NFSG

NORFOLK FUNGUS STUDY GROUP

SPOREPRINT

2002

Verging on the Remarkable

A naturalist driving along a lane near Cranworth, about five miles south of East Dereham, would be unlikely to think it worth taking a closer look at the bank that separates the lane from the adjacent arable field but if they did they might be surprised. Alec Bull took such a look in 1961 and recognised a vegetation characteristic of nutrient-poor chalky boulder clay with species such as Dwarf Thistle (*Cirsium acaule*), Rough Hawkbit (*Leontodon hispidus*), Fairy Flax (*Linum catharticum*), Burnet Saxifrage (*Pimpinella saxifraga*) and Hoary Plantain (*Plantago media*).

The fungus-rich verge, Cranworth. ©Tony Leech

The bank is surmounted by a well-spaced line of oaks which account for the exceptional fungal interest of the site, recognised by Alec in 1982 when he found Norfolk's first specimen of the Devil's Bolete (*Boletus satanas*) there. The presence of this greyish-capped bolete with its swollen red-netted and pink-flushed stipe was confirmed in 2002. *Lactarius zonarius*, another first for Norfolk, was also found in 1982 and 2002, and again in 2002 on another roadside verge at Reymerston, a few miles away. In 2000, Alec found *Boletus radicans* on the bank, another first record for Norfolk but which is now known from at least three other roadside sites.

Devil's Bolete (*Boletus satanas*). ©Max d'Ayala

In 2002, Tony Leech attempted to key out a red russule from the site using Geoffrey Kibby's new synoptic key to the genus and was surprised to find it agreeing with

Russula rubra (unconfirmed). ©Tony Leech

Russula rubra, a species found on calcareous soils under oak but with just a single UK record. Dried specimens were sent to Geoffrey Kibby but confirmation may have to wait until more fresh material is available.

In the spring of 2002, the verge was designated a Roadside Nature Reserve by Norfolk County Council, a decision which subsequent records showed to be entirely justified.

Alec Bull

The **Norfolk Fungus Study Group** exists to provide mutual assistance with the identification of fungi and to record their distribution in Norfolk. Further details can be obtained from Tony Leech, 3, Eccles Road, Holt, Norfolk NR25 6HJ. Tel: 01263 712282. E-mail: leech @dialstart.net

The Database Is Mushrooming

Primed with Reg and Lil Evans' 38 000 records made between 1975 and the present day, the Norfolk Fungus Database continues to grow. I have recently added the records from several current members of NFSG (*see photo*) as well as a large number of records generated by Ted Ellis between the 1930s and the 1980s. The latter include many records of microfungi, made in collaboration with his brother Martin and sister-in-law Pamela who were both professional mycologists, as well as macrofungi recorded at Wheatfen. It was while entering these Wheatfen records that I realised that most of then were actually attributable to Peter Orton. Peter is one of Britain's most eminent amateur mycologists and is the naming authority for several hundred agarics. He visited Wheatfen many times from the 1950s to the 1980s and some of our best-known fungi owe their identity to these visits. A case in point is *Coprinus leiocephalus*, first recognised as distinct from a specimen he collected at Wheatfen on the 18th of September 1964, and one with which most of us must be familiar. Peter has kindly allowed us include his records in the Norfolk Mycota.

By the end of May, the 3000th species, *Conocybe intrusa* (see p. 9), had been added to the Database and the total had reached 55000 records. The Norfolk & Norwich Naturalists' Society is planning to publish a Norfolk Mycota, based on these records, in 2004. An exciting possibility is that this book could be accompanied by a CD with fuller details of all records.

Stop press: On July 15th 2003 there were 56332 records on the database.

Richard Shotbolt

©Richard Shotbolt

Postman delivers 50000th record. With the addition of Trevor Dove's 2650 Records, the Database passed the 50000 mark. Trevor is a postman and has made several interesting finds in gardens and along roadsides while delivering the mail. He has probably found more new sites for the Sandy Stilt Puffball (*Battarrea phalloides*) than anyone else. His favourite fungi are the Earthstars (*Geastrum*), for which he has 67 records for 9 species to date, and his ambition is to rediscover the Pepperpot Earthstar (*Myriostoma coliforme*), last seen in Norfolk (and Britain) in 1880.

