

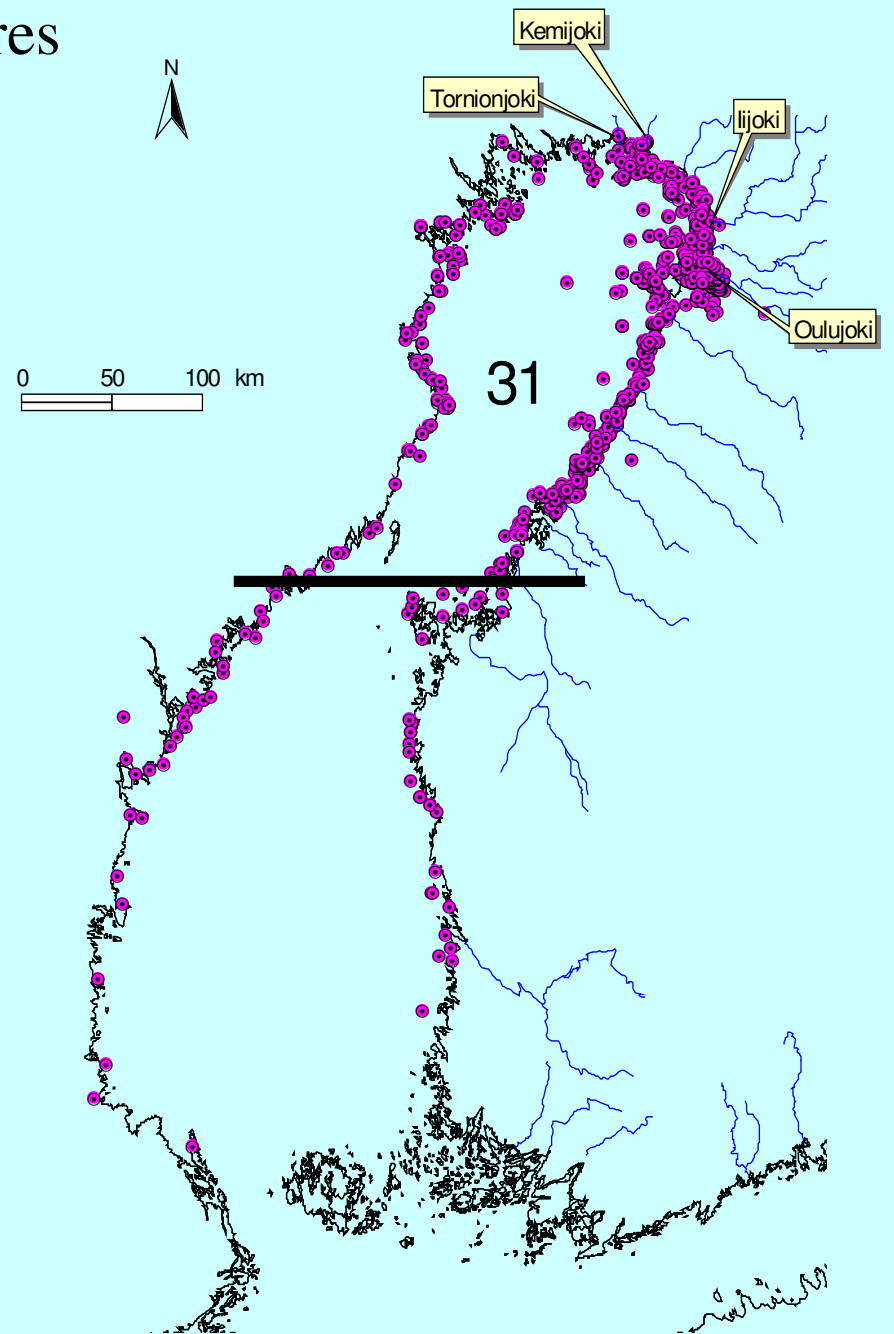
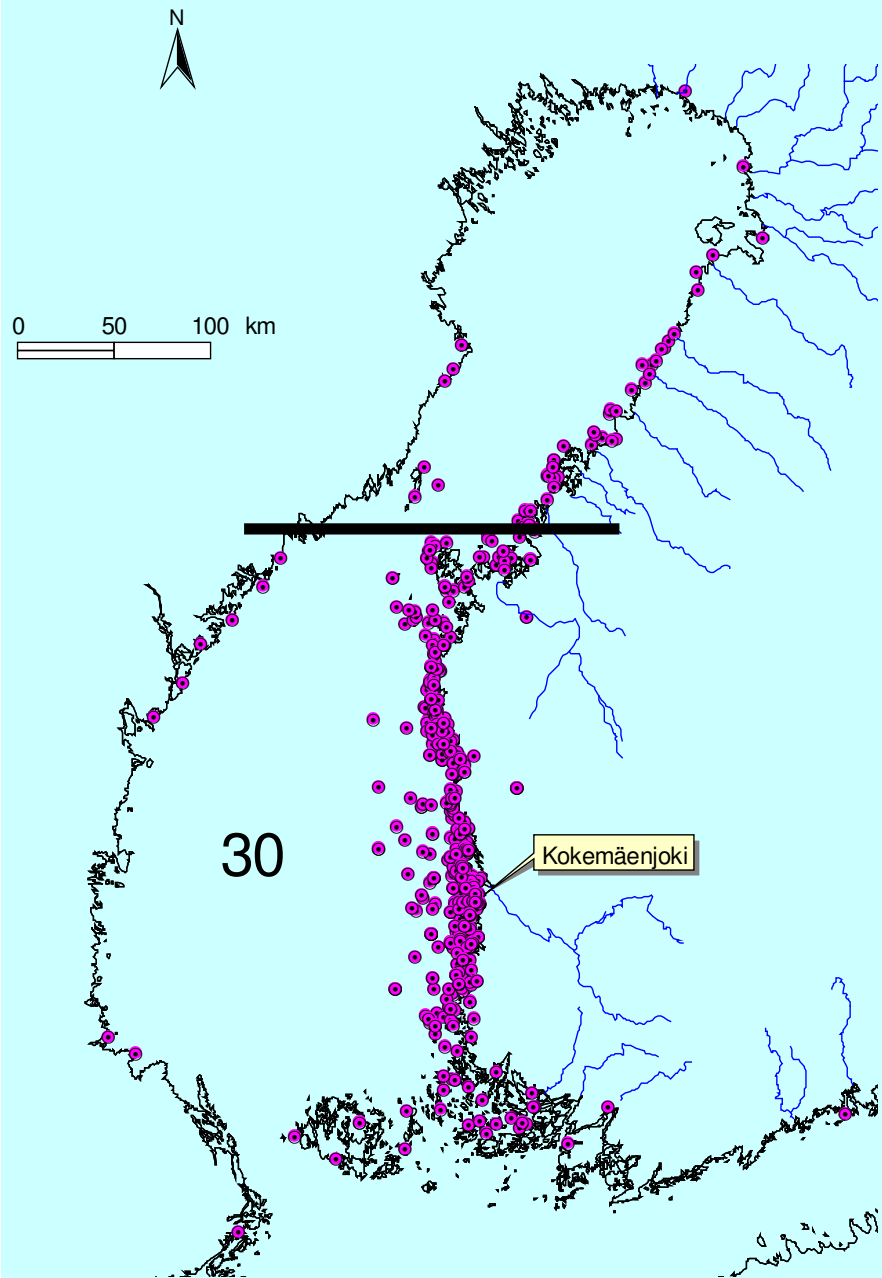


Problems with sea trout by-catches in gill net fishing for whitefish and pikeperch

