

Kirkconnell Merse, 4th August 2022

The southern half of the merse, part of the site managed by RSPB, has not been grazed recently and we surveyed much of the site with RSPB personnel in attendance. In all, 12 of use covered 2 of the 4 monads in this area, specifically hoping to re-find *Ruppia maritima* Tasselweed and *Ranunculus baudotii* Brackish water crowfoot in the saltpans and brackish pools.

The merse is typical of Solway saltmarsh in that there are a number of distinct “steps” reflecting differing sea levels over the past centuries, each step having a particular community of plants. The site was dissected by numerous deep creeks and scattered bare mud patches, remnants of brackish water pools.



We tackled these in reverse starting at the highest step bordering the track, recording *Vicia cracca* tufted vetch and stands of *Holcus lanatus* Yorkshire Fog, *Sonchus arvensis* common sow-thistle with colonies of *Trifolium repens* white clover, *Scorzoneroideis autumnalis* autumn hawk'sbit and a single clump of *Carex otrubae* false fox sedge.



There was also a single stand of *Schedonurus arundinacea* tall fescue with its bright green leaves, purple node and very tall (2m) spreading flower panicle.

The next lower step is occupied by mid-marsh species including *Agrostis stolonifera* creeping bent, *Elytrigia repens* aggregate (I didn't attempt to identify to species as this is a very complex group involving hybrids), *Festuca ovina* sheeps fescue and its larger counterpart *F. rubra* red fescue and of course white clover again. There was a single clump of *Trifolium pratense* red clover, but unexpectedly no sedges of any description - I would have expected at least 3 saltmarsh species here, so rather a poor community. Scattered in amongst this were dense stands of *Bolboschoenus maritimus* sea clubrush, usually found lower down the merse and numerous scattered white heads of *Oenanthe lachenalii* parsley water dropwort with its finely divided pinnate leaves, standing above the general level of the surrounding vegetation.



The next lower step was low marsh and here the species changed dramatically with abundant *Puccinellia maritima* common saltmarsh grass, *Aster tripolium* sea aster, *Triglochin maritimum* sea arrowgrass, masses of the small *Juncus gerardii* saltmarsh rush (more about which later), *Glaux maritima* sea purslane and close to the actual shoreline *Armeria maritima* thrift. *Rumex crispus* curled dock with its deep red fruits in a dense spike occurred here and in the preceding step. It was on the step that we lunched on the “comfort” of a large ash trunk overlooking a deep creek; and here was the only specimen of *Beta maritima* sea beet we saw on the site.

The lowest step corresponded to pioneer saltmarsh, a community also seen frequently in the bare mud of the saltpans at higher levels in the merse. Vegetation here covered about 50% or less of the ground and was dominated in various places by different plants. Notable were *Spergularia maritima* sea spurrey with both pink and white flowered plants, *Salicornia* spp, glasswort or samphire (although the latter name can cause confusion with at least two other non-related species), *Suaeda maritima* annual sea-blite. Here we also noted a single rather sparse clump of the invasive *Spartina anglica* which normally spreads rapidly through this community, but here seemed unable to do so. In one of the creeks in the upper marsh we spotted a

single clump of *Ranunculus sceleratus* celery-leaved buttercup. Some of the salt pans, particularly close to the upper marsh areas, help large colonies of what appeared to be *Juncus compressus* round-fruited rush, so we completed a TPP form detailing habitat, colony size, etc.



This rush is considered rare here and a Nationally Threatened species (declining colonies). But closer examination at home was confusing as the distinction between this and *J. gerardii* is difficult to say the least. I'm not convinced and need to send samples way for expert determination.

Scattered through almost all of these steps, there were varying numbers of *Cochlearia officinalis* aggregate common scurvy grass and *Atriplex prostrata* spear-leaved orache. Incidentally, we tasted the scurvy grass, glasswort and sea-blite, finding all palatable!

The various sections of the merse held only 33 species, a poor total for such an area. Controlled grazing would probably increase the species diversity of the merse by reducing the height and vigour of some of the taller or more rapidly growing species, and allow less competitive species to get access. Many of the other Solway marshes hold considerably more species (Mersehead, Auchencairn, Rough Firth, Fleet Bay and Creetown) including several scarce or rare species for the VC.

As a footnote, Sarah and Ken, who provided all the above photos, followed up my grid reference for *Acorus calamus* sweet flag on the merse near Kirkconnell House and found 2 clumps (more in the next Newsletter).