## Creating the Thick Shelled River Mussel *Unio crassus* species protection plan: problems and actualities

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Thick Shelled River Mussel *Unio crassus* is found in all the territory of Latvia. Species is included in the Directive 92/43/EEC 2nd and 4th Appendixes, but the requirements of these documents are performed only partially.

For the species included in the 2nd Appendix the establishing of the protected areas is provided. According to the survey data on the 674 protected areas in Latvia, only in 23 Thick Shelled River Mussel is present. The 2nd Appendix of the Directive 92/43/EEC provides the implementation of a protective regime, but it does not take place neither in the protected areas nor outside.

The aim of the species protection plan is to evaluate the proper and well-disposed survival conditions and to provide increasing or stable number of population areas or amount of individuals in the populations. The main factors that threaten *Unio crassus* species in Latvia are:

- The pollution of the rivers with the organic substances and wastes, as a result of the insufficient purification of wastes (outmoded purification plants, ignored waste disposal management).
- The impact of beaver activities destroying the stream habitats, which results in the decreasing the water quality and effects the habitat downstream the dams.
- The building and action of small hydropower stations, destroying the downstream habitat and isolating the upstream part of the population.

The purposes of the species protection plan are:

- 1. To propose to change the laws and regulations to prescribe the species conservation.
- 2. To propose changes in the laws and regulations to limit the harmful influence on the mussel populations and habitat.
- 3. To discover the main sources of the organic pollution in the mussel rivers and to evaluate the possibilities to prevent the pollution.
  - 4. To evaluate the protection of the areas of the mussel species populations.
  - 5. To prepare the recommendations for monitoring and investigation of the species.
  - 6. To prepare the recommendations for the public information and education.

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