

File ID 78042
Filename Conclusions

SOURCE (OR PART OF THE FOLLOWING SOURCE):

Type Dissertation
Title Biomechanical limitations on macrophytes in shallow lakes
Author J. Schutten
Faculty Faculty of Science
Year 2005
Pages 155
ISBN 9076894604

FULL BIBLIOGRAPHIC DETAILS:

<http://dare.uva.nl/record/168611>

Copyright

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use.

Conclusions

The scientific knowledge on the mechanical limitations that I have developed within this thesis help to explain that the patchy and erratic macrophyte recovery experienced in particular in larger lakes with soft sediments, could be due to mechanical limitations. The forces that can be generated by grazing birds and result from waves can be sufficiently large in particular situations, as to uproot or break plants and thus hindering the establishment of a macrophyte population in previously unvegetated waters.

This knowledge will be and has already been used to both direct efforts towards those lakes most likely to achieve clear water without extra measures, and has increased the chance of a successful recovery for lakes with soft sediments. The knowledge has also helped to estimate the potential effects of various mowing regimes in a lake with such successful recovering vegetation that established recreation was hindered.

The Hickling case-study showed that a lake in which aquatic vegetation has recovered will not directly be seen by all stakeholders as a positive development. An analysis of the opinions of various stakeholder groups shows that the rich nature and peacefulness of our lakes is directly related to the enjoyment of the recreating people. It also shows that money spend by those recreants is an important driver in the local economy. These benefits of nature and wildlife for our human population, expressed in Hickling as the natural beauty, the recreational usage of the open water and the financial gain from that, tie almost seamlessly in with the views on the role of water quality and the value of nature expressed in the introduction to this thesis.