Fisheries and limnology in the cradle of biomanipulation: Brief outline of long-term ecological research into water reservoirs in the Czech Republic

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Long term ecological research is one of the most reliable ways to monitor the changes of our ecosystems. Institute of Hydrobiology specializes at lakes and reservoirs in the Czech Republic. Two reservoirs, Slapy and Římov had been monitored systematically in three weeks intervals since their building in 1958 and 1979 respectively. These reference localities serve also for developing many new study approaches. Numerous changes of physical (temperature, discharge, transparency), chemical (nutrients, dissolved organic matter) and biotic (chlorophyll, algal composition, zooplankton structure) had been recorded. Fish communities underwent the successions typical for early stages of reservoir formation and stabilized in cyprinid-dominated system with limited fluctuations. Very strong flooding events in the new millennium seem to have very little real influence the stabilized fish assemblage. Under stabilized conditions, the quantity of fish seem to be influenced mainly by the nutrient input and the management measures. However, some changes coherent to climatic change (general decrease of average size, shift in reproduction periods and start of reproduction of warmwater species) had been detected.