

THE EFFECT OF THE LARGE-SCALE INTRODUCTION OF SIGNAL CRAYFISH ON THE SPREAD OF CRAYFISH PLAGUE IN SWEDEN



Since 1907, coinciding with the arrival of the crayfish plague, the noble crayfish (*Astacus astacus*) has steadily declined in Sweden. To substitute the noble crayfish fishery lost, mainly due to the plague, and since the species is highly susceptible to the disease, the Swedish government started a large-scale introduction of the American signal crayfish (*Pacifastacus leniusculus*) in the end of the 1960's. The signal crayfish is a chronic carrier of crayfish plague (*Aphanomyces astaci*), and it is likely that the introduction of this species has had an effect on the spread of the disease to the remaining noble crayfish populations. 6,961 crayfish plague outbreaks were recorded between the years 1907-2004. 65% of the recorded outbreaks (4,531 records) occurred after 1969. The legislation for giving licenses to stock signal crayfish has gone from being restrictive in the end of the 1960's, to becoming quite liberal in the 1980's, and to becoming more restrictive again starting in 1994. From 1983-1994 the number of licenses increased with over 500% (from 536 to 3,000). This coincides with the largest number of recorded crayfish plague outbreaks ever. To assess the relationship between the large-scale introduction of signal crayfish, the spread of crayfish plague, and the steady

decline of noble crayfish populations in Swedish waters, we compared the number of outbreaks between two 20-year periods, before and after the introduction of the signal crayfish. We found that the introduction of the signal crayfish, due to a more permissible legislation, have accelerated the spread of crayfish plague to noble crayfish populations in the country, and that is the main reason for the current decline of native crayfish populations.

Auteurs du document : P. BOHMAN, F. NORDWALL, L. EDSMAN

Obtenir le document : EDP Sciences

Mots clés : *Pacifastacus leniusculus*, *Astacus astacus*, crayfish plague, *Aphanomyces astaci*, large-scale introduction, fisheries legislation, database, *Pacifastacus leniusculus*, *Astacus astacus*, peste des écrevisses, *Aphanomyces astaci*, introduction à grande échelle, législation des pêches, base de données

Date : 2008-04-01

Format : text/xml

Source : <https://doi.org/10.1051/kmae:2006026>

Langue : Anglais

Télécharger les documents : <https://www.kmae-journal.org/10.1051/kmae:2006026/pdf>

Permalien : <https://www.documentation.eauetbiodiversite.fr/notice/the-effect-of-the-large-scale-introduction-of-signal-crayfish-on-the-spread-of-crayfish-plague-in-sw0>

Evaluer cette notice: