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## **Chlorophyll budgets: response to food web manipulation**

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**Abstract.** Budgets for chlorophyll *a* and selected degradation products were constructed during summer stratification in 1984 and 1985 in two lakes. In Paul Lake, the reference ecosystem, pigment sedimentation showed no significant interannual differences. In Tuesday Lake, fish manipulations in May 1985 changed the zooplankton from an assemblage of *Bosmina* and small cyclopoids to one of large cladoceran grazers. Sedimentation of pigments, especially the grazing indicator pheophorbide *a*, increased significantly as the grazer assemblage changed. Mean grazer size was positively related to pheophorbide deposition rate in both lakes. Results of this whole-lake experiment indicate that major changes in lake food webs alter pigment deposition rates.