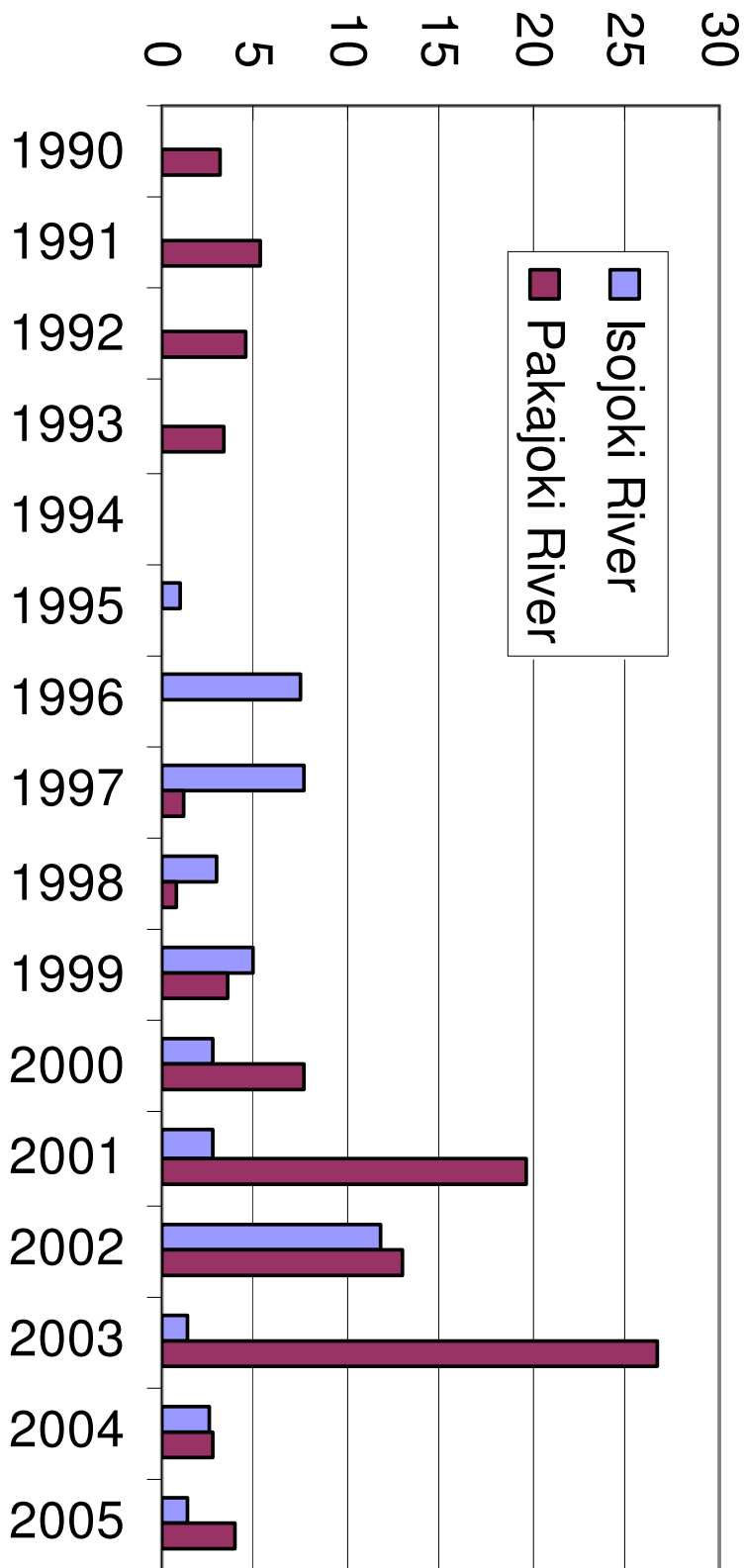
Eero Jutila and Ari Saura
Finnish Game and Fisheries Research Institute

