

Scientific publications on both phosphorus and nitrogen in the environment

The following list is a record of publications up to 2006 on freshwater eutrophication and related issues by members of the Department of Agriculture and Rural Development.

Smith, R.V. (1973). Freshwater pollution in Northern Ireland: evaluation and significance of the agricultural contribution. *Journal of the Northern Ireland Institute of Agricultural Science* **1972/73** : 6-12.

Wood, R.B. & Gibson, C.E. (1973). Eutrophication and Lough Neagh. *Water Research*, **7**: 173-187.

Alexander, G.C. & Stevens, R.J. (1976). Per capita phosphorus loading from domestic sewage. *Water Research*, **10**: 757-764.

Gibson, C.E. (1976). An investigation into the effects of forestry plantations on the water quality of upland reservoirs in Northern Ireland. *Water Research*, **10**:995-998.

Parr, M.P. & Smith, R.V. (1976). The identification of phosphorus as a growth limiting nutrient in Lough Neagh using bioassays. *Water Research*, **10**: 1151-1154.

Smith, R.V. (1976). Nutrient budget of the River Main, Co Antrim. In: *Agriculture and Water Quality*, (Eds. W. Dermott, and J.R.Gasser.), HMSO, London. pp: 315-339.

McAllister, J.S.V., Stevens, R.J., Alexander, G.C. & Sutton, G.K. (1977). Chemical composition of stream waters in Counties Antrim and Armagh. *Record of Agricultural Research*, **25**: 1-7.

Smith, R.V. (1977). Domestic and agricultural contributions to the inputs of phosphorus and nitrogen to Lough Neagh. *Water Research*, **11**: 453-459.

Smith, R.V. & Stewart, D.A. (1977). Statistical models of river loading of nitrogen and phosphorus in the Lough Neagh system. *Water Research*, **11**: 631-636.

Stevens, R.J. & Smith, R.V. (1978). A comparison of discrete and intensive sampling for measuring the loads of nitrogen and phosphorus in the River Main. *Water Research*, **12**: 823-830.

Smith, R.V. (1979). Sources of phosphorus in the Lough Neagh system and their reduction. *Progress in Water Technology*, **11**: 209-217.

McAllister, J.S.V & Stevens, R.J. (1980). Problems related to phosphorus in the disposal of slurry. *Proceedings of EEC Seminar jointly organised by the CEC and Institute for Soil Fertility, Haren (Gr.)*. Groningen, Netherlands June 12-13 1980 pp 383-393.

Stevens, R.J. (1980). The different forms of phosphorus in freshwater. *Analytical Proceedings*, **17**(9): 375-376.

Smith, R.V., Stevens, R.J., Foy, R.H. & Gibson, C.E. (1981). Upward trend in nitrate concentrations in rivers discharging into Lough Neagh for the period 1969-1979. *Water Research*, **15**:183-188.

- Stevens, R.J. & Stewart, D.A. (1981). The effect of sampling interval and method of calculation on the accuracy of estimated phosphorus and nitrogen loads in drainage water from two different-sized catchment areas. *Record of Agricultural Research*, **29**: 29-38.
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- Gibson, C.E. & Fitzsimons, A.G. (1982). Periodicity and morphology of planktonic blue-green algae in an unstratified lake (Lough Neagh, N.I.). *International Revue der gesamten Hydrobiologie*, **67**: 459-476.
- Stevens, R.J. & Stewart, B.M. (1982). Concentration, fractionation and characterisation of soluble organic phosphorus in river water entering Lough Neagh. *Water Research*, **16**: 1507-1519.
- Stevens, R.J. & Stewart, B.M. (1982). Some components of particulate phosphorus in river water entering Lough Neagh. *Water Research*, **16**: 1591-1596.
- Jordan, C. (1983). The precipitation chemistry of a rural site in Co. Antrim, Northern Ireland. *Record of Agricultural Research*, **31**: 89-98.
- Smith, R.V. (1984). Nitrate loading to Lough Neagh. *Journal of the Science of Food and Agriculture*, **35**: 853-854.
- Foy, R.H. (1985). Phosphorus inactivation in a eutrophic lake by the direct addition of ferric aluminum sulphate: impact on iron and phosphorus. *Freshwater Biology*, **15**: 597-604.
- Jordan, C. & Dinsmore, P. (1985). Determination of biologically available phosphorus using a radiobioassay technique. *Freshwater Biology*, **15**: 597-603.
- Jordan, C. & Smith, R.V. (1985). Factors affecting leaching of nutrients from an intensively managed grassland in County Antrim, Northern Ireland. *Journal of Environmental Management*, **20**(1): 1-15.
- Kennedy, G. J. A. (1985). River pollution - How much does it cost fisheries? *DARD Advisers and Lecturers Conference, Loughry College of Agriculture and Food Technology*, 14 pp.
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