Scarce Ganodermas

I recently found a marvellous specimen of *Ganoderma lucidum* on an oak tree near Keswick by the B1113. Its stalk was 8 inches long and its bracket 6 inches wide. This is one of our most attractive brackets and, in my experience, grows most often at the base of oak where it can be difficult to see if the surrounding vegetation is high. This is, incidentally, the same situation in which at Poringland I made the only known record of *Ganoderma resinaceum* in Norfolk. Occasionally *G. resinaceum* can produce a rudimentary stalk so the spores are usually the safest way to be certain of identification. The ornamentation of mature spores is coarser with *G. lucidum* than it is with *G. resinaceum*.

Trevor Dove

Richard's Reflections on Some NFSG Forays

Holt Hall July 12th

Daldinia concentrica

Reg Evans found King Alfred's Cakes on beech, a very unusual host for this species.

Phylloporus pelletieri

Tracy Money found the first Norfolk record for this small brown boletus with thick yellow gills instead of pores

Photo©Richard Shotbolt

Sphaerotheca pannosa

First British record for the Rose Mildew (*Sphaerotheca pannosa*) on Cherry Laurel (*Prunus laurocerasus*). Much commoner in S. Europe where it is a nuisance on nursery stock. The affected hedge had been recently pruned.

Thorpe End Woods, Norwich August 11th

Pleuroceras pseudoplatani

Rex Hancy found what is probably the second British record for the Giant Leaf Blotch (*Pleuroceras pseudoplatani*) on a Sycamore leaf. The sample was sent to Brian Spooner but did not produce any spores, so Rex hopes to collect some more this year.

Felthorpe Woods August 21st

Gyroporus castaneus

My collection of this good edible fungus, which is quite common along the Marriott's Way, had a rather acrid taste.

Xerocomus porosporus

The banks of the Marriotts Way were dotted with the remains of *Xerocomus chrysenteron* heavily infected with *Hypomyces chrysospermus*. But some of the boletes were in pristine condition and had slightly cracked caps. These were identified microscopically as *Xerocomus porosporus* and I would be interested to hear whether anybody has ever seen this species infected by *Hypomyces*.

Xerocomus rubellus

An animal had eaten the stipe of my specimen and left the red cap perched on a beech stump.

Sculthorpe Moor, Fakenham 8th September

Helvella dissingii (H. chinensis)

The original identification of this fungus by Tony Leech as *H. cupuliformis* was revised in the light of Brian Spooner's key to the Helvellaceae in *Field Mycology* April 2003 to *H. dissingii*, still a first Norfolk record. Several apothecia were white with the parasitic fungus *Mycogone cervina*, already known from Norfolk as a parasite of *H. macropus*.

Helvella dissingii infected with *Mycogone cervinus* (left), at Sculthorpe Moor. ©Tony Leech

Felthorpe Woods September 12th

Lepiota echinella

I spent a lot of time on this tiny parasol mushroom and was pleased to find that my identification was backed up by several previous records from Reg Evans

Russula cyanoxantha var. peltereaui

Trevor Dove found this variant of *R. cyanoxantha* with a pure green cap. It has a greenish reaction to iron salts.

Tricholoma columbetta

This pure white agaric with a greenish tinge in the stem base occurs regularly in Felthorpe Woods. Supposedly edible and good, I ate one and found it a bit tough with a slightly unpleasant after-taste.

Waveney Forest, Fritton September 21st

Pluteus thomsonii

Unusually small specimens were found by Anne Andrews on dead stems of Marsh Mallow (*Althaea officinalis*). I spent a long time with the microscope on this but all attempts to make it something rarer failed!

Buxton Heath November 3rd

Amanita porphyria

Old specimen found by Tony Leech, but the distinctive grey ring makes this species unmistakable.

Cortinarius violilamellatus

Anne Andrews found this small brown agaric with beautiful maroon gills in the willow carr, and took it to Geoffrey Kibby for identification. By an amazing coincidence Geoff had a specimen in his fridge! Third British record.

Laccaria pumila

Another of Anne's finds in the willow carr, this time identified by Alick Henrici.

Lactarius lilacinus

Small milkcap in the alder carr. There are several similar species associated with alder and they are difficult to separate.

Russula knauthii

Very similar to *R. fragilis*, recognised as distinct by Geoffrey Kibby.