- **Background**
- **Gill net selectivity**
- **Conclusions**

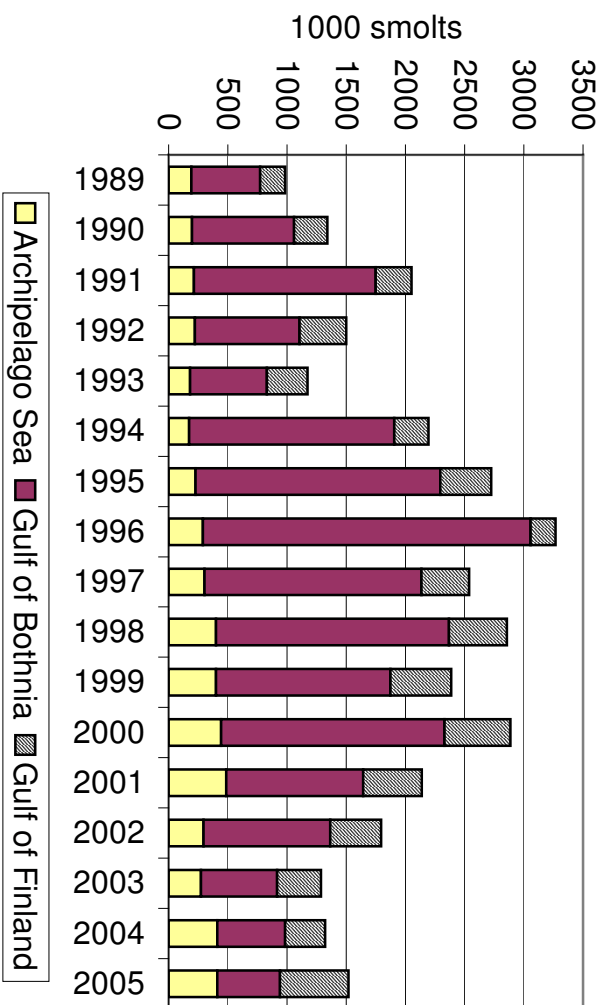
Sea trout recaptures



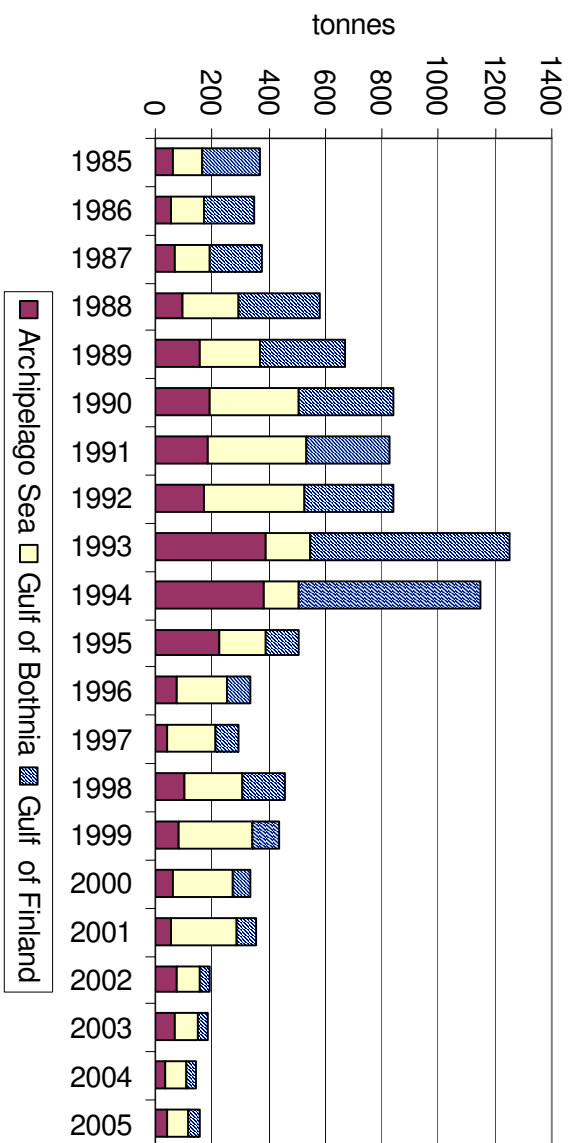
Parr density
ind./100 m²



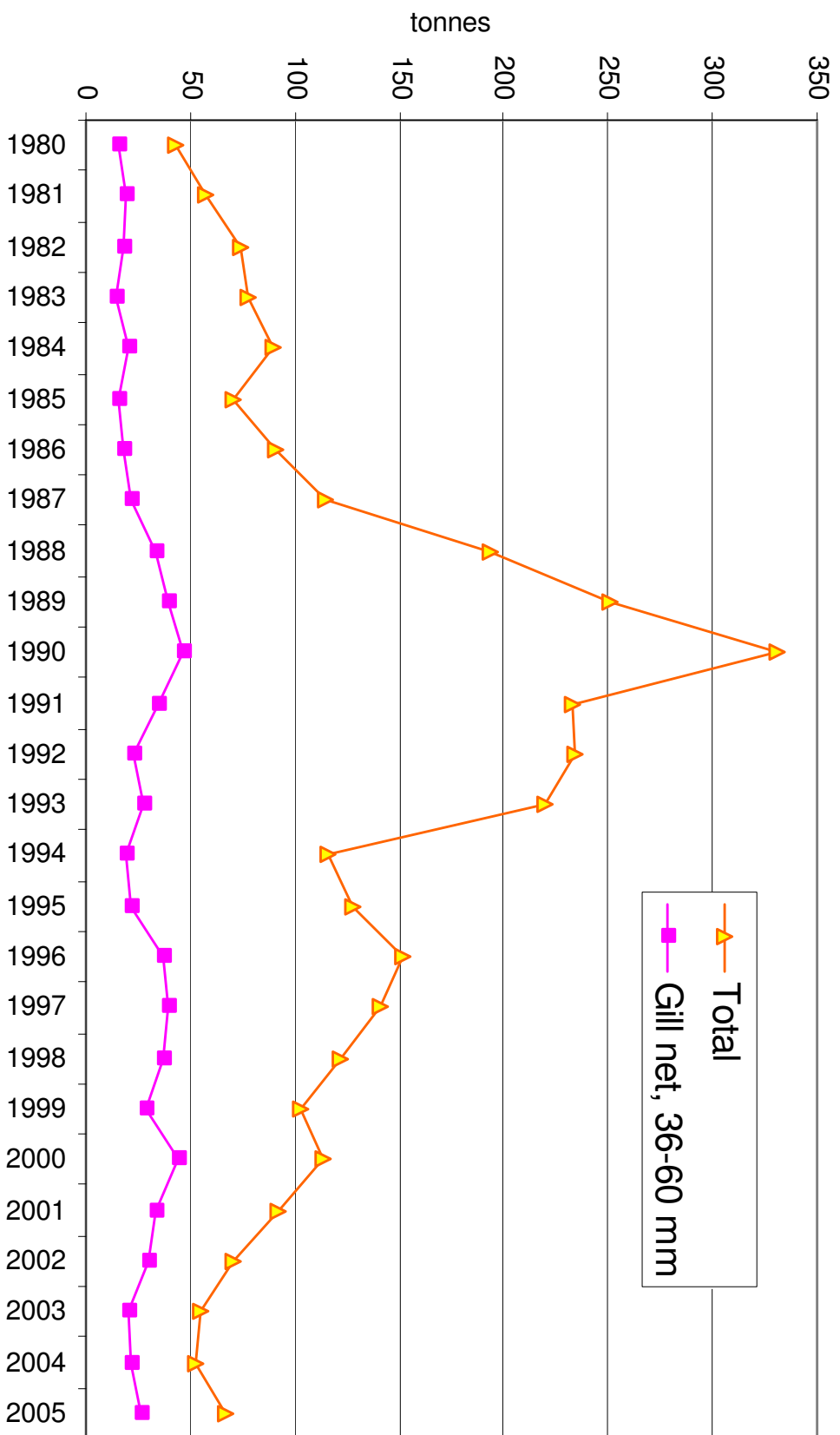
Releases



Catch

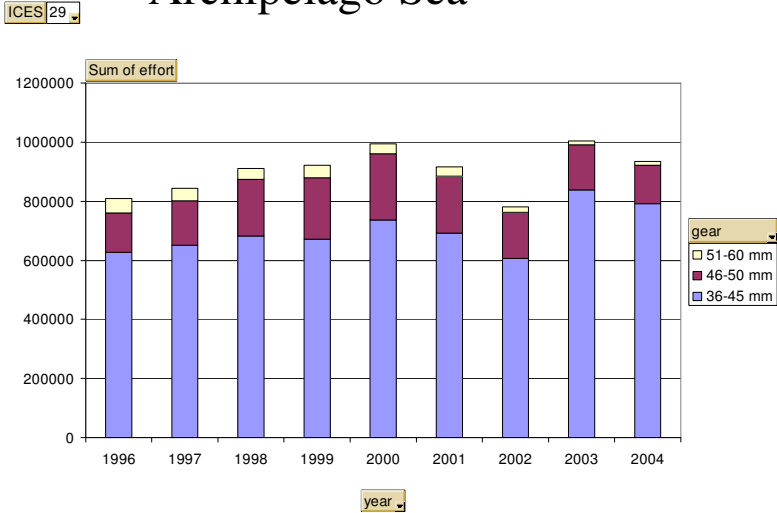


