





## DEPLOYMENT OF ENEX ENCLOSURES IN HIGH-MOUNTAIN LAKE REDON (SPAIN)

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### Study Description

The ENEX experiment in Lake Redon (Pyrenees) investigated the relationship between the changes in plankton stoichiometry, productivity, and community structure occurring during nutrient fluctuations in P-limited conditions. Columnar enclosures were used for treatments varying P availability, N:P imbalance, and N source. C:N:P seston ratios were stable in P-limited conditions, with loose coupling with productivity, nutrient supply ratios, and species dominance. The stoichiometric ratios shifted to Redfield proportions in P-repleted conditions. The results suggest a complex regulation of P scarcity in planktonic communities that goes beyond immediate acclimation growth responses and might include alternative physiological and biogeochemical states.

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Photo 1: Ultraoligotrophic Lake Redon (Central Pyrenees Mountains, Spain) with the ENEX experimental enclosures deployed in the central part. Limnological research in this high-mountain lake (2232 m above sea level) has been ongoing for more than 30 years. Photo credit: Pau Giménez-Grau.

This photograph illustrates the article “Homeostasis and non-linear shift in the stoichiometry of P-limited planktonic communities” by Pau Giménez-Grau, Marisol Felip Aitziber Zufiaurre, Sergi Pla-Rabès, Lluís Camarero, and Jordi Catalan published in *Ecosphere*. <https://doi.org/10.1002/ecs2.3249>.