Site management plan - Great Ayton Floodplain Meadow
Martin Allen, Oct 2023

Background.

The purpose of a traditional Floodplain Meadow was to provide an annual hay crop which was harvested in late-June or early July and following that harvest the regrowth of vegetation was available for livestock grazing over the winter or until the site got too wet.

Great Ayton's floodplain meadow has a primary purpose to store water when the River Leven is very high and there is danger of flooding downstream and then to release that stored water gradually after the flood peak is over.

Management as a traditional floodplain meadow is not possible at Great Ayton due to the difficulty of getting hay-making machinery on site and the equal problem of the site not being suitable for livestock grazing due to its small size and the frequency of dog walkers on site. This being the case we need to be pragmatic about how the site can be managed to be best for wildlife and also be practical to undertake.

Management

An ideal to aim for would be to cut the grass at the end of August/early September, rake up and then remove the cuttings taking them to the south of the site where they can be placed in a pile to rot at the base of the slope. Removing the cuttings removes nutrients from the soil so the grasses grow less vigorously and the wildflowers are then better able to compete and grow.

Seed collected from populations of local plants can then be scattered on the raked area to add more diversity of wildflowers for wildlife and a more species-rich plant community in the meadow.

A minimum level of management would be to ensure that the grassland was cut once a year and the cuttings left in place to rot down. The northern half can be cut at the end of August/beginning of September and the southern half left over the winter to retain the thistle seedheads for seed eating birds and insect hibernation and then to be cut in March.

In 2023 a team of volunteers managed to rake up the cuttings from a quarter of the main meadow area and move them to the south end of the site during an afternoon and it was felt that it would be difficult to get a team to undertake this every year and for the whole site.

One possible route to reducing the height and volume of grass growth is to sow the semi-parasitic annual **Yellow-rattle** which has been used with some good effect in promoting a more biodiverse meadow plant community. There is some more helpful information on the Plantlife website https://meadows.plantlife.org.uk/making-meadows/yellow-rattle/ but note that it can be difficult to establish on rich soils and it is likely that would include the Great Ayton floodplain meadow soil.

Generally, an access path around edge of meadow area can be regularly mown and also around the picnic benches to make it pleasant to sit there. Ensure that the steps are accessible and the adjacent vegetation does not flop over the pathways.

Management of non-native plants

Remove **Himalayan Balsam** either as seedlings, during the year as young plants, or as larger plants when they begin to flower – they can be tall at this stage 1.5 to 1.8 m high. This needs to be carried out regularly and before the plants set seed if the aim is to prevent it from growing on site. It is classed as a Schedule 9 plant meaning it is an offence to plant or cause to grow this species in the wild. As it is frequently found along, and spreads via, watercourses it can be difficult to control. The River Tees Trust are currently trialling the use of a rust fungus which damages the plant and acts as a form of bio-control. More detailed information here https://www.nonnativespecies.org/non-native-species/information-portal/view/1810

The **Snowberry** bush can be cut back to reduce its spread, regular cutting will weaken the plant but carefully applied weedkiller will be required to kill it off. It does have advantages as its dense growth habitat provides shelter for some birds and mammals. More detailed information here https://www.nonnativespecies.org/non-native-species/information-portal/view/3440

The **Hybrid Poplar** trees have grown very large very quickly which can be seen by comparing their size on the aerial photos of the 1950s in the site timeline document and so may be coming to the end of the healthy stage of their lifespan. It's possible that they may start to become too large for the site and be blown down in windy weather or have some of the larger branches snap and fall. That being the case it would be advisable to get professional advice of a tree surgeon on how to proceed in the future with their management. The site has plenty of large trees and so it would be not affect the wildlife adversely if the timber were to be harvested.

Ash Dieback. This fungal disease is already killing some of the Ash saplings on site and has affected some of the standard trees in the hedgerow at the edge of the playing field boundary. As the tree branches are individually killed off they can start to rot and therefore be liable to breaking and falling in windy weather. Where they are close to or above pathways that becomes a safety hazard and so a regular inspection is recommended. There is no cure, but it is thought that perhaps 10% of Ash trees will be genetically immune to the effects of the fungus and so survive to reproduce in future.