Professional sea trout catch

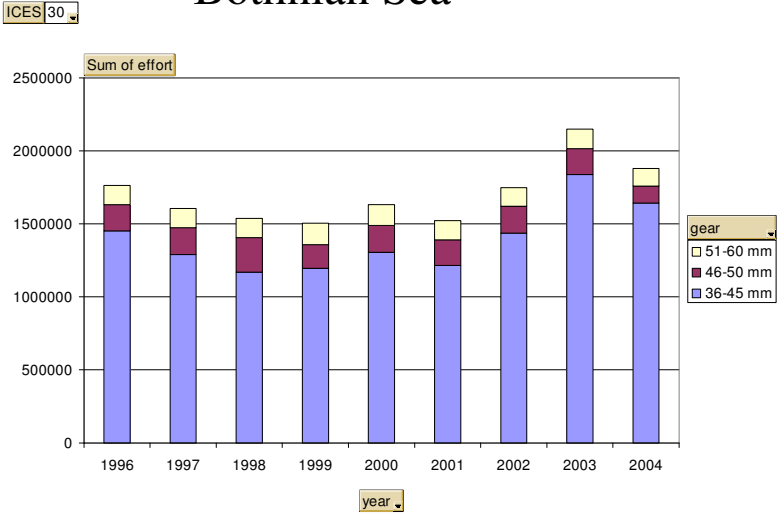


Professional gill net effort

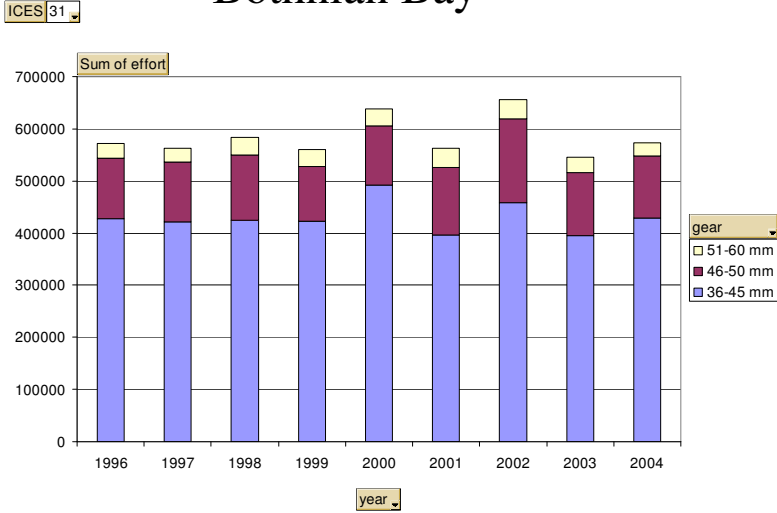
Archipelago Sea



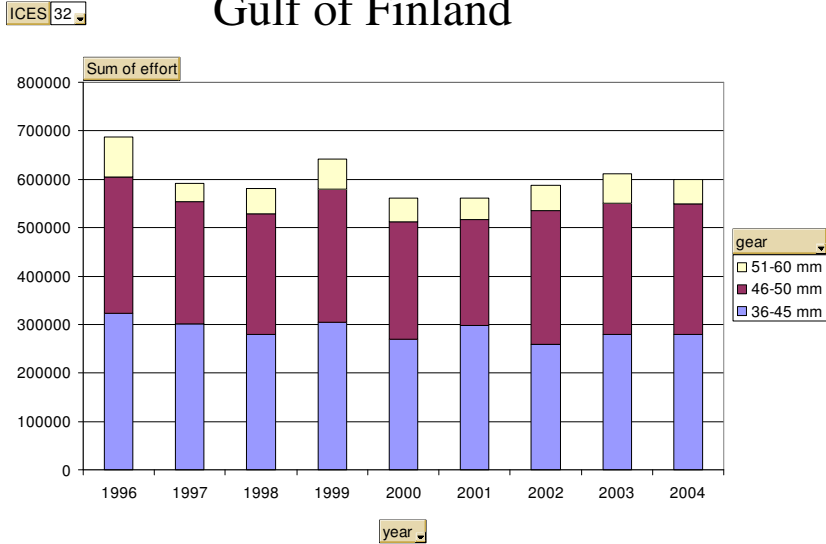
Bothnian Sea



Bothnian Bay

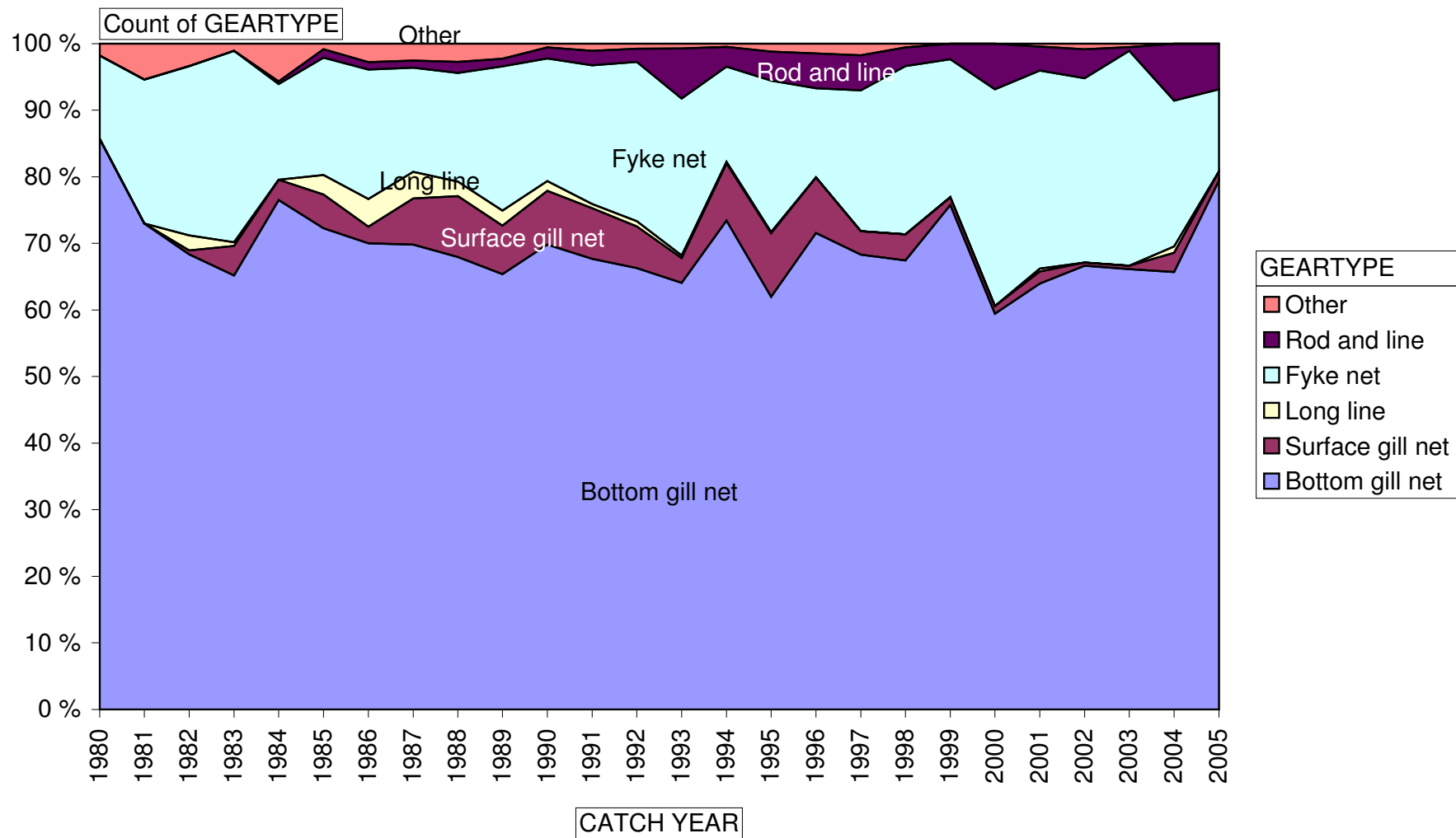


Gulf of Finland

