

Vitenskapskomiteen for mat og miljø

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Saksbehandler:

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## Assessment of the risk to Norwegian biodiversity from import and keeping of crustaceans in freshwater aquaria

The Norwegian Environment Agency has registered a growing interest in the import of various species of freshwater crayfish for aquaculture and private keeping, both from the southern and northern hemispheres. The Directorate hereby requests the Scientific Committee for Food and Environment to assess of the risk of adverse consequences for biological diversity following import of various crustaceans for keeping in freshwater aquariums.

Regulations on alien organisms under the Norwegian Nature Diversity Act, which entered into force on 1 January 2016, regulate all imports of freshwater organisms. However, exceptions have been made to the general requirement for an import permit for "heat-loving" freshwater organisms.

*"Permission is not required for the import of freshwater organisms which can only live at temperatures above 5 ° C, and which are to be kept exclusively for ornamental purposes in indoor aquariums which are designed so that organisms cannot escape, ..."*

In addition to the exemption for aquarium organisms being limited to those species that cannot survive below 5 ° C, the regulations always require a permit when importing a number of species that are listed in Annex III to the regulations. The species in the appendix have been updated on the basis of information from the zoo industry, as well as assessments and recommendations from researchers / research institutions. However, the assessments were carried out at a time when the regulations on alien organisms had not been completed, and the assumption on which the assessments are based has changed somewhat. As a basis for application processing and any change in how the species in the future should be regulated under regulations on alien organisms. The Norwegian Environment Agency therefore need an updated assessment of the risk of adverse consequences for biological diversity regarding the freshwater crustaceans listed in Annex III of the regulations.

The Norwegian Environment Agency has received a number of applications for the introduction of crustaceans for use in freshwater aquariums, and also sees a need for assessments of the risk of adverse consequences for biological diversity associated with these species.

In order to be prepared to process future applications, the Norwegian Environment Agency also needs a review of which other species of crustaceans that are kept in freshwater aquariums today, or which can be expected to be kept in the future, and assessments of the risk of adverse biological consequences regarding keeping these.

## Terms of reference

The Norwegian Environment Agency requests the Norwegian Scientific Committee for Food and environment (VKM) to identify which species of crustaceans are currently kept, and which species are likely to be kept in the foreseeable future, in freshwater aquariums in Norway. The directorate further requests VKM to assess the risk of negative impacts on biological diversity in Norway as a result of the import and keeping of the identified species.

The Norwegian Nature Diversity Act defines biological diversity as the variability among ecosystems and species, intraspecies genetic variation and the ecological relationships between ecosystem components. The ability to survive under Norwegian conditions and possible impact on ecosystems and other species should be included in the risk assessments, as well as the likelihood that the import and keeping may cause the species to escape and spread. If there are special measures or restrictions that would affect the risk posed by the species, this must be stated. Since pathogens that can have an impact on wild species and biological diversity are regulated under the Norwegian Food Law, it must be stated to what extent diseases are weighted and decisive for the assessments.

Given there is a cut-off temperature of 5 ° C for an exemption under the Norwegian import permit requirements, it must be stated for each risk assessment whether the species can survive below this temperature.

A grouped risk assessment may be conducted for whole families or genera, given that the risks are similar among all species.

The starting point for the risk assessments is the current climate. If any of the species and the risk they pose will be affected by the expected climate change in the period up to the year 2100, this shall, to the extent practicable with current knowledge, be stated in the risk assessments. Due to the uncertainty in the development of emissions, it is national policy that the changes due to continued high emissions should be used as a basis for climate projections, and we therefore ask that RCP 8.5 be included as one of the climate scenarios on which the assessments are based.

The risk for adverse impact on ecosystem services shall be stated, but shall not be included in the assessments of the risk of negative impacts on biological diversity.

