THE HISTORY OF SHARPHAM MOOR PLOT

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SUMMARY

The history of what is thought to be the second oldest site in Britain to be purchased as a nature reserve is told in the words of its discoverer, its major subscriber and its present reserve manager. The original interest was a hybrid sedge then unknown elsewhere in Britain. The present interest arises from botanical records going back to 1915 and the changes brought about by surrounding peat extraction.

The manuscript of *Sharpham Moor Plot, Somerset. Notes on its History and Vegetation* by H.S. Thompson (1870–1940) was written for the *Journal of Ecology*, sent to its editor, A.G. Tansley inviting modification, but apparently never published.

The great peat moor of central Somerset, lying between Glastonbury on the east, Edington Station and Chilton Polden on the west and more or less bounded and drained by the River Brue on the north and the Liassic Polden Hills on the south, has been known to British botanists from the time of Wm. Sole (1741–1802) at least. Parts of it have been occasionally visited by the writer during at least 50 years.

MAIN LANDMARKS IN THE HISTORY OF THE PLOT

In *A Catalogue of the Rarer Plants of the Turfmoors of Somerset* by Thomas Clarke (1793–1864) we read (Clarke 1859):

> *Carex filiformis (=C.lasiocarpa)* does not appear to have been heretofore recorded in our county ... It grows plentifully towards the south eastern end of the moor, about two miles NW of Sharpham Park [in which H Fielding was born]. On July 8th 1915, I visited that end of the moor from Street, and in a small wet enclosure where *C. lasiocarpa* Ehrh. (*C. filiformis* L.) was growing, observed numbers of what I took to be its hybrid with *C. riparia* which latter is strangely rare in its immediate vicinity. My surmise was at once corroborated by botanists at the British Museum (Nat. Hist.) and others including the late Arthur Bennett, who subsequently sent me the full synonymy which includes *C. evoluta* Hartmann (1818). Though not previously seen in Britain, it had been recorded from Norway, Sweden, Petrograd, Germany and Transylvania [see Thompson 1915, 309].
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> As the peat from the greater portion of this narrow field (nearly 1½ acres) had long since been cut and overgrown with marsh-loving small trees, shrubs and other plants, it was desirable to stop further cutting of the peat in the front portion and to prevent from interference the major part of the enclosure already covered with thick bush. For this purpose, and with the financial and other encouragement of the editor of this journal [*Journal of Ecology*, edited by A. G. Tansley] who also kindly devoted a weekend to

come to Bristol and thence on June 23rd 1923 to the moor. A fund was soon collected from 33 subscribers and the field was bought. Some months later, it was made over to the Society for the Promotion of Nature Reserves [which later became the RSNC]. [Confusingly, slender sedge now called *Carex lasiocarpa* is also mentioned here by its earlier name, *Carex filiformis*. The latter name is now used for downy-fruited sedge formerly *C. tomentosa*.]

On 10th August 1923 Professor A.G. Tansley wrote a letter to Mr Hamer, secretary of the National Trust ('for places of Historic Interest or Natural Beauty') in which he described Sharpham Moor Plot and its potential for ecological research. The intention was that the freehold be transferred to the National Trust. It was later agreed that the Society for the Promotion of Nature Reserves (SPNR) was a more appropriate owner. The following extract was used in a Somerset Trust for Nature Conservation (STNC) newsletter No. 25 Jan. 1974 by Miss B. Gibson.

Tansley wrote:

'The plot is a small one and a certain amount of peat has been removed from portions of it. These diggings, together with the drainage ditches which are connected with the general drainage system of this part of the Somerset Levels and separate the plot from neighbouring properties, have resulted in the original peat surface shrinking and partially drying. This surface, which for the most part appears to be untouched, stands one to two feet above the summer water level in the diggings and ditches. The greater part of the plot is more or less covered with small trees and bushes – the natural species of the Levels with numerous herbaceous species in between, the smaller is occupied by a turf of mixed fen and grassland plants. In and on the edge of the diggings there is peat at all levels – from a deeply submerged surface to the comparatively dry surface one to two feet over the water table. Thus habitats are provided for a great variety of plants – about one hundred species of vascular plants were noticed in a visit lasting two or three hours and these include a rare hybrid sedge not recorded elsewhere in Britain. Weeds, i.e. plants alien from the natural habitats of the Levels, are practically absent.