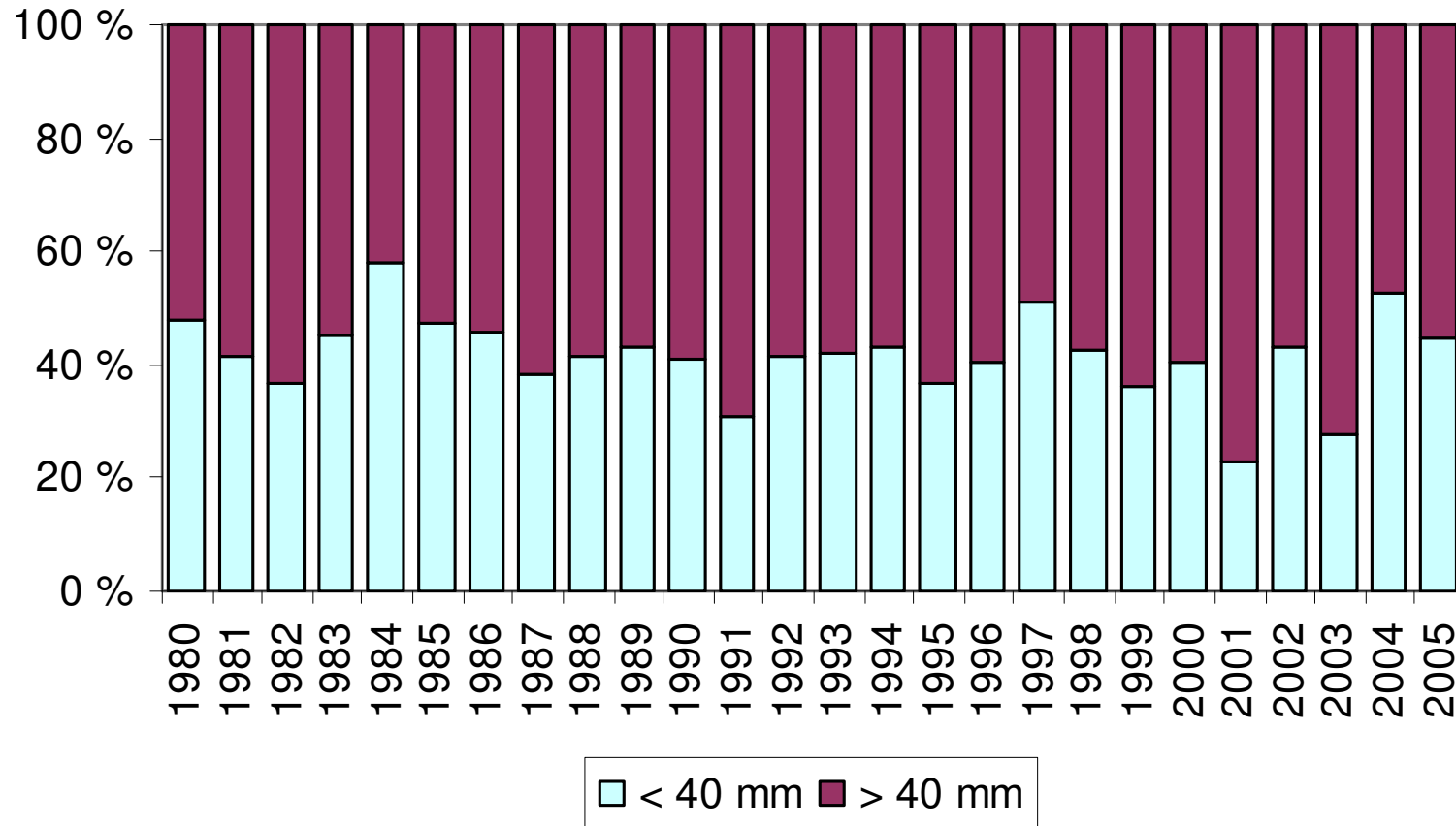


Proportion of gears in Bothnian Bay by tagging data

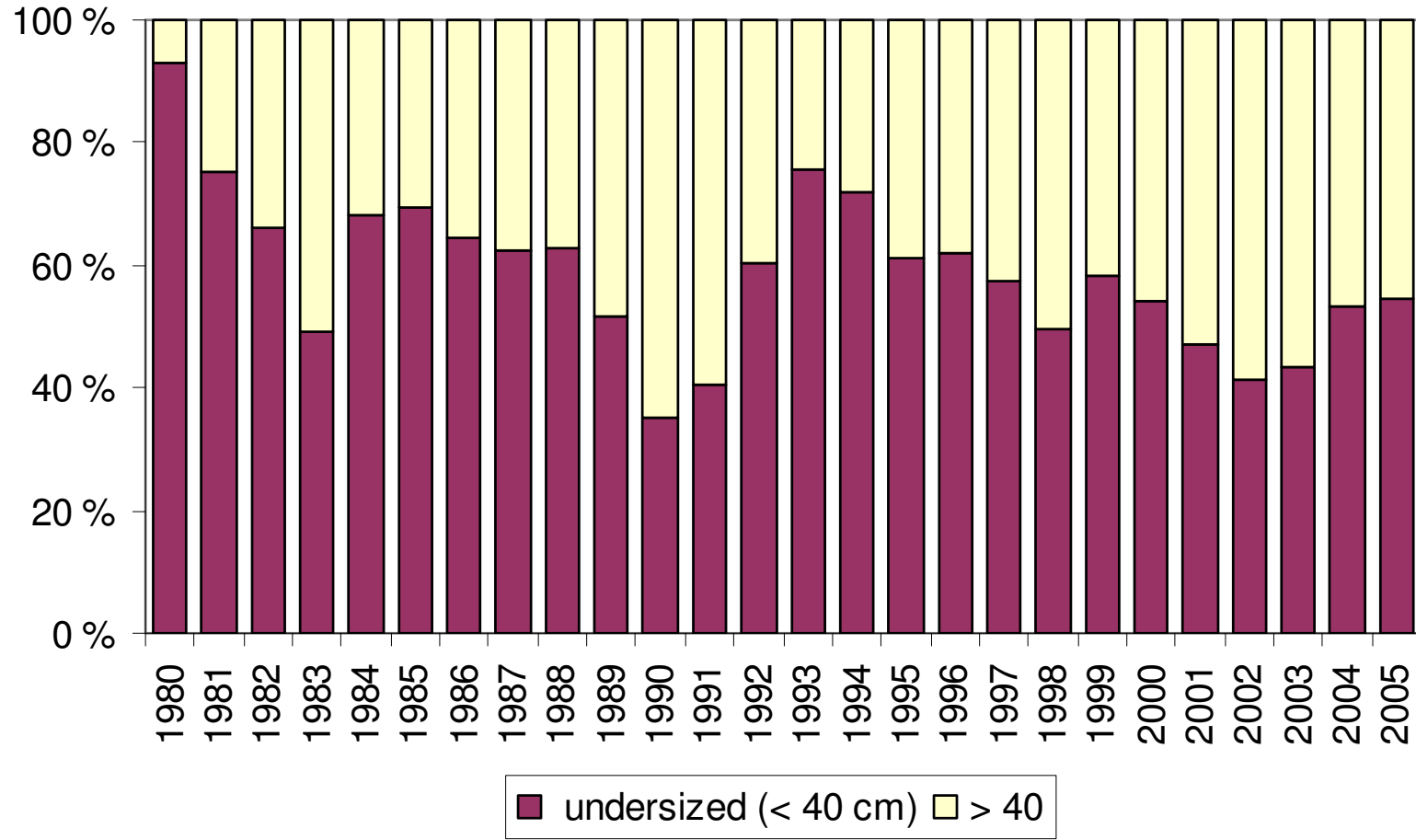
SEAFRE 1



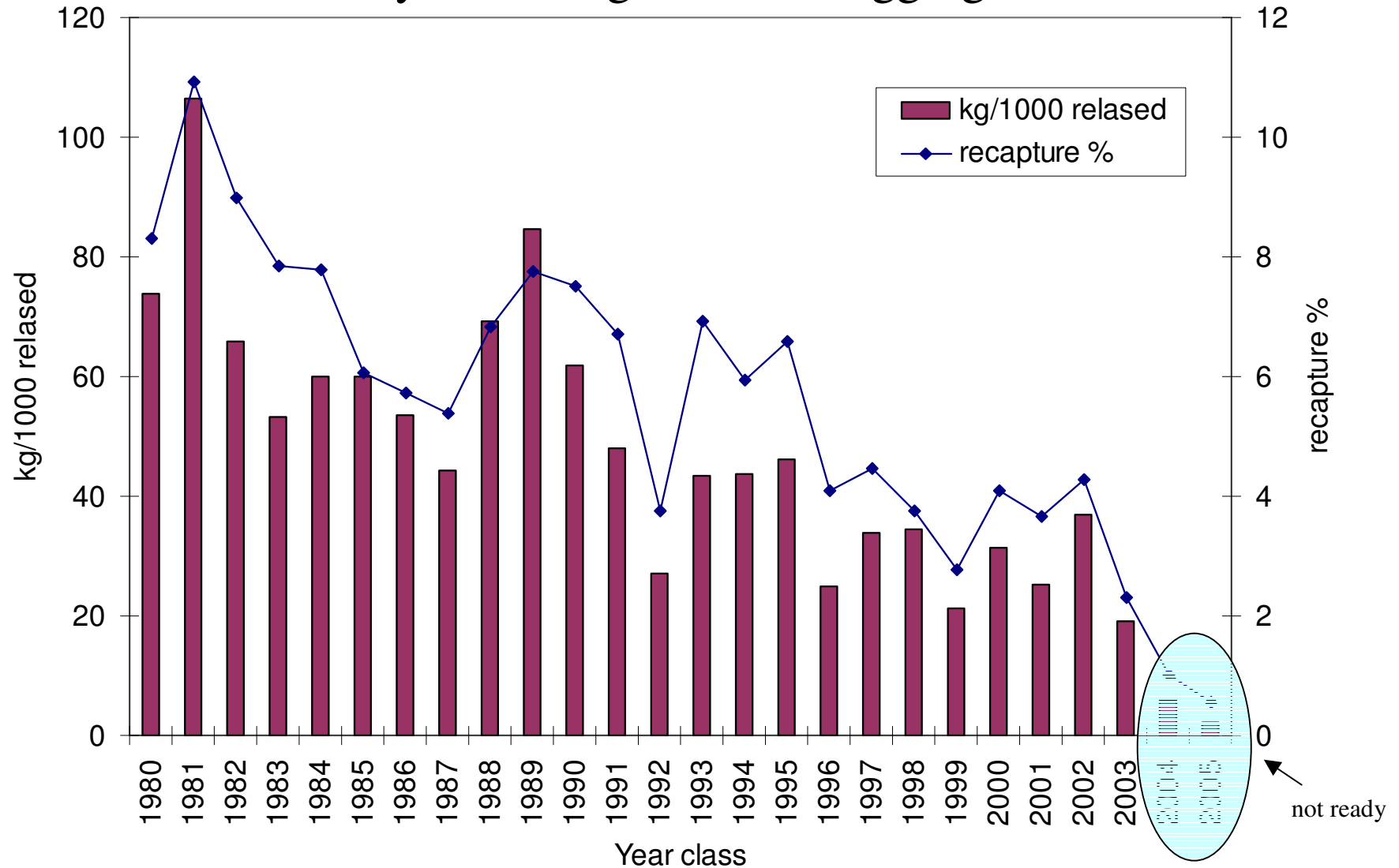
Proportion of under and over 40 mm (bar length) gill net by sea trout fishing in the Bothnian Bay



