ABSTRACT

Lagarosiphon major Control in a Large Irish Lake through Light Exclusion

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Lough Corrib is the second largest lake in Ireland. It is of major conservation importance and supports 14 habitats and six species that are listed on Annex I and Annex II, respectively, of the Habitats Directive. The lake is a nationally important angling resource and a major tourist angling destination. Since the recent discovery (2005) of the highly invasive submerged plant species, *Lagarosiphon major*, its rapid advance throughout the northern and middle basins of the lake has demonstrated its potential to compromise the environmental, social and economic value of this unique natural resource. To date, no *Lagarosiphon* has been recorded in lower lake and every effort is being made to halt the southerly spread of the plant into this large and shallow watercourse.

A wide range of control methods are being tested in Lough Corrib in an effort to control or eradicate this highly aggressive invasive species. One method that is currently receiving attention is light exclusion through the use of geotextile material. In 2007 black plastic geotextile was used to cover large trial plots of *Lagarosiphon.* Where it was possible to maintain the geotextile on the lake bed, a high level of effective weed control was achieved. However, the material was difficult to handle, caused problems in the lake for recreational users and required to be moved from the lake when the operation was completed. In 2008 a biodegradable jute geotextile was sourced and trials using this material were undertaken. A methodology to cover large areas of weed-infested lake bed was developed and a number of trial areas have been established. The results to date are encouraging and use of this control method will be significantly expanded in 2009. The paper will describe the methodology for geotextile placement that has been developed, the fate of the submerged geotextile over time, the impact on the target vegetation and the potential for natural recolonisation by indigenous macrophytes in treated areas.