Richard Shotbolt

Black Holes and Other Theories

©Maxd'Ayala

I came upon these strange objects one day. A dense shroud of grass and moss suspended them. My first theory postulated that they were the remains of someone's lunch, possibly discarded from the window of a moving car. Perhaps a half-eaten bagel with a tough coating of processed cheese. Closer inspection revealed this to be wrong. I had in fact discovered a luxury home for slugs.

The odour of this bolete may have been pleasant to them (although this is pure conjecture) and I assume they started by munching their way through, and up, the stem. On reaching the top they broke out into daylight (of course, it may have been moonlight) and this time discovered another vast disc of food. At their leisure they could have a bite to eat and when sated they could then retire to the safety of the black hole.

The yellow foundation at the bottom of their disc world is not eaten; perhaps it is not as tasty as the white flesh. When the food store looked like it was coming to an end they would have to migrate to another *impolitus* world, leaving the safety of their black hole behind them. Fortunately, there were many suitable large homes to move to in this location.

Max d'Ayala

The BMS Comes To Norfolk

The British Mycological Society is a pro-am organisation; as well as being a prestigious academic society for professional mycologists, it also caters for serious amateurs, organising three residential Forays each year and several weekend workshops. After neglecting the County for many years, the BMS came to Wells-next-the-Sea in April 2002 and will be holding its Autumn Foray in Holt in October 2003 (see below).

During the Spring Foray, visits were made to Holkham Park, Holkham Meols, Swanton Novers Great Wood, Sandringham Country Park and Dersingham Bog with individuals also visiting a number of other sites in the area. The weeks before the foray were exceptionally dry but such was the level of participants' expertise that 358 species were recorded during the week, only 22 of them agarics!

Fifty-five (15%) of the species recorded appear neither on Richard's Norfolk Database nor as Norfolk records on the BMS Database (BMSFRD) so would appear to be 'new to Norfolk'. Those with the fewest national records [in square brackets] are as follows:

- *Actidium hysterioides* (Loculoascomycete) Brian Spooner at Dersingham Bog on decorticated pine. [2]

- *Aschochyta psammae* (Coelomycete) Sheila Francis at Holkham on marram grass. [2]

- *Belonopsis retincola* (Discomycete) Henry Beker at Wells on reed [apparently 0]

- *Dermea padi* (Discomycete) Kerry Robinson at Swanton Novers on bird cherry [3 w/o data]

- *Exidia plana* (Basidiomycete: Tremellales) Brian Spooner at Holkham Park on dead beech branch. [2]

- *Monilinia aucupariae* (Discomycete) Martyn Ainsworth at Swanton Novers on rowan berry [2]

- *Rutstroemia maritima* (Discomycete) Ted Batten at Holkham on marram grass [1 w/o data]

- *Thyrostromella myriana* (Hyphomycete) Sheila Francis at Holkham on marram grass [1 w/o data]

- *Vuillemenia macrospora* (corticioid Basidiomycete) Martyn Ainsworth at Brancater on dead tamarisk branch [4 – all Scottish]

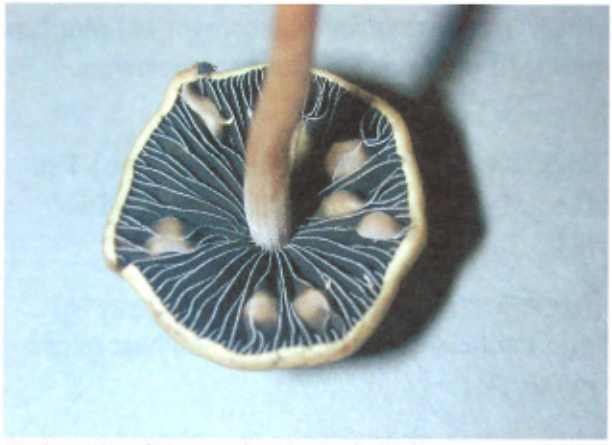
In some ways, the most remarkable find was that of *Geastrum elegans* found separated from its substrate at the bottom of a bank on the seaward side of the pine-covered dunes at Holkham. It was found by Tony Leech and Maurice Rotheroe and identified by Brian Spooner. The only other Norfolk record for this earthstar (designated Vulnerable in the provisional Red Data Book list) is from Great Missingham in 1892. Remarkably, of the ten records now on BMSFRD, Maurice has been involved in finding three of them.