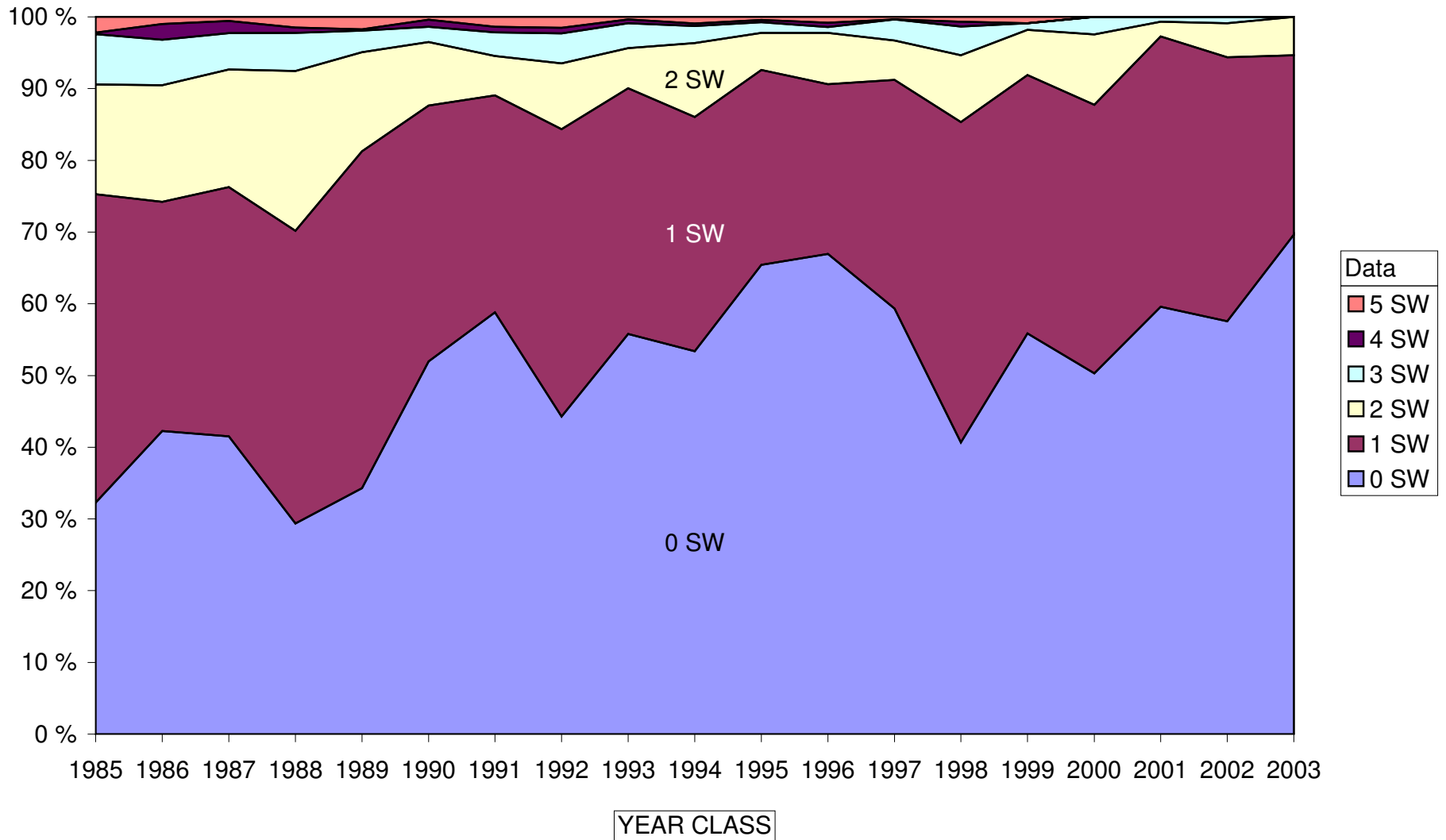
Proportion of undersized sea trout in Bothnian Bay according to Carlin tagging data



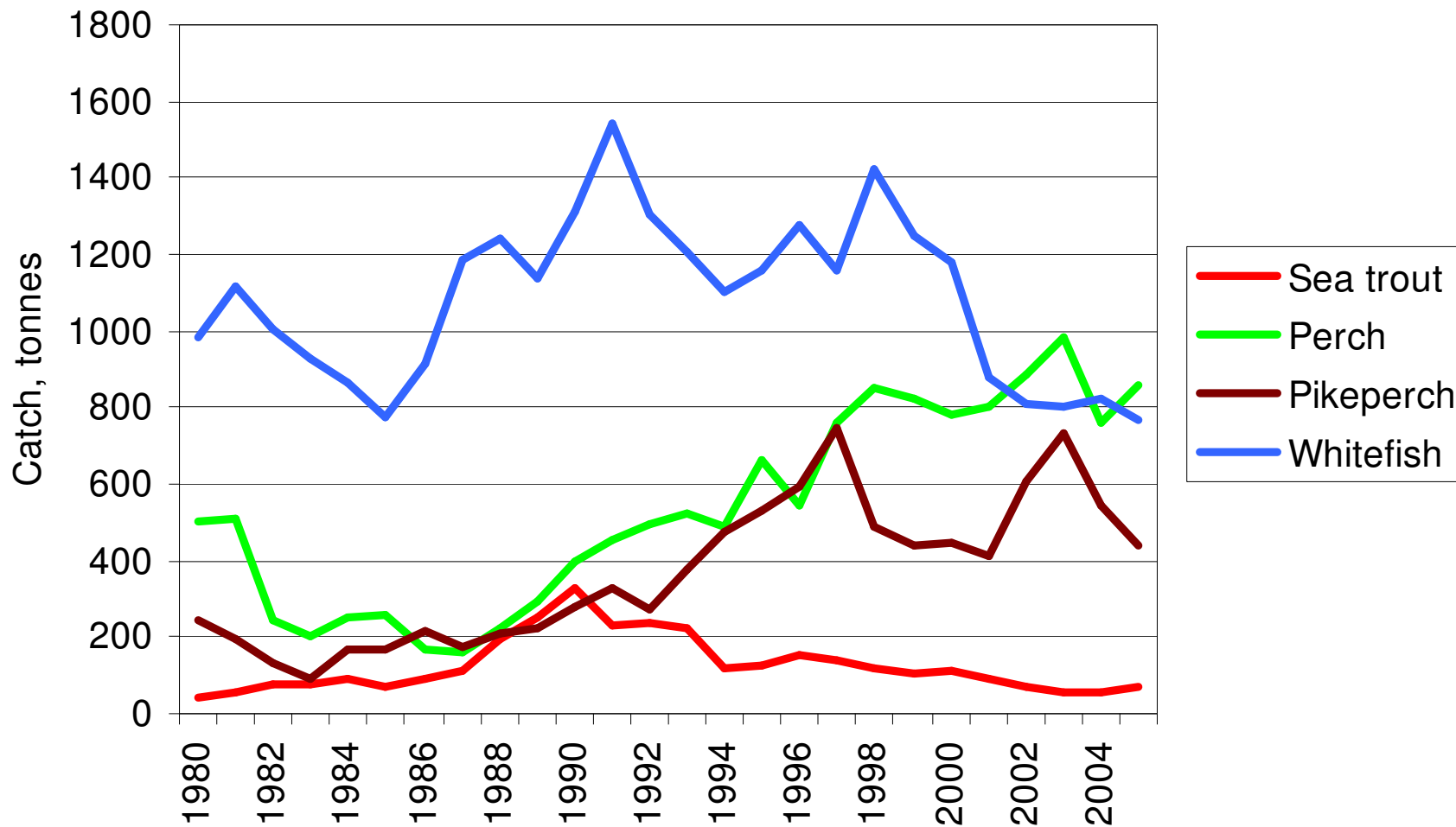
Recapture rate and yield/1000 smolts in the Bothnian Bay according to Carlin tagging data



