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## The most northerly documented record of the green alga *Hydrodictyon reticulatum* (water-net) in the UK

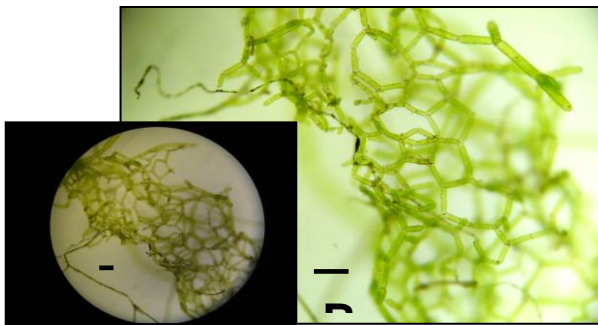
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Strathclyde Loch is located within Strathclyde Country Park, Motherwell (NS 73290 56980) and is designated as a Sensitive Area (Eutrophic) under the Urban Waste Water Treatment Directive, and of poor ecological potential under current Water Framework Directive (WFD) classification. A macrophyte survey of the loch was carried out in September 2011 by Alison McManus, Thomas Coy and Jan Krokowski (SEPA). This was done as part of SEPA's WFD monitoring and classification. During the survey the invasive nuisance green alga *Hydrodictyon reticulatum* (L.) Bory de Saint-Vincent, 1824 (water-net; Fig. 1) was discovered at one of the sampling points and is believed to be the most northerly documented record of this species in the UK.



**Fig. 1.** *Hydrodictyon reticulatum*, Strathclyde Loch, September 2011. Scalebars 100  $\mu$ m.

This species is known as a nuisance because it can clog waterways, smother aquatic plants and fauna and adversely impact boating, fishing, swimming and tourism. The spread of this alga is believed to be a response to elevated and extended summer water temperatures (John *et al.*, 1998). The species is confined to downstream sections of waterbodies, partially due to its nutrient requirements, and populations of the alga usually only become obvious in mid-summer, suggesting a need for high temperatures (Whitton, 2000).

It appears that the water-net has become widely distributed over the past two decades and is gradually

beginning to colonise more northern waterbodies. Until 2011 the most northern documented records of the species were in Dumfries and Galloway, with other undocumented reports of the species as far north as Aberdeenshire. There are also anecdotal records of the species in Castle Semple Loch, Renfrewshire. The species is well documented in rivers in the Scottish Borders and northern England, especially the Tweed, Tyne, Wear and the Swale.

### ACKNOWLEDGMENTS

Thanks to Alison Bell, John Clayton, Robin Guthrie (SEPA) and Professor Brian A. Whitton (Durham University) for their records of water-net distribution.

### REFERENCES

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- Whitton, B.A. (2000). Increases in nuisance macroalgae in rivers: a review. *Verh. Int. Verein. Limnol.*, 27: 1257-125