

# **Biotic feedbacks in Lake phosphorus cycles**

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## **Abstract**

Limnologists are now reconsidering the role of the biota in the phosphorus (P) cycles of lakes. Changes in lake communities can have significant consequences for ecosystem P cycles. At seasonal timescales, the relative importance of nitrogen (N) and P as limiting factors for primary production depends in part on zooplankton species composition. Phosphorus storage and recycling by fish and zooplankton can be large components of P budgets, and mobile consumers can be important vectors in P transport. Stability, resilience and resistance of lake P cycles may depend heavily on fluxes to and from upper trophic levels.