MOORSPACE

A joint partnership publication for the Humberhead Peatlands National Nature Reserve.
LIFE+ Project – an update

Since the last edition of Moorspace progress has been made on a number of fronts, there is much more to do and we will take opportunities to keep updating readers whenever we can.

Like fieldfares the “Estate team” have now returned from their summer time away and have settled down to their winter challenge of scrub removal on Thorne and Hatfield Moors. In preparation for the work the Estate team have spent the early part of the autumn ensuring that access tracks are clear of scrub to allow machinery access. A winter of scrub removal has been planned using both contractors and our ‘in house team’ using both flailing machinery as well as more labour intensive but sensitive chainsaw and chipper method. Two “in house” machinery methods have been successfully trialled off Elmhirst Tram, after additional radiator cooling equipment was added to the roof of the Softrack – a vehicle with wide tracks to access the Moors for management works!

Some exciting work on the Reserve’s star bird, the nightjar, has shown how the GPS tagged birds have used the surrounding hedgerows and probable insect hot spots (the sewage works). The small tags attached to the birds feathers record the position of the birds every 3 minutes for several days allowing the birds position to be mapped. This tagging work will start again next June. Other monitoring work continues looking at invertebrates, where a series of sampling methods have been deployed to look at the reaction of invertebrate species to the scrub clearance. A programme of monitoring the water levels on the site will be developed over the winter months.

Our associated beneficiary in the LIFE+ Project, Doncaster East Internal Drainage Board, have been busy planning and designing the pumping station, weirs and bunds that will be required on Thorne Moors to implement the Water Level Management Plan. It is planned that these works will be carried out during the first months of 2016. Further works are being planned to the water management on Hatfield Moors – an important step in the restoration of this lowland raised mire.
A series of events have taken place during the summer months and we have participated in a series of public shows. Further guided walks and events are being planned for the winter months and these are listed within this leaflet. The Humberhead Peatlands NNR has also launched its own Facebook page where people can tell us what they have seen on the Reserve as well as a means of access to other information including the events mentioned above.

The work within the LIFE+ Project is not undertaken in isolation. We are grateful for the help of all our colleagues within Natural England and our partners outside of Natural England. Also our gratitude is extended to the many volunteers who have helped us with our achievements to date.

We have many more challenges ahead if we are to achieve all our targets.

David Hargreaves
LIFE+ Project Manager

Take care

- There are many old peat workings, drains and water courses. You are strongly advised to keep to way marked walks and existing tracks.
- Please take responsibility for your own safety. In hot weather you will need a sunhat, drinking water and insect repellent.
- Dogs must be kept under effective control at all times. You must keep your dog on a short lead between 1 March and 31 July and all year round near farm animals.
- Camping, fishing, barbeques, motorcycles, horses and cycles are not allowed. Cycles are permitted on the designated route only at Hatfield and horses by permit only at Hatfield.
- Do not leave valuables in your car.
- Danger deep water. No swimming.
- Snakes live here. Do not touch them.
- Prepare for your visit by wearing suitable outdoor clothing – you will need to wear stout shoes or wellingtons.

Please follow the Countryside Code

- Be safe, plan ahead and follow any signs.
- Leave gates and property as you find them.
- Protect plants and animals and take your litter home.
- Keep dogs under effective control.
- Consider other people.

Facilities

- There are toilets on Hatfield Moors at the Boston Park car park but none at Thorne Moors – the nearest being in the town.
Thorne Moors

There are two flat walks across Thorne from the west access point near Moorends. From the east, Crowle Moors meets Thorne at a metal footbridge access point (Bailey Bridge) and there is a third circular walk, not shown on map. All involve a mixture of peatland, grass and boardwalks underfoot. Please park thoughtfully along Grange Road or at the Winning Post Centre in Moorends.

Follow the brown signs along a disused road to a metal footbridge on the Reserve’s boundary, close to site of the old Thorne Colliery. Cycle racks are available.

For foot access, leave Marshland Road in Moorends at the brown sign. Turn left into Moor Lane and then right onto Jones’ Cable. Follow for a mile to the Reserve’s boundary.
Casson’s Garden, Rhododendrons and Thorne Moors

Rhododendrons may be a familiar garden plant to many individuals; in the smaller garden its close relative azaleas have more appeal. Rhododendrons are a genus belonging to the botanical family the Ericaceae; over 1024 species have been described. They have been known in the western world since the sixteenth century when botanist Charles de l'Ecluise described a species latterly referred to as *Rhododendron hirsutum*.

Rhododendrons occur naturally and are found mainly in Asia, although they are also widespread throughout the Southern Highlands of the Appalachian Mountains of North America. The genus are normally described as being shrubs, small to (rarely) large trees, the smallest species growing to 10–100 cm (3.9–39.4 in) tall, and the largest, *R. protistum var. giganteum*, reported to 30m (98 ft.) tall.

