INTRODUCTION

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Thorne Moors, a degraded raised mire 15kms north-east of Doncaster, lies immediately north-east of Thorne, in a flat, very low-lying region, a part of the extensive Humberhead Levels. Although situated mostly in Yorkshire, the eastern part of the moorland extends into Lincolnshire. To the west, the moorland is surrounded by excellent arable farmland; small pockets of pasture land have gradually been ploughed, and almost eliminated.

The name Thorne Moors, as defined here, denotes the peatland and contiguous areas of unfarmed but reclaimed land situated to the north-east of Thorne and west of Crowle. The peatland comprises several 'moors', each defined by parish boundaries: Thorne Waste,* Snaith and Cowick Moors, Rawcliffe Moors, Goole Moors and Crowle Moors. The region is mapped and described in Limbert *et al.* (1986), where a detailed habitat description is available.

The present surface of the moors, extensively modified by continuing peat cutting, lies at c. 2m O.D., and therefore below natural high tide level of the surrounding rivers. This necessitates continuous pumping to avoid flooding in the area. The moorland, though formerly more extensive, has been lessened in area by reclamation, and is now reduced to c. 2100ha, including several peripheral unfarmed but reclaimed areas, which currently exhibit fen and carr characteristics. The moorland is traversed by a network of used and disused tramways, utilised for hauling cut peat in trucks, which often run on ballast on the peat, providing a niche for plants which would not otherwise grow on pure peat. The depth of the surviving peat varies, but is nowhere more than c. 2.5m. Thorne Moors is the largest surviving area of lowland ombrophilous mire in eastern England (Rogers and Bellamy 1972), and is notable for its existence in an area where the rainfall averages less than 60cms annually.

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Interest in the study of Thorne Moors is building on endeavour extending over two centuries, during which period a large number of papers, notes and records have been published. Further details are held in unpublished work, on data labels, and on herbarium sheets. The sheer volume of accumulating facts demands a periodical synthesis if this collected knowledge is to have both purpose and usefulness. The first known co-operative attempt to collate and publish a natural history of Thorne

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* Quoted references, particularly older ones, tend to use the names 'Thorne Moors' and 'Thorne Waste' indiscriminately.

Moors arose as a direct outcome of an excursion to the moorland by members of the Yorkshire Naturalists' Union in 1907. In reporting to the Union about relevant events in that year, Smith (1909) commented:

> *"It was . . . decided to proceed with the formation of a body of workers who could obtain the information necessary for the proposed account of [Thorne Moors]. Several names were proposed, mainly of naturalists residing in the neighbourhood of Thorne, Doncaster, etc., though it is yet too early to give these names, and other details, because it will take some time to organise the work. The general scheme is that the local naturalists be supplemented by other members of the Y.N.U., so that every branch of natural history will have its representative collecting and observing on the [moors], and in other ways gathering information. Where aid in identification, or in other ways, is required, the assistance of members with special knowledge will be obtained through the Sections and Committees of the Y.N.U. The compiled account might then be published in the Transactions of the Union."*

Regrettably, this imaginative scheme, which was probably conceived by the Doncaster naturalist Dr. H. H. Corbett, was unable to proceed, as Smith (1909a), a year later, had to report:

> *"The Thorne Waste Survey was organised, and several workers were prepared to start. The owners and tenants of the Waste were approached for permission. They, however, sent a representative to explain to [Dr.] Corbett that for reasons given, they could not sanction the proposed survey."*

Although visits and more sustained research continued, over 60 years were to elapse before a further attempt at wide-ranging data gathering was again attempted. This was *An Outline Study of Hatfield Chase, Part 1*, written by the Thorne naturalist William Bunting and the staff of Doncaster Museum. It was specifically prepared to present environmental evidence to counter the Central Electricity Generating Board's proposal to dump pulverised fuel ash on the moors. The dossier was completed in early June 1969, and 11 copies were produced (Skidmore 1970), though it was photocopied more widely as its broader significance was recognised. Today, however, the *Outline Study* is difficult to obtain, and is inevitably becoming outdated. Much subsequent fieldwork, coupled with visits to libraries and museums, has led to very much more data being available. From 1979, this new work, building on the foundations laid down a decade earlier, has led to the preparation and publication of studies of many aspects of Thorne Moors, with others still being investigated. Although modern workers are not operating as a 'study group' or 'survey team,' there has been sufficient contact and co-ordinated interest in recent years to enable the documentation of a relatively wide range of subjects to proceed.

