

BALTIC SEA TROUT WORKSHOP IN KOTKA 31.5. -  
2.6.2006

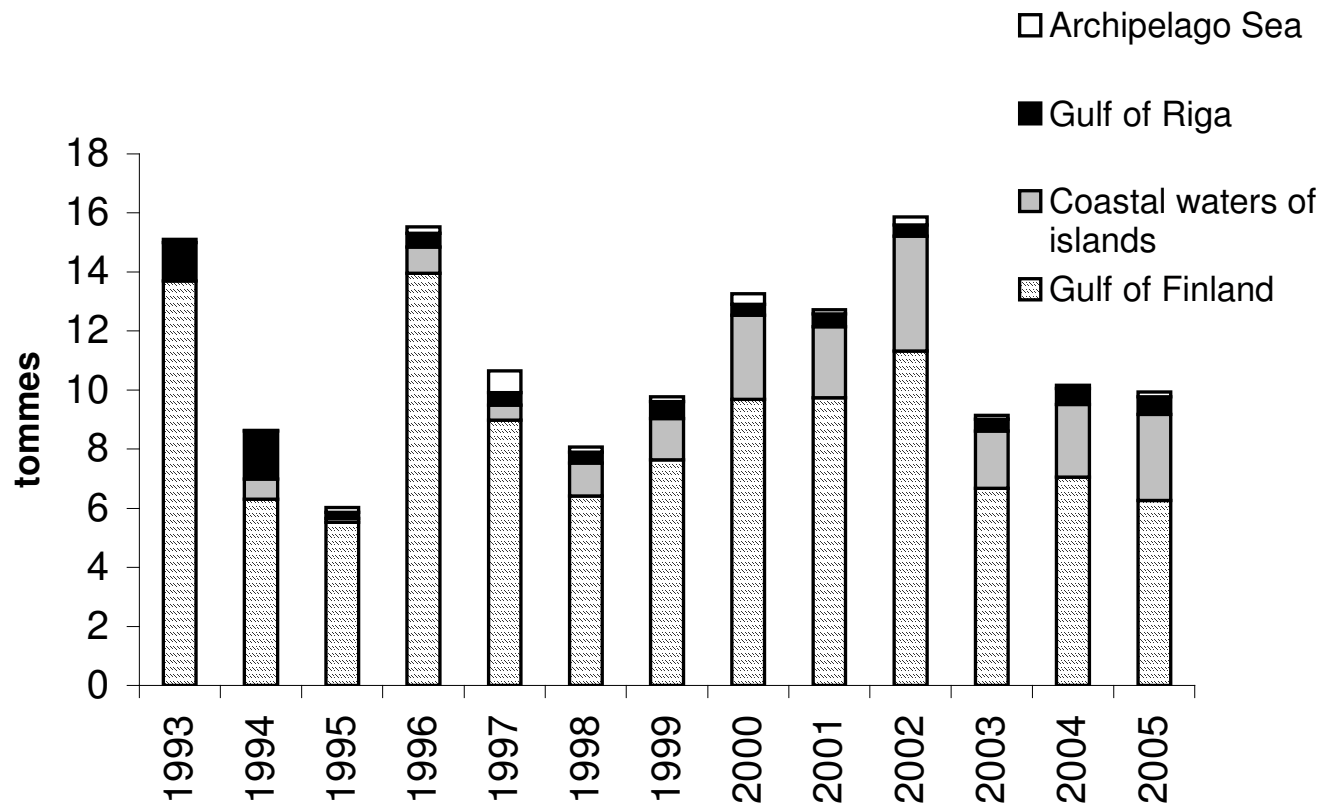
**ESTONIAN COUNTRY REPORT**

MART KANGUR, MARI-LIIS VIILMANN & MARTIN  
KESLER

ESTONIAN MARINE INSTITUTE, UNIVERSITY of  
TARTU

HERKI TUUS  
FISHERY RESOURCES DEPARTMENT, MINISTRY of  
ENVIRONMENT

# 1. Fishing and catches by sea areas



## 2. Fishing regulations

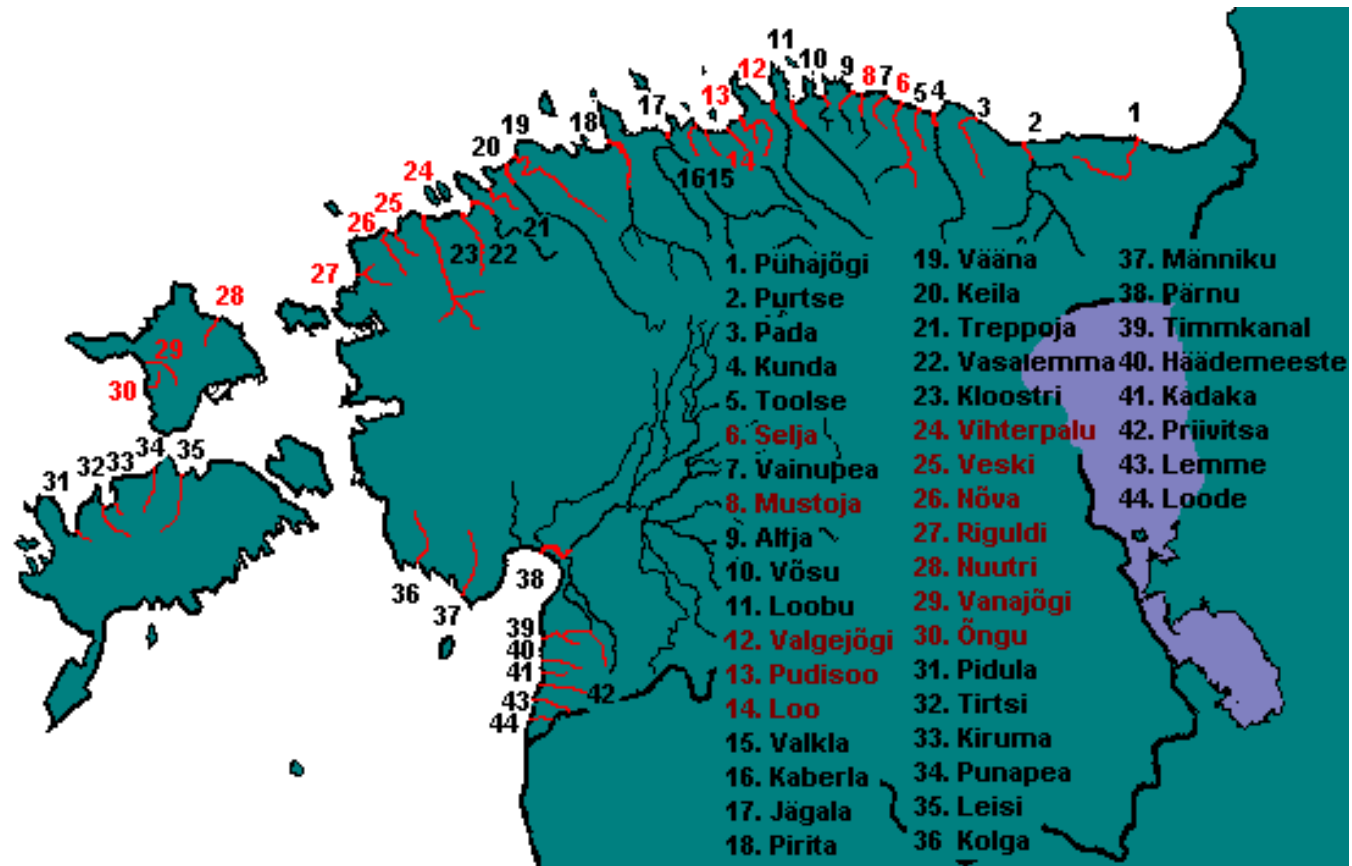
- Legal catch size in the sea and rivers  $\geq 50$  cm (total length) or 45 cm (standard length)
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- *Sea fishing*
- - 2/3 of the strait must be kept open
- - 35 mm minimum mesh size (bar length) in gill nets
- -  $\geq 24$  mm minimum mesh size in cod end in trap with leader net (bar length).
- - At the mouth of a sea trout rivers a closed area and season for fishing:
- 1000 m in 12 rivers and brooks all a round of year
- 500 m in 15 rivers and brooks from 15 of August to 31 of December
- 500 m in 22 rivers and brooks from 1 of September to 30 of November
- - Limited minimum distances between fishing gears
- - Limited number of gears
- - Drift nets and anchored floating nets with mesh size  $< 157$  mm forbidden
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- *Rivers*
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- - Gillnet, trap net (except lamprey traps) and some types of river seines fishing forbidden in all sea trout rivers.
- - Salmon and sea trout, rod fishing forbidden from 1 September to 30 November in salmon rivers, in sea trout rivers from 1 September to 31 October.
- - Wading forbidden in salmonids spawning rivers in closed period.
- - Fishing in 26 rivers and brooks is forbidden round all of year
- - Fishing in 12 rivers forbidden in stretch below a first definite migration obstacle
- - Fishing on fish ladders and 50 m upstream forbidden
- - Fishing below dams in distance of 100 - 500 m forbidden

