

## Sea Moor Tarn (Brown Bank Marsh) Local Wildlife Site

### Survey Report

<b>Site Name/ Code:</b> Brown Bank Marsh	<b>Location:</b> Northeast of Silsden
<b>Date of Survey:</b> 30/08/16	<b>Surveyor:</b> F.Denham
<b>Grid Reference:</b> SE059481	<b>Site Area (Ha):</b> 3.904
<b>Natural Area:</b> Southern Pennines	<b>Public Access:</b> None
<b>NVC Communities:</b> S27, M23, MG10, S12	

### Site Description

Brown Bank Marsh is a small site surrounded by grazed pasture, northeast of Silsden. The South Pennine Moors SSSI, SAC, SPA is situated approximately 600m southeast of the site. The site comprises a central depressed area dominated by swamp vegetation, surrounded by rush pasture which then grades into unmown neutral grassland. There are no boundaries to the marsh community, thus the site has been expanded outwards to include the surrounding semi-improved pasture. This bounds the site by dry stone walls, with the exception of the northwest edge.

The site lies within a natural hollow and is fed/kept waterlogged by Sea Moor Dike from the east. The majority of the site comprises swamp vegetation in standing water which deepens towards the centre. There is a small central area of swamp overwhelmingly dominated by *Typha latifolia*. This best fits S12 *Typha latifolia* swamp. A number of small areas of open water have been vegetated. On the day of the survey only two open waterbodies were still visible. These comprised *Carex rostrata* around the periphery with some locally dominant *Iris pseudacorus* and *Potamogeton natens*. Other aquatic species may have been present, however lack of access prevented identification.

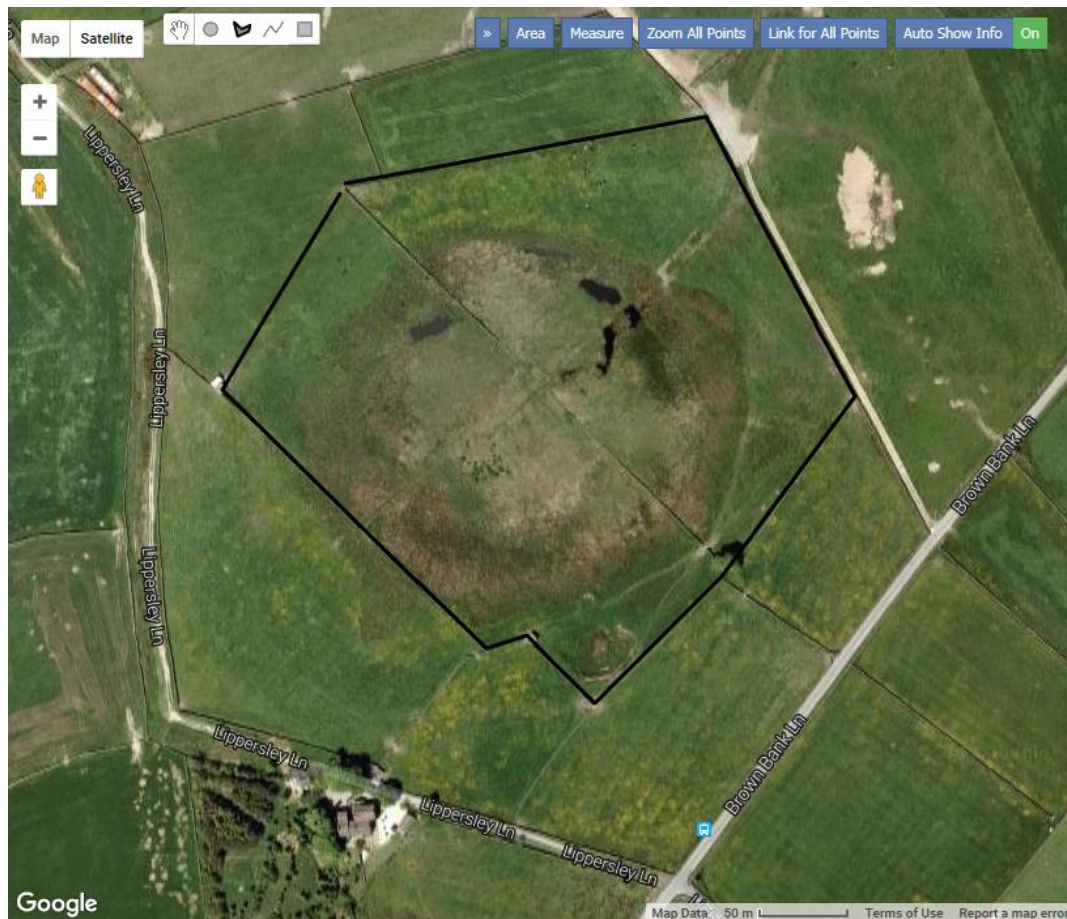
*Carex rostrata* is the dominant species within the main central area of swamp vegetation, with abundant associates. This best fits the NVC community S27 *Carex rostrata* – *Potentilla palustris* tall-herb fen. There is a small area of scattered scrub in the western portion of this community. Scrub species are *Alnus glutinosa* and *Salix cinerea*. Other species scattered within this community include locally abundant *Potentilla palustris*, *Eriophorum angustifolium*, *Equisetum fluviatile* and *Lotus pedunculatus*. Frequent to abundantly occurring species include *Galium palustre*, *Veronica scutellata*, *Stellaria uliginosa*, *Viola palustris* and *Mentha aquatica*. Other sedges are occasional and grass species are occasional including *Carex nigra*, *Agrostis canina*, *Agrostis vinealis* and *Holcus lanatus*. Rushes are common throughout and include *Juncus effusus*, *J. articulatus* and *J. acutiflorus*. Bryophytes are not common but include locally abundant *Calliergonella cuspidata* and *C. giganteum*.