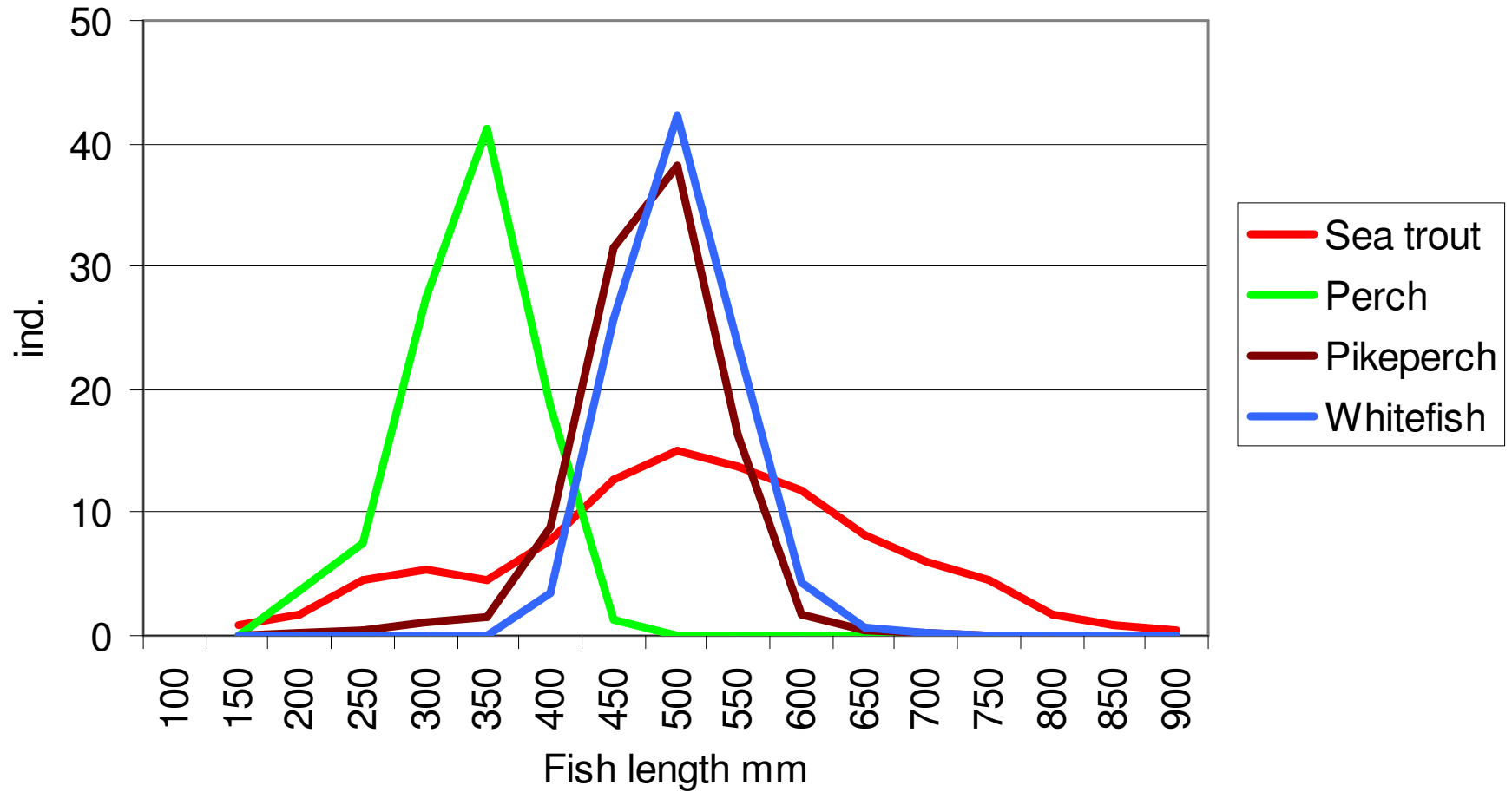
Age structure in the Bothnian Bay by the tagging data