### 3. Sea trout stocks and their status by sea areas

Sea area	Number and status of sea trout stocks		Potential smolt production (guess)	Notes
	Original/probably original	Stocked/Mixed		
Coastal waters of islands	0 good 5 satisfactory 3 poor	1 good 0 satisfactory 2 poor	4000 – 8000	Supportive stocking in 4 rivers
Gulf of Riga	1 good 5 satisfactory 3 poor 1 not known	0 good 0 satisfactory 1 poor	20 000 –30 000	
Archipelago Sea	0	0	0	
Gulf of Finland	3 good 8 satisfactory 7 poor 8 not known	0 good 7 satisfactory 3 poor	up to 100 000	Supportive stocking in 10 rivers

Figure. Main Estonian stocks of Baltic sea trout



## 4. Annual monitoring of sea trout stocks by sea areas

Sea area	Rivers electro fished	Total n of sites	Carlin tagging, numb. of stocks	Average tagged (n)	Fin clipped
Gulf of Riga	2 each year 8 approx. once per 3-5 year	16	0	0	0
Coastal waters of islands	11 approx. once per 3-5 year	13	1	2000 (in 2005)	all 2 yr old tot 172 000 1999-2005
Archipelago Sea	0	0	0	0	0
Gulf of Finland	22 each year 11 approx. once per 3-5 year	44	3	460 2002-2005	all 1, 1+, 2 yr old tot 71 000 2001-2005

## 5. Threats for the stocks

<b>Sea area</b>	<b>Threats</b>
Gulf of Riga	Sea fishing, river poaching, water quality, silting of spawning grounds, low flow periods
Coastal waters of islands	Sea fishing, water quality, silting of spawning grounds, low flow periods
Archipelago Sea	No stocks
Gulf of Finland	Sea fishing, river poaching, silting of spawning grounds, water quality, low flow periods, water regulation, beaver dams

## 6. Improvement measures in sea trout rivers

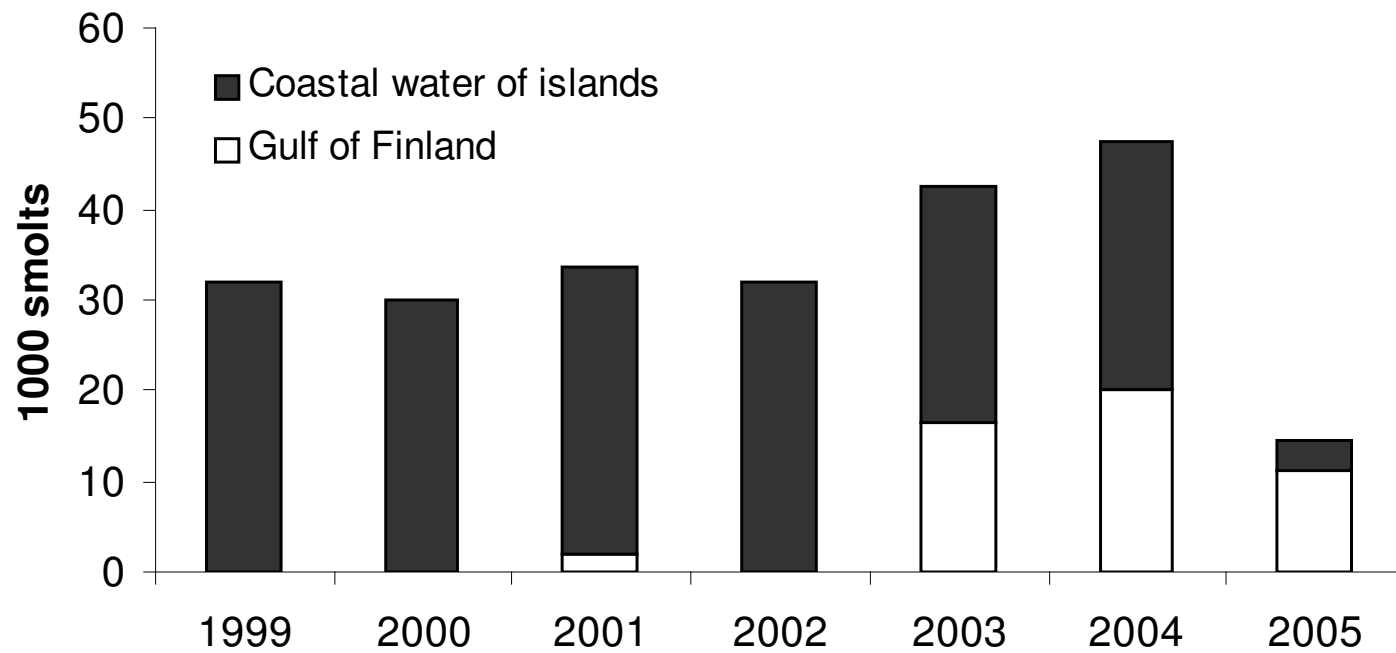
<b>Sea area</b>	<b>Fish ways</b>	<b>Restoration</b>	<b>Enhancement/supportive stocking</b>
Gulf of Riga	1	Partial in river Pärnu	0
Coastal waters of islands	0	No	25 000 parr/ year, 2100 smolts/year 1999-2005
Archipelago Sea	0	No	No
Gulf of Finland	1	No	31 400 parr/ year, 5 100 smolts/year 2001-2005

