Dumfriesshire Botany Group at Raehills 18 August 2021



Raehills house and main lochan with fringing Bottle Sedge and Broad-leaved Pondweed

The group met at St Ann's and were able to record in the grounds of Raehills at the kind invitation of Lord Annadale. Lord Annandale's son Lord David Johnstone is interested in restoring some biodiversity in a major refurbishment of the extensive policies around the listed Raehills House. Raehills is an impressive A listed mansion. It was built in 1793 and added to in 1829. The house sits in extensive parkland with some impressive specimen trees, an historic walled garden and walks connecting the house to the impressive Kinnel Linn with a natural woodland flora.

There were 8 of us. Our main objective was to record in the two monads north of the impressive St Annes bridge on the A701. This would include parkland, the Kinnel Linn and grasslands which are in the process of being turned from amenity grassland to wildflower rich grasslands.

From the lodge at St Ann's Bridge we initially followed the main drive. Either side major clearance of conifer plantation and Rhodendron thickets has left bare ground slowly recolonising. In these areas we saw fragments of old woodland species like **Remote Sedge**, *Carex remota*, **Three-nerved Sandwort**, *Moehringia trinervia* and **Bluebell**, *Hyacinthoides non-scripta* recovering. There will also be a lot of **Foxglove**, *Digitalis purpurea* in the next couple of years as it responds to the open ground and extra light.

We then followed the path alongside the Kinnel Water. Lower down this has cut an impressive rocky ravine and it is lined with old native woodland. Here we saw a typical old woodland fern community including **Beech Fern** *Phegopteris connectilis*, **Oak Fern** *Gymnocarpium dryopteris*, **Hard Shield-fern**, *Polysichum aculeatum* and **Soft Shield-fern** *Polystichum setiferum*. On the rocks there was **Goldenrod** *Solidago vigaurea*, **Wood Sage** *Teucrium scorodonia* and **Wood Cranes-bill**, *Geranium sylvaticum* indicating a rather acid geology. **Alternate-leaved Golden-saxifrage** *Chrysosplenium alternifolium* was nice to find in once place.

There were some fine specimen trees, including **Wellingtonia** *Sequoiadendron giganteum*, **European Silver-fir**, *Abies alba*, **Noble Fir** *Abies procera* and **Eastern White-cedar** *Thuja occidentalis*.



Beech Fern Phegopteris connectilis Kinnel Water

We explored the ponds on site including the older pond near the cleared woodland, some newer ponds recently installed along the drive and the main lochan below Raehills House itself. These had a good range of aquatic plants, generally the older ponds had the greater diversity with nice fringing sedge or Bur-reed beds. The main lochan was rather shallow and silted. We found species like **Fat Duckweed** *Lemna gibba*, **Small Pondweed** *Potamogeton berchtoldii*, **Branched Bur-reed** *Sparganium erectum*, **Common Spike-rush** *Eleocharis palustris* and **Bottle Sedge** *Carex rostrata*. One concerning species in one of the ponds along the drive is **Curley Waterweed** *Lagarosiphon major*. This is regarded as a troublesome non native invasive species and can choke water bodies. There are no legal issues with it being in the pond though it could spread to other water bodies and if it spread beyond the site it might be a problem elsewhere. It would be best cleared out and carefully disposed of to prevent its spread.

We spent a good part of the day looking at grasslands given these were a focus of change in the way they are managed. Essentially they are being managed as wildlife meadows. We looked at various grasslands as they had different origins and underlying soils. The meadow below Garden Bank is pasture but contains components of the natural old river terrace flora indicating the kind of species that are native to the area. These included **Yellow Rattle** *Rhinanthus minor*, **Harebell** *Campanula rotundifolia*, **Burnet saxifrage** *Pimpinella* saxifraga, **Lady's Bedstraw** and the main grasses were **Common Bent** *Agrostis capillaris* and **Red Fescue** *Festuca rubra*. Grasslands formerly kept as short mown amenity have been allowed to flower before being cut with the cuttings removed in late August with the intention of improving their biodiversity value. These were either dry with species like the early flowering **Pignut** *Conopodium major*, **Common Bird's-foot-trefoil** *Lotus corniculatus* and **Autumn Hawkbit** *Scorzoneroides autumnalis* or wet and dominated in places by **Sharp-flowered Rush** *Juncus acutiformis* and **Greater Bird's-foot-trefoil** *Lotus pedunculatus*. A short report on management ideas has been sent separately.

One final area of interest was by the bridge on the A701. Here works had taken place on the traffic lights. Where the soil had been disturbed some flower seed had been scattered and some odd non

natives had grown. But alongside these some native disturbed ground species had also popped up and these included **Red Goosefoot** *Oxybasis rubra*, **Lesser Swine-cress** *Lepidium didymium*, **Field Penny-cress** *Thlaspi arvense* and **Long-headed Poppy** *Papaver dubium*.

There were 253 species in the southern square with 177 in the northern square.

Chris Miles