Tony Leech

The BMS is coming to Norfolk for its **2003 Autumn Foray** from October 25th to November 1st at **Gresham's School, Holt**. If you are a member of the BMS do consider coming to the whole Foray – it is a great way to improve your knowledge. If you are wondering whether you are mycologically 'up to it' I would make two points: first, you will be fine if you have your own microscope and some of the more specialist literature and secondly that all the 'experts' are willing to help those with less experience. Typically, the days are spent in the field and the evenings in the laboratory – with appropriate breaks for refreshment!

Members of NFSG who are not BMS members can still participate in the event. You are invited to join any of the forays and also to attend a special evening at Gresham's to see how an Autumn Foray works and to examine the collections. Details of the programme will be sent to all members when it has been arranged.

Galled Gills?



Underside of *Panaeolus fimicola*. Holt Country Park, 2002. ©Tony Leech

I was unable to identify this fungus in the field (I later made it *Panaeolus fimicola*) but I was sure that its gills were galled. So sure that I did not examine the structures thoroughly but simply sent a photograph to Reg Evans expecting him to tell me what they were. I got a reply (one always does) but one that cast doubt on the nature of the swellings. To qualify as a gall, the deformity must show evidence of stimulated growth, that is, an increase in the number of cells. Galls of this kind have not been described and Reg, who has seen something similar on several occasions, is not convinced that they are anything more than distortions caused by one-sided eating by insect larvae. He tells me he has reared fungus gnats from similar specimens but also from non-'galled' specimens. If anyone finds something similar, please examine it carefully or get in touch with Reg and/or me.

In his reply, Reg drew my attention to some examples of the rather limited number of true fungal galls which have been recorded from Norfolk:

Peniophora spp.

In the *Entomologist's Gazette* (1979) **30** 23-30, Reg and co-author K.M.Harris, describe a new species of cecidiomiid fly *Brachyneurina peniophorae* Harris & Evans responsible for inducing galls on *Peniophora cinerea* which Reg first found in Warwickshire. These are conspicuous light-brown to red-brown galls with a soft spongy centre which coalesce into irregular masses 2-3 cm across. In Norfolk, Reg has found galled *Peniophora* spp at four sites.

Hypoxylon rubiginosum

Larvae of the gall midge *Mycocecis ovalis* feed on this fungus and produce a canopy above themselves and a yellow gall tissue. This has been found by Reg at a number of sites in Norfolk.

Coniophora puteana

On five of the 99 occasions Reg and Lil have recorded this resupinate fungus in Norfolk (at 50 sites between 1975 and 1996), the fungus has shown swollen yellow cerebriform masses erupting from its brownish surface. At first, Reg suspected that the fungus gnat *Mycetophila lunata* was responsible but discounted this when he was also able to breed the fly from non-galled material. In 2000, Peter Roberts and Brian Spooner identified the gall-causer as another fungus, *Nodulisporium cecidogenes*, new to Britain (*Mycologist* (2000) **14** 177-178).

Ganoderma applanatum

Alec Bull relates his discovery of nipple-shaped galls, 7-8 mm high on the underside of this bracket fungus collected at Bressingham, and their subsequent discovery at a second site at East Tuddenham, in *Transactions of the Norfolk & Norwich Naturalists' Society* (2002) **35** 28-30, where a photograph can be seen. The galling agent responsible is the flat-footed fly, *Agathomyia wankowiczi*, previously known only from Kent, Surrey and Sussex.

Tony Leech

Welney Wonders

The following records for 2002 are all from my home (Wigston Villa) or elsewhere in Welney village.

Agrocybe putaminum, Welney Village, 12th July & 16th August

Put a mycologist in the fens and look what happens! You just know as soon as you first see them they're something a bit different and so it proved, kindly confirmed by Alick Henrici. The first record of this species outside of Surrey and thus new for Norfolk too. Found growing amongst woody debris and sawdust from a large rotting Horse Chestnut trunk on a roadside verge, this fungus also fruited again in August.

Agrocybe putaminum, Welney, 2002
©Jonathan Revett

Coprinus friesii Wigston Villa, May, June, July & August

A firm lover of summer rain appearing in large ephemeral swarms on the lawn and leaving nothing but a few minute traces of blotchy ink on blades of grass after only a few hours. Differs from *Coprinus phaeosporus* by larger ovoid/rhomboid spores and wispy white veil consisting of strongly divergent thick-walled hyphae.