## 7. Potential rivers likely suitable for enhancement/restocking

<b>Sea area</b>	<b>Estimate of the numbers</b>	<b>Potential smolt production</b>
Gulf of Riga	2	5 000 - 10 000
Coastal waters of islands	2	<2 000
Archipelago Sea	0	0
Gulf of Finland	4	5 000- 8 000

## 8b. Annual releases by sea areas

### Estonian sea trout releases



- **Research activities**
- *Major activities*
  - - Electric fishing surveys in sea trout rivers
  - - Analysis of tag recovery data
  - - Analyses of catch data
  - - Genetic studies
  - - Sampling programme
  - - Mapping of reproduction habitats (also potential)
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- *Research needs and interests*
  - - Smolt trapping (present on one river)
  - - Counts of spawners

- **10. Needs for national conservation and management measures**
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- - Increase of minimum mesh sizes for gill nets in period of maximal catches of sea trout in the sea fishery.
- - Temporal and areal fishing restrictions for the gill net fishing.
- - Management plans for sea trout rivers.
- - Improvement of habitat.
- - Recovery plans for potential sea trout rivers.
- - Construction of fish ways.
- - Improvement of water quality; mitigation of damages caused by agriculture (nutrients) and forestry (drainage -> silting, etc.), prevention of water pollution in general.
- - Seek for such management/regulatory measures for fishing of other species, which prevents sea trout to get caught as a by-catch.
- - Increase of control in rivers and sea.
- - Promotion of public awareness.

- **11. Needs for international cooperation in research**

- - Fisheries related subject at the stock recovery phase: selectivity/catchability (gear, time, area).
- - Improvement of habitats: fish ladders, conflict with hydropower production in small rivers (sociology, economy).
- - Tagging programs / exchange of tagging data (releases and recoveries).
- - Genetic studies: exchange of baseline samples.
- - Viability analysis of the sea trout stocks: methodology and potential data.
- - Aquaculture related: enhancement (age, stock).

- **12. Needs for international cooperation in management**

- Planning and implementation of joint management plans in Gulf of Finland (FIN – RUS – EST)
  - Baltic sea trout action plan

## 13. Main conclusions

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- - Natural reproduction sea trout stocks in Estonia declined.
- - The main reasons of decline is too high fishing pressure in the sea and poaching in the rivers.
- - Sea trout are caught mostly as a by-catch by bottom gillnets.
- - Low numbers of spawners result in risks for natural reproduction.
- - Releases are not economically profitable.
- - Real fulfilling of fishing rules needed.
- - Improving of the spawning and rearing habitats is needed
- - Stock-specific recovery and enhancement plans by sea areas should be enforced.
- - Promotion of international communication in research and management is still needed.