Total catches of professional fishermen in Finnish coastal areas

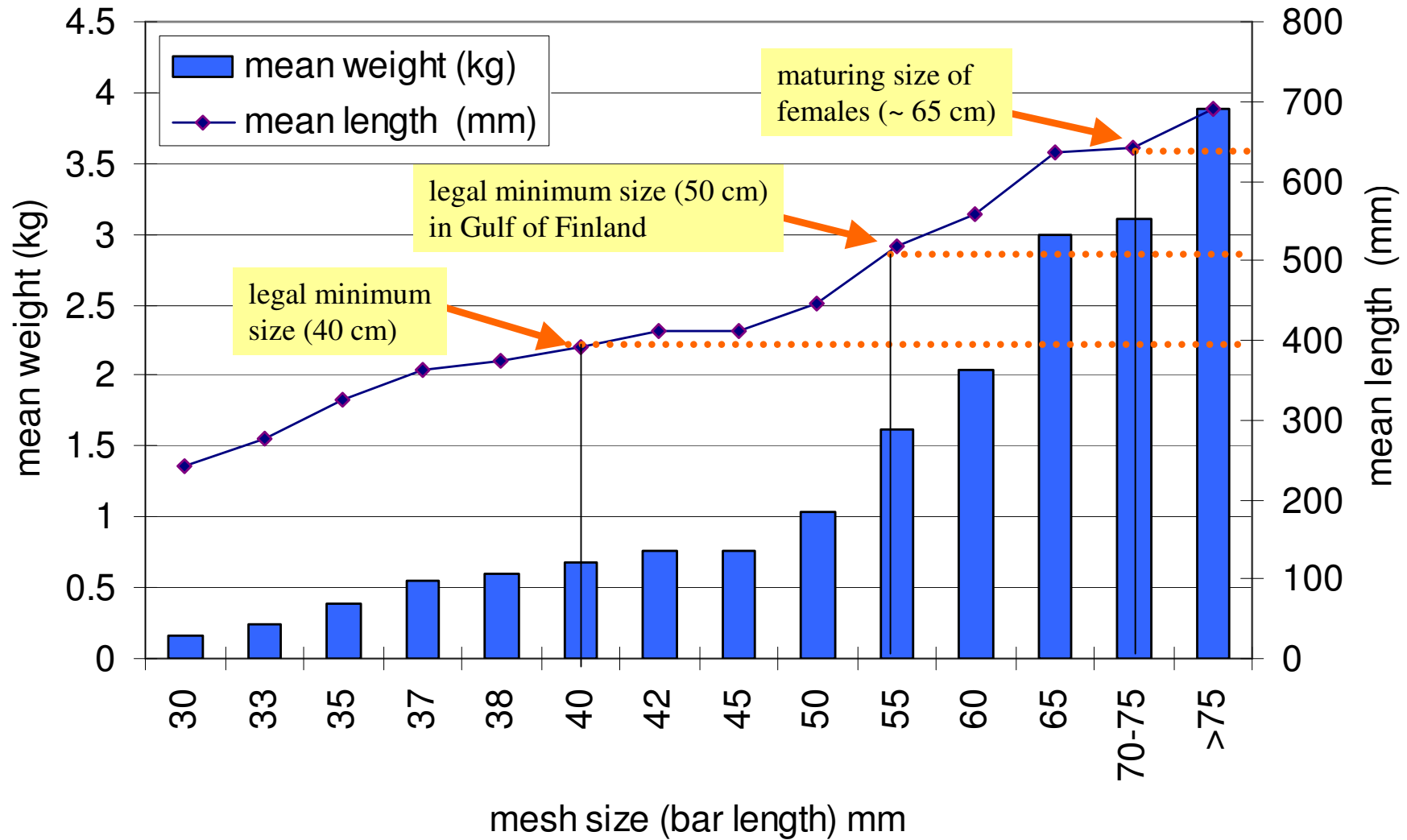


Mesh size 45 and 50 mm

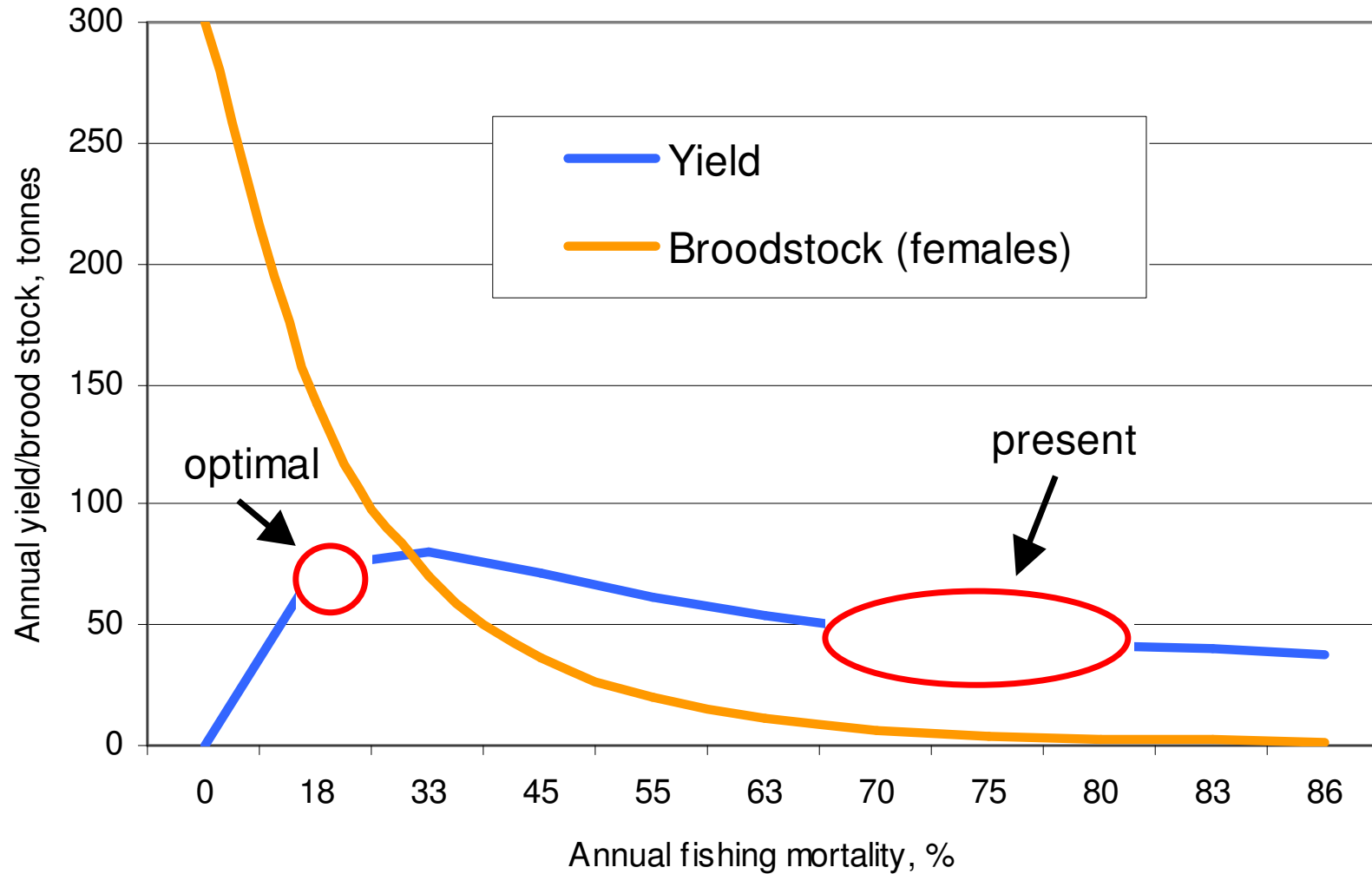


(Heikinheimo and Setälä 2004)

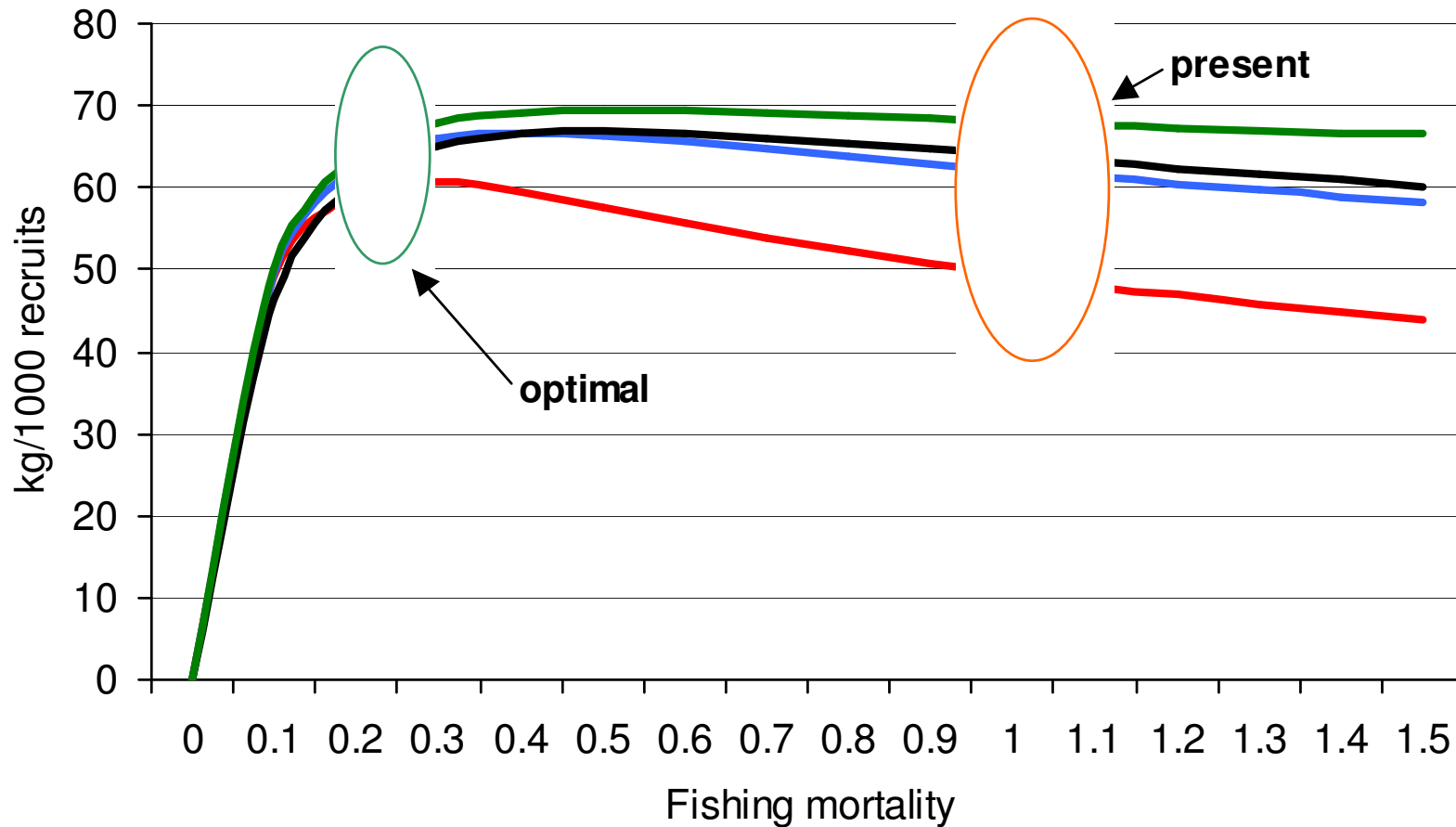
Mean size of sea trout in different mesh sizes



Yield and broodstock of sea trout in different fishing mortalities in the Bothnian Bay according to the tagging data



Whitefish yield with different fishing mortalities and regulation options in the Bothnian Bay



— No restrictions — 45 mm — 50 mm — 450 g size limit

(Jokikokko 2006)

Conclusions

- **minimum catch size/regulation of mesh size**
- **mesh size >65 mm ---> safeguarding of natural reproduction**
- **increase of the mesh size/effects on other species**
- **a successful management/combination of different regulation measures**

Thank You!