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The current publication, *Thorne Moors Papers*, should be seen as an essential component of this work which, broadly, presents an overview of several aspects of the moorland. The first paper is a background account of the geology and landscape development of the Thorne Moors region, summarising, in addition to solid and Quaternary deposits, an outline of peat stratigraphy and palynology, and details of two major anthropogenic alterations to the landscape: river diversions, and land reclamation through warping. The second paper gives further information on the development of the moorland landscape; and the third provides a wide-ranging, but admittedly provisional, bibliography of the Thorne Moors flora, intended to facilitate future botanical research on the moorland. The four remaining papers can be grouped together, and provide a basic listing of the liverworts, mosses, fungi, lichens and charophytes of the site. The remaining 'lower' plants, the other algae, remain ostensibly almost unworked, although this is not strictly true. A number of fieldworkers have collected algae on and around Thorne Moors, from an odd species to more comprehensive gatherings. These include Thomas Birks jnr (Birks 1905), Thomas Bunker (Bunker 1882, Limbert 1983), William Bunting (Bunting *et al.* 1969), George Norman (Lees 1888, West and West 1900-01), H. F. Parsons (Parsons 1878, Lees 1888, West and West 1900-01), and William West (Anon. 1886, Lees 1888, West and West 1900-01). However, the number of records seemingly available is very small, obviating the need, at the moment, to attempt a summary of the data to hand. In 1905, Thomas Birks, who was probably especially interested in diatoms and desmids (Birks 1878), spoke to Goole naturalists *inter alia*, about freshwater algae. He commented:

> *" . . . probably there is no district in England that is likely to yield better results than the Goole Moors and the ditches in their neighbourhood. During the last years of my residence in Goole[1] I collected many rare and interesting species . . . For two or three years I carefully worked the ditches by the edge of Goole Moors, and seldom returned from a visit without something new and interesting and often rare."*

It would be interesting to know how many of these early algological records have been preserved, as the known records cannot even begin to provide a summary of the range of species that these workers must have encountered. In more recent years, Bunting *et al.* (1969), although covering a wider area than Thorne Moors, have added to this conjecture by remarking:

> *" . . . it is understood that Wm. Bunting has a comprehensive list of the algae, including at least one new to science[2], which will be published at a later date."*

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[1] He left the Goole area c. 1885.

[2] Probably *Lyngbya thornensis* B. & L. (Bunting and Lund 1956)

Clearly, much background data apparently exists, to enhance requisite specialist fieldwork, which is desirable as a contribution to the fuller understanding of Thorne Moors, and which will, in addition, probably prove to be thoroughly rewarding.

References

Anon. (1886) Contributions to a Fauna and Flora of West Yorkshire. Section B. Flora. Algae (exclusive of Diatomaceae). *Trans Leeds Nat. Cl. and Sci. Assoc.* 1: 69-78.

Birks, T. (1878) The Flora of the Goole District. *Ann. Rep. Cttee Goole Sci. Soc. 1877-1878*: 1-8 [separate pagination].

Birks, T. (1905) Goole Scientific Society. The Work of the Old Members. *Goole Times*, 27th October.

Bunker, T. (1882) Bottle-nosed Dolphins. *Naturalist* 8: 56.

Bunting, W. and J. W. G. Lund (1956) A New Blue-Green Alga Epizooic on *Daphnia pulex* L. *Naturalist* 81: 88-90.

Bunting, W., M. J. Dolby, C. A. Howes and P. Skidmore (1969) *An Outline Study of Hatfield Chase. Part 1.* Thorne.

Lees, F. A. (1888) The Flora of West Yorkshire. *Bot. Ser. Trans Y.N.U. Vol.2.*

Limbert, M. (1983) An Early Visit to Thorne Moors. *Lapwing* 14: 18-26.

Limbert, M., R. D. Mitchell and R. J. Rhodes (1986) *Thorne Moors: Birds and Man.* Doncaster.

Parsons, H. F. (1878) Supplement to the Botanical Report for the Year 1878. *Trans Y.N.U. Ser. E. Botany*: 29-50.

Rogers, S. A. and D. J. Bellamy (1972) Peat Exploitation and Conservation: A Case History. *Proc. 4th Int. Peat Cong., Helsinki* 1: 219-33.

Skidmore, P. (1970) Fifty Years Later - Another Look at Thorne Waste. *Naturalist* 95: 81-7.

Smith, W. G. (1909) Committee of Suggestions for Research, in Yorkshire Naturalists' Union. Forty-sixth Annual Report, for 1907. *Trans Y.N.U. New Misc. Ser. No.2*: 24-6 [separate pagination].

Smith, W. G. (1909a) Committee for Suggestions, in Yorkshire Naturalists' Union. Forty-seventh Annual Report, for 1908. *Trans Y.N.U. New Misc. Ser. No.2*: 35 [separate pagination].

West, W. and G. S. West (1900-01) The Alga Flora of Yorkshire. *Bot. Ser. Trans Y.N.U. Vol.5.*

Woodruffe-Peacock, E. A. (1920-21) The Ecology of Thorne Waste. *Naturalist* 45: 301-4; 353-6; 381-4; 46: 21-5.