*Rhododendron ponticum* subsp. *baeticum* is one of the most extensively cultivated rhododendrons in Western Europe. It is used as an ornamental plant in its own right, and more frequently as a rootstock onto which other more attractive rhododendrons are grafted. *R. ponticum* was first introduced to Great Britain from south-west Spain in 1763, supplied by Conrad Loddiges, and became widely distributed through the commercial nursery trade in the late 18th and early 19th centuries. The roots readily send up suckers from below the graft, often allowing it to overtake the intended grafted rhododendron. Only species rhododendrons come true from seed. Named cultivars must be propagated from cuttings, grafting or layering. Rhododendron cuttings are taken with a heel and wounded to encourage rooting.

Victorian enthusiasm for gardening and the relative improvement in the wealth of the country saw a rapid expansion of the horticultural trade. A number of notable horticulturalists began commercial exploitation of the hybrids in the UK, on the continent and in the USA. Notable examples are Thomas Nuttall of Lancashire, A. Waterer of Knap Hill & Bagshot, M. Jean Byls of Ghent, James Cunningham of Comely Bank, Geber Francoisi of Ghent, Rev. William Herbert, Sir John Horlick, Iveson of Northumberland, M. Koster & Sons of Boskoop, Ludwig Leopold Liebig, Otto Schulz of Berlin, Standish & Noble at Sunningdale and Van Houtte of Ghent.

A notable local example was William Casson, born in Thorne on 23 October 1796 to Mordecai and Mary Casson. He had two brothers, Mordecai and John Calvert, and one sister, Sarah. After a very basic education at the vicarage school, he was apprenticed to a firm of grocers and later worked in a grocery business in Thorne started by his grandfather. By the mid-1850s, William and his brother John had become successful "seedsmen, grocers, and farmers." They established an important nursery east of Thorne where he transformed the "unproductive moor" into a place for raising a variety of plants for their business.

William’s family lived and worked land at Clap Gate Farm (now The Willows) near Thorne. The holding extended eastward onto the land now comprising part of Thorne Moors (i.e. east of the Thorne Waste Drain). It was on part of this holding that William and his brother John started their ‘experimental garden’. The peat soil favoured the growth of particular groups of plants such as salvias, fuchsia’s, deutzia, manglesii and of course rhododendrons. From the 1860s the name Casson’s Garden became associated with the reclaimed units east of Thorne Waste drain as well as three further
units to the south. An 1872 catalogue listed 197 named hybrid rhododendrons derived from leading British and European growers.

In 1878 John died, followed by William's death on the 22nd January 1886. The family interest was taken up by John’s son Francis. However, Francis’ unexpected death in 1888 and the eventual sale of the family's interest in 1890 of the “plantations, gardens, shrubberies, peat waste, land etc.” drew to a close the family interest. As well as the topographic name the Cassons have left a living legacy and that is rhododendrons.

Most of “Casson's Garden” has now been lost, turned over to potato growing. However some species survive on Thorne Moors such as the sheep-laurel (*Kalmia angustifolia*), rhododendrons certainly survive and cover a relatively large area. Some of the rhododendrons present today undoubtedly derive some of their genetic material from the many hybrids that were established in the areas in the 19th century. However, the favoured root stock for most of the cultivars and hybrids was the species *Rhododendron ponticum*, this together with the fact the hybrids do not breed true to type has meant that the majority of the extant rhododendrons are probably not known hybrids and could be described as *R. ponticum*.

*R. ponticum* was known in the wild by at least 1894 and has spread widely in the 20th century. The rate of spread has accelerated in the last 50 years, possibly as a result of increased disturbance to natural communities from forestry, the impact of myxomatosis on rabbits and over-grazing. Its distribution is now considered stable by some, in that it has not been detected in new 10km squares but the species is still expanding aggressively within individual patches of habitat. Few people who visit Britain's countryside when *Rhododendron ponticum* is in flower can comprehend the damage that has been caused to our native flora and fauna by this exotic Victorian introduction.

The plant is responsible for the destruction of many native habitats and the abandonment of land throughout the British Isles. The reason for this is simple. Where conditions are suitable, rhododendron will out compete most native plants. It will grow to many times the height of a person, allowing very little light to penetrate through its thick, evergreen leaf canopy. This effectively eliminates other competing native plant species which are unable to grow due to insufficient light. This in turn leads to the consequent loss of the associated native animals.

Rhododendron invades areas both vegetatively and via seed. Established plants spread by lateral horizontal growth of the branches. A single plant may eventually end up covering many metres of ground with thickly interlaced, impenetrable branches. Where the horizontal branches touch the ground, they will root, continually extending the area of rhododendron...
cover. It is worth noting that because of its extremely lateral growth form, rhododendron plants are capable of extending well into areas which otherwise would not be suitable for their growth. For example rhododendron is capable of dominating large areas of wetland with its canopy, while the main stem and roots of the plant are well back on suitably dry land.

