanobacteria blooms in a eutrophic hardwater reservoir. Water Quality Research Journal of Canada 42(4): 269-283.

Nürnberg, G.K. 2007. Lake responses to long-term hypolimnetic withdrawal treatments. Lake and Reservoir Management 23(4): 388-409.

Nürnberg, G.K. 2007. Internal phosphorus loading in Ontario Cottage Country *or* "the devil is in the sediments". Canadian Society of Environmental Biologists, Newsletter 64(4), 11-12.

Nürnberg, G.K. 2005. Quantification of internal phosphorus loading in polymictic lakes. Verhandlungen Internationalen Vereinigung Limnologie (SIL) 29: 623-626.

Cyr, H. and G.K. Nürnberg. 2005. Methodological biases in phosphate sorption experiments. p. 55-66 *in* L. Serrano and H.L. Golterman (editors), Phosphates in Sediments, Proceedings of the 4th International Symposium. Backhuys Publishers, the Netherlands.

Nürnberg, G.K. 2005. Quantification of anoxia and hypoxia in water bodies. OC 128 *in* J. H. Lehr (editor), The Encyclopedia of Water, John Wiley & Sons, Inc.

Havens K. E. and G. K. Nürnberg. 2004. The phosphorus-chlorophyll relationship in lakes: potential influences of color and mixing regime. Lake and Reservoir Management 20: 188-196.

Nürnberg, G.K. 2004. Quantified hypoxia and anoxia in lakes and reservoirs. TheScientificWorldJOURNAL 4, 42-54.

Nürnberg, G.K. and B.D. LaZerte. 2004. Modeling the effect of development on internal phosphorus load in nutrient-poor lakes. Water Resources Research 40(1): 1-9.

Nürnberg, G.K. and B.D. LaZerte. 2003/4. Ontario lakes: The importance of lake management. *NALMS* LakeLine 23(4): 32-37.

Nürnberg, G.K., B.D. LaZerte and D.D. Olding. 2003. An artificially induced Planktothrix rubescens surface bloom in a small kettle lake in southern Ontario compared to blooms world-wide. Lake and Reservoir Management 19: 307-322.

Nürnberg, G. K. 2002. Quantification of oxygen depletion in lakes and reservoirs with the hypoxic factor. Lake and Reservoir Management 18**:** 298-305.

Nürnberg, G.K. 2002. Probability of winterkill in Central Ontario lakes. Newsletter of the American Fisheries Society Southern Ontario Chapter, Sep 2002: 2-3.

Nürnberg, G. K. and B. D. LaZerte. 2001. Predicting lake water quality. *In*: Managing lakes and reservoirs. C. Holdren, W. Jones and J. Taggart. Madison, WI, North American Lake Management Society, Terrene Institute in cooperation with Office Water Assessment Watershed Protection Division U.S.-EPA, p. 139-163.

Nürnberg, G.K. 2001. Eutrophication and Trophic State - Why does lake water (quality) differ from lake to lake? *NALMS* LakeLine 21 (1): 29-33.

Nürnberg, G.K. 1999. Determining trophic state in experimental lakes (Comment to Carpenter et al. 1998) Limnology and Oceanography 44: 1176-1179.

Nürnberg, G.K. and M. Shaw. 1999. Productivity of clear and humic lakes: nutrients, phytoplankton, bacteria. Hydrobiologia 382: 97-112.

Nürnberg, G.K. 1998. Prediction of annual and seasonal phosphorus concentrations in stratified and polymictic lakes. Limnology and Oceanography 43: 1544-1552.

Nürnberg, G.K. 1997. Coping with water quality problems due to hypolimnetic anoxia in Central Ontario Lakes. Water Quality Research Journal of Canada 32: 391-405.

Nürnberg, G.K. 1996. Trophic state of clear and colored, soft- and hardwater lakes with special consideration of nutrients, anoxia, phytoplankton and fish. Lake and Reservoir Management 12: 432-447.

Nürnberg, G.K. 1996. Comment: Phosphorus budgets and stoichiometry during the open-water season in two unmanipulated lakes in the Experimental Lakes Area, northwestern Ontario. Canadian J. Fisheries Aquatic Science 53: 1469-1471.

Nürnberg, G.K. 1995. Quantifying anoxia in lakes. Limnology and Oceanography 40: 1100-1111.

Nürnberg, G.K. 1995. Anoxic factor, a quantitative measure of anoxia and fish species richness in Central Ontario lakes. Transactions of the American Fisheries Society 124: 677-686.

Nürnberg, G.K. 1994. Phosphorus release from anoxic sediments: What we know and how we can deal with it. Limnetica 10: 1-4.

Nürnberg, G.K. and P. J. Dillon. 1993. Iron budgets in temperate lakes. Canadian J. Fisheries Aquatic Science 50: 1728-1737.

Nürnberg, G.K. 1991. Phosphorus from internal sources in the Laurentian Great Lakes, and the concept of threshold external load. J. Great Lakes Research 17: 132-140.

Nürnberg, G.K. and P. G. Manning. 1991. Upwards migration of iron and phosphorus compounds in anoxic sediments from a mesotrophic lake on the Precambrian Shield. Ontario Ministry of the Environment, PIBS 1756. 24 p.

Nürnberg, G.K. 1988. Prediction of phosphorus release rates from total and reductant-soluble phosphorus in anoxic lake sediments. Canadian J. Fisheries Aquatic Science 45: 453-462.

Nürnberg, G.K. 1988. A simple model for predicting the date of fall turnover in thermally stratified lakes. Limnology and Oceanography 33: 1190-1195.

Nürnberg, G.K. 1987. A comparison of internal phosphorus loads in lakes with anoxic hypolimnia: laboratory incubations versus hypolimnetic phosphorus accumulation. Limnology and Oceanography 32: 1160-1164.

Nürnberg, G.K. 1987. Hypolimnetic withdrawal as a lake restoration technique. American Society of Civil Engineers, J. Environmental Engineering Division 113: 1006-1017.

Nürnberg, G.K., R. Hartley, and E. Davis. 1987. Hypolimnetic withdrawal in two North American lakes with anoxic phosphorus release from the sediment. Water Research 21: 923-928.

Nürnberg, G.K., M. Shaw, P. J. Dillon, and D. J. McQueen. 1986. Internal phosphorus load in an oligotrophic Precambrian Shield lake with an anoxic hypolimnion. Canadian J. Fisheries Aquatic Science 43: 574-580.

Nürnberg, G.K. 1985. Availability of phosphorus upwelling from iron-rich anoxic hypolimnia. Archive Hydrobiologia 104: 459-476.

Nürnberg, G.K. 1984. The prediction of internal phosphorus load in lakes with anoxic hypolimnia. Limnology and Oceanography 29: 111-124.

Nürnberg, G.K. 1984. Iron and hydrogen sulfide interference in the analysis of SRP in anoxic waters. Water Research 18: 369-377.

Nürnberg, G.K. and R. H. Peters. 1984. Biological availability of soluble reactive phosphorus in anoxic and oxic freshwaters. Canadian J. Fisheries Aquatic Science 41: 757-765.

Nürnberg, G.K. and R. H. Peters. 1984. The importance of internal phosphorus load to the eutrophication of lakes with anoxic hypolimnia. Verhandlungen Internationalen Vereinigung Limnologie (SIL) 22: 190-194.