The property thus provides very good opportunities for the detailed investigations of the conditions under which different species can live, of their relation to the peat soil and water supply, and kindred studies, including detailed studies of the fauna, especially the insect fauna Such investigations can only be carried on on private property which is exempt from ordinary exploitation, or on public property assigned to such purposes ... .'

These accounts by Sharpham Moor Plot's discoverer and its distinguished supporter and major subscriber give us a picture of the plot in the early 1920s. The correspondence between them and reports to SPNR enable us to continue the narrative.

A party from SANHS visited in June 1924. That body contributed ten shillings per annum towards its upkeep from 1924 to 1936 Correspondence between Thompson and Tansley contained descriptions of the plot in the 1920s and 1930s. The sedge was 'holding its own' – the former owner refers to it as a sage!

In 1930, Thompson cleared *Molinia* and scrub from the front part of the plot and collected (on 10.8.32) a flowering specimen of the sedge now in Kew herbarium. A sheet in Birmingham University Herbarium (6.7.35) has a note 'not flowering again this third year'. The plot was visited in 1935 by Sir H. Godwin with Tansley and Thompson, a peat boring for pollen analysis was planned but may not have been carried out. Dr W. Watson and Mr D. A. Jones also visited the site and compiled lists of mosses, fungi and lichens.

Although the sedge had spread vegetatively in 1933, it was threatened by competition. A pencil note by Thompson on a letter dated 18.7.39 says 'it has been terribly overgrown of recent years, impassable in places'.

On 3rd March 1940 Thompson died from influenza. His obituary may be found in the *Journal of Botany* 1940 and *Proceedings of the Bristol Naturalists Society*. He was undoubtedly greatly

missed in botanical circles generally, and especially by SANHS. He was born in Bridgwater in 1870, of Quaker stock, educated at Sidcot and Bootham, Yorkshire, joined the Watson Botanical Exchange Club at age 16 and graduated from Bristol University. Author of two books and many papers, his most interesting discovery in the British Flora was *Carex evoluta*. His herbarium was bequeathed to Birmingham University (5,600 specimens), others to Reading and Geneva.

After Thompson's death, the plot was managed by Professor M. Skene of Bristol University during the Second World War. Educational and research use was intended, but it was difficult to reach from Bristol in wartime and the plot undoubtedly became overgrown. There were three short-term managers in the period 1946–1948. The owners (SPNR) considered selling in 1948 and consulted Tansley. He asked Dr J.F. Hope-Simpson of the Botany Department, Bristol University, to manage the plot. Dr Hope-Simpson found it completely covered by a tall carr of sallow, birch and alder. In consultation with SPNR and Professors Skene and Tansley, a management strategy was devised. This was put into effect by a local man (Mr R. Lockyer) between 1949 and 1953 and maintained into the late 1960s. The north-east third was to remain as woodland to see 'what ultimately happened to it'. The remainder of the plot was to be a U-shaped glade maintained by annual cutting to encourage herbaceous mixed fen vegetation. Scrub would be tolerated in the low-lying central area and there would be a margin of trees. Additionally, in 1957–1959, a peat slope was constructed for the study of colonisation and water requirements.

In 1954, there was a visit by Captain Diver of the Nature Conservancy, and Mr Riley of SPNR, but the most notable event of the decade was the rediscovery of *Carex evoluta* by Dr A.J. Willis. As this was its only British site, it is more likely to be a survival than a new hybrid.

In the 1960s there were some discussions concerning change of ownership or management responsibility. It was agreed not to hand it to the Nature Conservancy in 1962. Suggestions that the STNC take over the plot appeared from1964 to1967 when they did not want it, even as a gift! Attempts to interest Millfield School in 1962 and1967 were unsuccessful.

In 1968 Dr Hope-Simpson introduced Miss Barbara Gibson, Rural Studies Adviser for Somerset Education Department, to the plot. She recognised its potential for senior school fieldwork and arranged its lease, for a peppercorn rent, to Somerset County Council. Dr Hope-Simpson's management over the previous 18 years had provided a wide variety of habitats with opportunities for the kind of studies envisaged by Tansley. The schools involved were Elmhurst Grammar, Street, the Blue School and Secondary Modern, Wells, and the Grammar School, Midsomer Norton. I was involved as Head of Biology at Midsomer Norton which became Norton Hill School. Representatives of these schools were guided by Miss F. Seeley (Field Studies Tutor) through meetings on site and at Wells Teachers' Centre. A scheme based at the centre provided me with the time and resources to review the history of the plot, construct maps, give an account of the sedge, a checklist of 187 flowering plants, identification keys and leaf drawings, together with a review and illustrations of ecological studies.

