

Pål Brettum

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Research interest

Freshwater phytoplankton. Taxonomy and analysis. Water quality assessment.

Current research

Analysis and calculation on composition and biomass of freshwater phytoplankton.

Assessment of water quality. Impact of physical factors on phytoplankton. Phytoplankton and primary production. Impact of acid rain on the biomasses and composition of phytoplankton.

Analysis on marine phytoplankton.

Publications

Brettum, P. 1970. Desmidiaceer i Øvre Heimdalsvatn (English summary). - *Blyttia* 28 (3): 177-183.

Brettum P. 1971. Fordeling og biomasse av *Isoëtes lacusteris* og *Scorpidium scorpioides* i Øvre Heimdalsvatn, et høyfjellsvatn i Sør-Norge. - *Blyttia* 29 (1): 1-11.

Brettum, P. 1972. Alger fra noen innsjøer i Nordmarka ved Oslo (English summary). - *Blyttia* 30 (4): 187-197.

Brettum, P. 1972. The Phytoplankton of Lake Øvre Heimdalsvatn, Central South Norway, 1969-70.- *Norw.J.Bot.* 19 (2): 79-90.

Brettum, P. 1974. The relation between the new colonization and drift of periphytic diatoms in a small stream in Oslo, Norway. - *Norw.J.Bot.* 21: 277-284.

Brettum, P. and Lillevold, L. 1974. Planteplankton i Mjøsa - biomasse og produksjon. - *Forskningsnytt* 19 (8): 44-48.

Brettum, P. 1994. Acidification of the humic Lake Skjervatjern: Effects on the volume and species composition of phytoplankton. - *Environ.Int.* 20 (3): 313-319.

- Brettum, P. 1996. Changes in the volume and composition of phytoplankton after experimental acidification of a humic lake. - *Environ.Int.* 22 (5): 619-628.
- Brettum, P. and Andersen, T. 2005. The use of phytoplankton as indicators of water quality. NIVA- Report SNO 4818-2004: 197 pp.
- Ptacnik, R., Solimini, A.G. and Brettum, P. Performance of a new phytoplankton composition metric along a eutrophication gradient in Nordic lakes. – *Hydrobiologia* 2009.
- Ptacnik, R., Solimini, A.G., Andersen, T., Tamminen, T., Brettum, P., Lepistö, L. and Willén, E. and Rekolainen, S. 2008 a. Diversity predicts stability and resource use efficiency in natural Phytoplankton communities. *Proceedings of the National Academy of Sciences of the USA* 105: 5134-5138.
- Ptacnik, R., Lepistö, L., Willén, E., Brettum, P., Andersen, P., Rekolainen, S. and Lyche Solheim, A. 2008 b. Quantitative responses of lake phytoplankton to eutrophication in Northern Europe. *Aquatic Ecology* 42: 227-236.
- Ptacnik, R., Andersen, T., Brettum, P., Lepistö, L. and Willén, E. 2010. Regional species pools control community saturation in lake phytoplankton. – *Biological Sciences – Ecology* (in press).
- Raddum, G.G., Brettum, P., Matzow, D., Nilssen, J.P., Skov, A., Sveaelv, T. and Wright, R.F. 1986. Liming the acid Lake Hovvatn, Norway: A whole-ecosystem study. - *Water, Air and Soil Poll.* 31(3-4): 721-763.
- Rørslett, B. and Brettum, P. 1989. The genus *Isoëtes* in Scandinavia: An ecological review and perspectives. - *Aquatic botany* 35: 223-261.
- Tangen, K. and Brettum, P. 1978. Phytoplankton and pelagic primary productivity in Øvre Heimdalsvatn. - *Holarctic.Ecol.* 1 (2-3): 128-147.
- Tangen, K., Müller, C. and Brettum, P. 1978. Periphytic and drifting microalgae in a tributary stream of Øvre Heimdalsvatn. - *Holarctic.Ecol.* 1 (2-3): 148-154.
- Tangen, K., Haworth, E. Y., Brettum, P. and Müller, C. 1978. An annotated check-list of microalgae from Øvre Heimdalsvatn and its tributaries. - *Holarctic.Ecol.* 1 (2-3): 155-161.