Removal of fallen trees and branches from around the island in the southern lake at Boggart Hole Clough – Ecology comments

Open water habitats (ponds and lakes) are relatively scarce in Manchester. The Lakes at Boggart Hole Clough therefore represent important ecological assets for the City. They also have high recreational and aesthetic value for the very well-used public space at the Clough.

In recent years the southern, more formal, Lake at Boggart Hole Clough has experienced toxic algal 'blooms' and unexplained deaths of water birds. The Lake is relatively shallow, water flow through is slow and the Lake experiences high nutrient inputs from public feeding of water birds. Until very recently there has been a lack of aquatic and marginal plant vegetation in the Lake which would otherwise have facilitated nutrient cycling. These factors have contributed to the eutrophication and oxygen depletion of the Lake waters and have been detrimental to the development of a healthy, diverse Lake ecosystem.

It is also known that in some cases high levels of eutrophication can lead to incidents of fatal disease in water birds.

Fallen trees and branches in the water and high volumes of leaf-fall will be adding to nutrient inputs into the Lake.

Efforts are now being made to improve the ecosystem of the Lake and reduce eutrophication by –

- Introducing aquatic and marginal vegetation on floating islands that will help with nutrient cycling in the Lake
- Artificially oxygenating the water by pumping through aeration
- Reducing nutrient inputs by discouraging the feeding of water birds

The proposed removal of fallen trees and branches from the water and the water's edge around the island will contribute to the reduction of organic matter and nutrient inputs to the Lake and will aid efforts to reduce eutrophication.

It is recognised that fallen trees and branches at the water's edge provide a habitat for some water birds for refuge and nesting. The island itself also supports important nesting habitats, not least a local Heronry. Any timber removal should therefore be undertaken sensitively and potential harm to nesting birds should be mitigated throughout.

Dragging timber back onto the island and the creation of 'habitat piles' on the island instead of removing the timber from site will help to increase nesting habitat on the island itself, for 'terrestrial' birds as well as for water birds that can nest on land.

The Lake has in recent years supported a nesting pair of great crested grebes, a scarce and very attractive breeding bird in Manchester. Great crested grebes cannot nest on land because their legs are set far back on the body and they therefore have difficulty walking on

land. It is therefore recommended that some fallen branches are left around the island in locations that have been known to have been previously used by the grebes and other birds for nesting, and/or a vegetated artificial island be made available as an alternative nesting site. So not all the fallen trees and branches should be removed from the Lake shore in one operation.

Herons are also sensitive to disturbance and can begin nesting relatively early in the year. It is therefore recommended that to avoid disturbing nesting Herons -

- Trees with Heron nests should not be cut and nest trees should not be left too open.
- Tree works should be undertaken outside of the optimum bird nesting period – which to include Herons means that works should not be undertaken between mid-February and the end of August.

Contractors should be reminded that all nesting birds their eggs and young are specially protected under the terms of the Wildlife and Countryside Act 1981 (as amended). If active nests are encountered at any time during works the nests should be left undisturbed until young birds have fledged.

Conclusions

- The reduction in organic matter inputs to the southern Lake at Boggart Hole Clough, in combination with other interventions, will improve the long-term ecosystem health of the Lake and will increase Lake biodiversity in the longer term.
- Although the removal of fallen trees and branches from around the southern Lake at Boggart Hole Clough may cause some temporary harm to nesting birds this harm is capable of being mitigated.

Derek Richardson
Principal Ecologist
Greater Manchester Ecology Unit