Coprinus phaeosporus Wigston Villa, May, June, July & August

A good dose of summer rain and up we pop, especially where the lawn meets the river. This species can be found growing on or near Sedge that has encroached into the grass. The small ovoid cap has patches of brown velvety scales whilst the spores are almost ovoid, separating it from the superficially similar *Coprinus friesii.*

Coprinus tuberosus Wigston Villa, 26th May

Three of these uncommon ink caps decided to appear in the greenhouse in a pot filled with ordinary compost and sown with Coriander, which had grown to about an inch high. Careful extraction of the fruiting bodies revealed each had a long rooting stem, approximately 4 inches in length, attached to a small black, pea-sized sclerotium at the bottom of the pot.

Galerina nana Wigston Villa, 25th November

Swarms of this LBM (little brown mushroom) were found spewing out of pots of compost in and around the greenhouse. A bit of a worry at first as the cystidia were crystal-capped just like an *Inocybe* but other features hinted at a *Galerina* and British Fungus Flora 7 came to the rescue.

Hemimycena delictabilis Wigston Villa, September & October

Found in longer grass on the lawn, characterised by the wide triangular gills and strong nitrous smell when handled. Fruited throughout the autumn, seemingly thriving when conditions were permanently damp and drizzly.

Rhodocybe popinalis Wigston Villa, August, September, October

This small, squat, chunky species grows on the lawn and is characterised by the slow darkening of the caps when sliced with the mower. Add a drop of potassium hydroxide solution to the flesh (of the fungus) and you get a lovely reddish/purple reaction (from the fungus).

Meanwhile, elsewhere in the county.....

Boletus pulverulentus Lenwade Dinosaur Park 20th August & Lynford Arboretum 2nd November

Found at Lenwade growing under a Brontosaurus in association with Stegosaurus and Triceratops. When broken, the flesh turns instantly blue (the fungus not the Triceratops) and all parts of the mushroom bruise black where handled. Found later in the season at Lynford, the chrome yellow pores contrasting with the reddish-brown cap make this a super bolete to find.

Coprinus semitalis Lynford Aboretum, 2nd November

Another case of knowing that these mouse-grey ink caps trooping in mossy grass were something a bit different, so first on the slab for a *post mortem* when home. Crucially, 4-spored basidia, ellipsoid spores with an obvious episporium, lack of smell for this section and habitat, all helped identify another new species for the county.

Coprinus semitalis Welney, 2002

©Jonathan Revett

Stropharia aurantiaca Tesco, Downham Market, 23rd October

The newest Tesco store in the area produced a huge colourful crop of this species on coniferous bark mulch around the car park area. An estimated 1 000+ fruiting bodies were counted and attracted the attention of the local press (after an anonymous tip-off by a thoroughly impressed mycologist!). Attempts to gain free shopping for a year from the store for giving them much free publicity have yet to bear fruit.....

Jonathan Revett

Gymnopilus Update

In Sporeprint 2002 I reported that *Gymnopilus dilepis*, recorded on woodchips by Francis Farrow on Beeston Common in 2001, had appeared on a similar pile of woodchips on Holt Lowes, making this the fourth British record. We now know that the fungus was present on Holt Lowes during the previous year! It was photographed on July 2nd 2001, on a smaller pile of woodchips at the same place, by Bernard Dawson who only recently showed me the photograph. In 2003 it has fruited more or less continuously from the beginning of April (it is now the end of June), forming tight clusters all over the pile after rain and then drying out. The only other agaric to have colonised the pile is *Pluteus petasatus* which has appeared in a similar way.

Again as reported, dried specimens of the Beeston Common fungus were requested by Dr Bettye Rees from the Royal Botanic Gardens, Sydney for DNA analysis to see whether they were the same species as the purple-capped *Gymnopilus* species occurring in Australia. Despite frustrating problems getting the material through customs to her, she has established:

1] That the specimens from Norfolk are conspecific with an Australian fungus (but needs to examine the type to establish that this is *G. dilepis*).

2] That a similar fungus sent to her from Zurich under the name of *G. purpuratus* (presumably the one figured in Breitenbach & Kränzlin Vol 5 p.140) is a different species but also occurs in Australia.