There is a strip of rush pasture around the periphery of the swamp, as the ground rises. This best fits the NVC community M23 *Juncus effusus/acutiflorus* – *Galium palustre* rush pasture. Rushes dominate with *Juncus acutiflorus* and *J. effusus* both locally dominant. *Agrostis canina* and *Alopecurus geniculatus* are locally abundant

grasses, with *Holcus lanatus* abundant. Herbs are only occasional here with *Lotus pedunculatus* locally abundant and *Galium palustre*, *Cardamine pratensis*, *Lychnis flos-cuculi*, *Stellaria uliginosa* and *Cirsium palustre* are occasional. *Sphagnum* spp. are locally abundant.

A small unmown strip along the northern edge of the M23 rush pasture comprises slightly dryer grassland which best fits the NVC community MG10 *Holcus lanatus* – *Juncus effusus* rush pasture. This grassland is dominated by *Holcus lanatus* with only occasional *Juncus effusus*. It was previously assessed as NVC community MG13 which is dominated by *Agrostis stolonifera* and *Alopecurus geniculatus*, and although the latter species is locally abundant, *Holcus lanatus* seems to have increased its cover since the last survey, with *Agrostis vinealis* being frequent.

NB In previous surveys (SEGI 1997 and 2002) the *Carex rostrata* dominated community within the site has been assessed as NVC community M9 *Carex rostrata* – *Calliergon cuspidatum/giganteum* mire.



## **Ecological Evaluation**

The S27 tall herb fen/swamp scores 19/10 from the rich fen table thus qualifying under the Fe3 criteria for species diversity. It also scores 14/8 from the poor fen table, thus qualifying under Fe4. Finally it scores 22/10 from the combined rich fen and poor fen tables and therefore qualifies under Fe5 mixed fen for species diversity.

Additionally S27 is a rare community and is a qualifying criteria under Fe2 (the S27 community is just over 2.5ha).

The M23 rush pasture scores 9/10 from the rich fen table thus does not pass the Fe3 criteria for species diversity. However it scores 10/8 from the poor fen table therefore qualifying under Fe4 for species diversity. It also scores 14/10 from the combined rich/poor fen tables and so qualifies under Fe5 mixed fen for species diversity.

The small strip of MG10 grassland does not score highly and does not pass the species diversity criteria for neutral grassland.