In 1970–1973 a range of exercises was undertaken, with various degrees of clarity or obscurity in interpreting the results, details would not be appropriate in a historical account. Valuable marker poles, at least half of which survive unreplaced to the present day, were erected in 1970. In the same year, three ceramic drainpipes were fitted vertically to act as dipwells. In the spring of 1972, a party from the Blue School constructed a 4 x 4m square pond, with sides stepped for safety.

We presented a display on Sharpham Moor Plot at the Somerset Wildlife Trust's (SWT formerly STNC) Annual General Meeting in November 1972. This led to my involvement with the Peat Moors Committee and eventually my role as manager of Street Heath Reserve. The focus of my students' ecological investigations changed to the larger reserve so the 1980s was a quiet decade for studies at Sharpham, but markers and measurements from the early 1970s enabled us to return in the 1990s and rework some of the studies to investigate vegetational change.

The plot eventually came under SWT management and I was made manager by 1989. It had been notified as a Site of Special Scientific Interest (SSSI) under the 1949 Act in 1967 and under the 1981 Act in 1986.

ECOLOGY OF THE PLOT

There have been marked changes in the environs of the plot over the 25 or so years I have been visiting it. In the early 1970s, fields on two sides were pasture for cattle, both of these are peat fields now, one being worked for blocks, the other by the open-cast method. Another side was wooded – mainly alder; this is now worked out down to the clay. There was a small farm called Loading Batch Farm across the drove from the reserve entrance, no trace now remains. Then there were extensive blocks of woodland, hay meadows and pasture with relatively few peat fields, some still cut by hand. Now the two reserves are almost the only woodland blocks remaining in an open landscape of peat pits, reed and *Typha* beds.

There have been great changes in average and extreme water levels. Flooding was a normal event in the early years. There is a published photograph (Hope-Willis and Simpson 1955) dated 19th August 1954 showing Sharpham Moor Plot with the fields to the east flooded. Floods prevented the annual spring clearance of the plot in 1960. The old shallow pre-1900 peat workings in the wooded part of the plot were flooded once in the early 1970s but I have not seen so much as a puddle since. A condition of planning consent for peat digging either side of the plot was that water be pumped into the side ditches to maintain a satisfactory level within the plot. This was set up in January 1989 with a buried pipe across the SW frontage connecting the two side ditches which were plugged at either end with clay. No such protection was afforded to the north-east boundary where there is a deep ditch 2 to 3m lower than the woodland floor. The consequent drying and shrinking of the peat has produced a deep crack running parallel with the ditch for virtually the whole 60m woodland edge. This process cannot be reversed but can be prevented from worsening by irrigation. A scheme to make this boundary impermeable is now in place.

The other change has been in the relationship between the plot and the surrounding vegetation. From 1923 to about 1970, it could be regarded as a small unit that was more or less typical of the surrounding area. Apart from the sedge last seen in 1955, its plants were fairly typical although they had been maintained for botanical rather than economic reasons. As it became more and more surrounded by pumped peat workings, it became more and more isolated. It retained many species in common with the neighbouring Street Heath, e.g. Blackcurrant *Ribes nigrum*, Marsh Fern *Thelypteris palustris*, Lady Fern *Athyrium filix-femina*, Skullcap *Scutellaria galericulata*, *Carex remota* and Common Twayblade *Listera ovata* but lacks Royal Fern *Osmunda regalis* and Bracken *Pteridium aquilinum*. It has, by chance, acquired a few species not known at Street Heath. These include single trees of yew *Taxus baccata*, elm *Ulmus* sp and Sycamore *Acer pseudoplatanus* as well as the fungi *Amanita muscaria* and *Geastrum triplex*. Hop *Humulus lupulus* is present on the plot and also in some Polden hedgerows. Lesser Celandine *Ranunculus ficaria* appeared for the first time in spring 1989 but apparently failed to establish itself.

The plot was the subject of fieldwork exercises from 1970 to 1978 inclusive but Norton Hill School sixth form groups (now called years 12 and 13) resurveyed some areas in 1989 to 1992. In 1992/3 I mapped the plot on a 1:100 scale showing all trees over 5cm diameter. I retired from teaching in 1993 but not from my interest in Sharpham Moor Plot. I continue to photograph its flora and fauna and monitor its water levels. I should be pleased to hear from any 16+ or 18+ educational establishment willing to continue this work with the close liaison which my duties as manager require.

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About the Author

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