Tony Leech

Woodchips at Holt Lowes with old specimens of *G. dilepis*, 2002 . ©Tony Leech

An Alien Conocybe

I should have realised that not all conocybes are small, brown and have conical caps but the agarics that appeared at the base of a friend's potted *Brugmansia (Datura)* were so *Agrocybe*-like that I looked no further. When I showed the puzzling specimens to Alick Henrici at the BMS Spring Foray he instantly identified them as *Conocybe intrusa* and kindly provided the following information.

Conocybe intrusa in plant pot. ©Tony Leech

Conocybe intrusa is an American species first recorded from Europe (Czechoslovakia) in 1947 and then from the Edinburgh Royal Botanic Garden (1958), Kew (1967, 1978) and Somerset (1980), either in glasshouses or, in the latter case, on manured soil in a garden. More recently it has been found, in each case in pots, in Shropshire (1997), Surrey (2000) and again at Kew just days before the Holt discovery.

Tony Leech

Please Tell Trevor

Trevor Dove (2, Kirklees, Tuckswood, Norwich NR4 6LP; tdove@tiscali.co.uk) would appreciate hearing from anyone who finds:

- Any rust fungus on clover (*Trifolium* sp.).
- Any species of *Ramaria* (coral fungus)
- Any unusual *Geastrum* (earthstar).

Another offer from Anne

I have now translated the Bon Hebeloma Key which appeared in *Documents Mycologiques*. Henry Beker, who is an expert on the genus, will be checking it and when he has completed this I shall be happy to let anyone else have a copy. As we know, Bon is a great splitter and there are far more species in his key than in the Vesterholt key though it may be that there are more *Hebeloma* species in France than Scandinavia.

Our most exciting find in Norfolk last year was *Cystoderma carcharias* on Crostwight Heath near Ridlington. I didn't recognise it until Alick Henrici named it because, although I've seen it a few times abroad, I didn't know it occurred in this country and it was rather small. Apparently there are quite a few records from Scotland and three from Norfolk.

Tom and I have now become the editors of the Herts Fungi Group Newsletter and would welcome contributions, especially if relevant to Hertfordshire.

Anne Andrews

An Amazing Coincidence

Working through Reg and Lil's card index, I came upon a species called *Myzus cerasi* that I could not find in any of the BMS fungus databases. Mystified, I left the record card on my desk and carried on with the other cards. Then the phone rang. It was Rex Hancy. "Can you help me with my computer. Windows has crashed, just as I was entering the records for *Myzus cerasi* into my gall database". After spluttering a few good Fenland expletives I discovered that *Myzus cerasi* is actually a common aphid that attacks flowering cherries. Based on chance, the odds of this happening are just under one million to one!

Richard Shotbolt

Stars in the East and the West

I have the opportunity to visit fairly regularly both the dunes at Holkham Meols on the North Norfolk coast and those at Big Balls Hill, Ainsdale, on the Lancashire coast. Both are moderately to heavily grazed by rabbits, have nearby pines and are well-trampled by visitors. The dunes at Ainsdale are higher, steeper and more vegetated by *Rubus* spp than those at Holkham but lack nearby saltmarsh. The collection of *Geastrum* species which occur, or have occurred, on these dune systems is remarkably similar:

	Holkham	Ainsdale
G. fimbriatum	●	●
G. minimum	●	
G. pectinatum	●	●
G. rufescens	●	●
G. schmidelii	●	●
G. triplex	●	●

Geastrum minimum, Holkham Dunes. © Max d'Ayala

Might other species also be present? My prediction that *G. elegans* might occur at Holkham has already been fulfilled (see p5). Another candidate for both sites is *G. berkeleyi* which was recorded at Blakeney in 1925-26. Holkham is the only site in Britain where *G. minimum* has been confirmed but if it does turn up elsewhere, Ainsdale is a likely spot. And finally, *Myriostoma coliforme* is a real possibility, at least for Norfolk It was ast seen in mainland Britain in 1880 at Hillington, only 25 km south-west of Holkham, and the fungus occurs on the Dutch coast, not a great distance for a 5 µm diameter spore to blow.

Trevor Dove

Geastrum fimbriatum, nr Wymondham. © Max d'Ayala

Geastrum triplex, nr Wymondham. © Max d'Ayala

One of several banks of mossy turf at Holkham Dunes on which *G. minimum* is found.

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