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## Conservation activities over the area around Saint-Petersburg, and their impact on pearl mussels



# Area around Saint-Petersburg: (Leningradskaya oblast): 7 populations of pearl mussels



## Activities contributing pearl mussel conservation: Release of salmon parrs in the pearl mussel

- Release of salmon parrs in the pearl mussel habitats
- Protected areas covering pearl mussel habitats
- General restrictions of the use of rivers and river banks, absence of private property on rivers.
- Absence of intensive forestry
- Including the species in local red lists

## Re-acclimatization of the Atlantic salmon in one river (Gladyshevka)

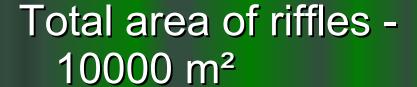






#### Releases of salmon juveniles

Year, month	Number	Mean weight, g	Age
2000, May	8500	8-10	1+
2001, May	1500	100	2+
2002, September	10000	8-10	0+
2003, May	1500	15	1+
2003, September	10000	8-10	0+
2004, September	10000	8-10	0+





#### Pearl mussel observation

Year	Area of bottom studied, m <sup>2</sup>	Number of pearl mussels	Number young pearl mussels
2006	500	3	2
2007	500	5	0
2008	200	-	-
2009	400	2	1
2010	300	1	1

## Reproduction in small populations (Gladyshevka river)



## Protected areas covering pearl mussel habitats



### Pearl mussel habitats - "Disorder" in rivers, conservation of natural vegetation at the river banks









#### "Disorder" in forestry









#### Conclusion:

Passive conservation measures aiming to protect the whole environment gave the possibility for survival of pearl mussels over the area around Saint-Petersburg, but they do not guarantee its stable existence in a near future. The number of pearl mussels decreases. Active measures including artificial rearing of mussels and their host fishes are required in the most of populations.

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