1046-92-344　　　　**Olli Ilari Tahvonen*** (`olli.tahvonen@metla.fi`), Finnish Forest Research Institute, PL 18 Vantaa, Finland. *Economics of harvesting age-structured fish populations.*

A generic discrete time age-structured fishery model is developed to derive analytical results for economically optimal harvesting. Given two age classes, knife-edge selectivity zero harvesting cost (or schooling fishery), the steady state is proved to be a unique saddle point. Adding harvesting cost does not alter the uniqueness given utility is linear. When fishing gear is nonselective, optimal harvesting may converge toward a stationary cycle that represents pulse fishing. Optimal steady states are shown to be different if age-structured information is ignored and optimization is based on biomass variables. This implies that optimal extinction results depend on age-structured information. Given a low rate of interest and knife-edge selectivity, optimal harvesting is shown to converge toward a unique saddle point independently of the number of age classes. (Received August 27, 2008)