

## **Developing new approaches to surveying *Lagarosiphon major* in Lough Corrib**

Emma Morrissey, Rossa Meade, Ronan Matson and Fiona Kelly

Inland Fisheries Ireland, 3044 Lake Drive, Citywest Business Campus, Dublin 24, D24 Y265, Ireland

*Lagarosiphon major* (Ridley) is an invasive aquatic plant species that occurs in Lough Corrib. Until recently *L. major's* distribution was mapped using traditional methods only e.g. direct observations from boats including bathyscopes and snorkel-towing with infestations marked using handheld GPS units. These methods are time and resource intensive. Here we provide an overview of a range of technical solutions including satellite and drone multispectral imagery, hydroacoustics and digital data collection applications that are currently being developed to map *L. major's* distribution in Lough Corrib. These methods offer an effective way of monitoring large areas in a short timeframe, facilitating early intervention by control teams. In addition, this large scale mapping can ensure that control operations of continuously infested sites are managed in the most strategic manner possible.