Rhododendron seeds are tiny and hence wind dispersed. Each flowerhead can produce between three and seven thousand seeds, so that a large bush can produce several million seeds per year. Although not all the seeds will grow successfully, given the right conditions, a good many will germinate. Seedlings have difficulty becoming established in areas where there is already continuous ground cover from native plants. Establishment is best in disturbed areas where the native vegetation has been in some way disrupted, providing an opening in the plant cover. Specific mycorrhizal associations with the roots of rhododendron plants provide a competitive advantage and allow the plants to flourish in nutrient-poor soils.

On Thorne Moors in particular it is estimated that the rhododendrons cover 193ha of land either as very dense canopy or as scattered clumps underneath birch. As part of the LIFE+ Project our aim is to reduce the cover. A careful watch will be kept for significant rhododendron plants which show characteristics of being hybrids or cultivars. These may be retained for the time being, so that a plan can be put together for their removal to a suitable public garden or rhododendron collection, however, it is likely that only true hybrids or cultivars will be of interest to horticulturalists. In a public garden or collections the presence of the rhododendron hybrids and cultivars should not be a problem, unlike, here on Thorne and Hatfield Moors. There are those who do not share

the author’s opinion and their valued opinion is that rhododendron has a valid place on Thorne Moors, they are part of the cultural landscape of Thorne and are “braided” into the history of both Thorne Moors and Thorne.

David Hargreaves
LIFE+ Project Manager

I am indebted to Martin Limbert who kindly provided me with copies of various articles written or contributed by him, regarding William Casson and The Rhododendrons of Casson’s Garden.

Responses from Issue 1

- We have included a map to show how the Reserves sit in the local area.
- The way marked routes range from an Easy Access route of 2.4km and taking 45mins at Hatfield to a long 8.3km route taking 2.30hrs at Thorne. There are a variety of walks with distances and timings shown on information boards at each Reserve.
- We have included the Thorne Moors map again as there were some small detail corrections to make.
- You can walk across Thorne Moors to Crowle Moors, or vice versa on the Peatlands Way.
How do I get to Humberhead Peatlands NNR?

The closest towns to the NNR are Goole, Doncaster and Scunthorpe.

By public transport

Rail stations – Thorne North and South. Contact South Yorkshire Transport on 01709 515151.

Moorends is served by bus from Thorne. Contact Doncaster Tourist Information on 01302 734309.

Crowle is served by rail and bus. Contact Brigg Tourist Information on 01652 657053.

Hatfield Woodhouse and Wroot villages are served by a limited bus service.

Walks and Events coming up

- 11 February drop in from 11am until 2pm. – half term family activity on Hatfield Moors – thinking about spring wildlife – a make and take session. No need to book. Call 07766 420290 for more info.


- And a date for the future – Hatfield Moors Open Day 2016 will be on Sunday 25 September.

How do I contribute to Moor Space?

Contact as above marking for the attention of the Moor Space Editor.

To receive future issues of Moor Space contact us at moorspace@yahoo.com
Contacts

Moor Space is produced and edited by a Steering Group who can be contacted at moorspace@yahoo.com

The Steering Group includes representatives of the following organisations:

North Lincolnshire Council – Own and manage land on Crowle Moors and maintain access to this and other land nearby.
Contact: 01724 729000 * enviromenteam@northlincs.gov.uk

Doncaster Metropolitan Council – Publicises access to and around the Moors.
Contact: 01302 736000 * publicrightsofway@doncaster.gov.uk

Lincolnshire Wildlife Trust – Owns land on Crowle Moors and manages it as a nature reserve.
Contact: 01507 526667 * info@lincstrust.co.uk

Natural England – Natural England owns land on Thorne Moors, Goole Moors and Hatfield Moors. It is all part of the Humberhead Peatlands National Nature Reserve.
Contact Senior Reserve Manager: 07827 280405. www.gov.uk/natural-england

Thorne & Hatfield Moors Conservation Forum – Prioritises science and publishes research, see website for list of publications. It also campaigns on issues affecting the conservation of the Moors.
www.thmcf.org and see also thmcf.wordpress.com
Contact: execsec@thmcf.org

Restoring the Humberhead Peatlands – LIFE+ Project (LIFE13NAT/UK/000451) – Funding from the European Union’s Biodiversity and Nature Programme (EU LIFE+), Doncaster East Internal Drainage Board and Natural England is helping the restoration of lowland raised mires of Thorne and Hatfield Moors
Contact: Humberhead.Peatlands@naturalengland.org.uk

JBA – Is a multi-disciplinary environmental and engineering consultancy specialising in wetland ecology, river restoration and the management of water with offices throughout the UK, Ireland and in the Far East.
Contact: Kieran Sheehan on 01302 720313
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FRONT COVER IMAGES: Main Image: Autumn shades © Steve Hiner
Small Left: Vodafone staff helping on a corporate work day at Hatfield Moors.
Small Right: Family fun at October half term event on Hatfield Moors.