

A brief review of the extent,
nature and costs of lowland
heathland management in England

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**A brief review of the extent,
nature and costs of lowland
heathland management in England**

N Michael, English Nature, Peterborough

Nominated Officer: Dr N Michael

Further copies of this report are available from
Lowlands Team administration at English Nature,
Northminster House, Peterborough PE1 1UA

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1. INTRODUCTION AND PROJECT RATIONALE

Lowland heathland requires management by techniques such as light grazing, controlled burning and cutting if it is not to be gradually invaded by scrub and trees and develop into secondary woodland. Secondary woodland does not support a full suite of heathland plant and animal species many of which are adapted to open conditions and some of which are thermophilous. It is therefore essential that lowland heathland sites receive appropriate conservation management if their wildlife interest is to be retained. The importance of lowland heathland for wildlife has been well documented elsewhere (Webb 1986; Gimingham 1992).

There appears to be little doubt that many of England's lowland heaths are suffering from a lack of conservation management. This has been caused by the fact that very few heaths are now used for grazing or fuel gathering because of changes in the agricultural economy. The Centre for European Agricultural Studies (CEAS) unpublished report commissioned by the Nature Conservancy Council estimated in 1990 that by area 90% of the heathland on Sites of Special Scientific Interest in 6 key heathland areas extending to some 26,000 ha (using a wide ranging definition of heathland) was unmanaged.

However, with the introduction of the Countryside Commission's Countryside Stewardship scheme increased management of heathland has occurred. This means that the findings of the CEAS report are likely to be out of date.

Accordingly it was decided to carry out a brief review of the extent of heathland management currently occurring in England in 1993 to determine whether lack of conservation management is a significant problem. If this is indeed the case it has important implications in terms of the need for increased management to take place if this habitat is to be conserved.

1.1 The questionnaire survey

A questionnaire was sent to English Nature Conservation Officers in May 1993 to assess the extent of conservation management on both SSSI and wherever possible non SSSI lowland heathland sites in 15 key heathland counties. In the relevant

counties questionnaires were also passed to the Project Officers of County Heathland Management Projects for completion.

The counties that were selected were those that have greater than 200 hectares of lowland heathland with at least 10% heather cover below 300 metres, based on provisional figures. This is a restrictive definition of heathland that excludes areas of bracken, scrub, woodland and acidic grassland (unless they have at least 10% heather cover). The counties that were selected for the questionnaire are shown in Table 1, with the exception of Cumbria which was not included because much of the heathland is transitional to or is upland heather moorland.

Table 1. Counties with greater than 200 hectares of lowland heathland with at least 10% heather cover (provisional figures only)

	Area (hectares) - rounded)
1. Hampshire	9,000
2. Cornwall	6,400
3. Dorset	5,400
4. Surrey	3,000
5. Devon	1,600
6. Staffordshire	900
7. Suffolk	900
8. Cumbria*	800
9. Norfolk	500
10. East Sussex	400
11. Somerset	400
12. West Midlands	300
13. Berkshire	300
14. North Yorkshire	300
15. Shropshire	200
16. West Sussex	200

	30,600

This is about 96% of the total resource of about 32,000 ha in England.

*Cumbria was excluded from the questionnaire survey.

The questionnaire that was sent out is given at Appendix 1. This requested information on:

- a. The area of heathland in a County that is being actively managed.
- b. Any evidence that heathland sites are being "deliberately neglected" so that their nature conservation interest declines in order to secure planning permission for their development.
- c. Comments on the advantages and disadvantages of Countryside Stewardship. These were requested because Stewardship is the only national lowland heathland management scheme.
- d. Information on the costs of managing England's lowland heathlands. This is needed to estimate the total cost of managing England's heathlands.

2. QUESTIONNAIRE RESULTS

Responses were received from 11 of the 15 key counties (Table 2). Together these comprise 12,166 ha or 38% of the total heathland resource. This figure is low because some of the counties for which responses were not received (Cornwall, Devon, Suffolk and East Sussex) contain large areas of heathland and because a response was only received for part of Hampshire (Mid and North Hampshire). In any case the New Forest is a special case as it is the only area in England where the traditional extensive pastoral management of heathland remains.

2.1 The areas and proportions of heathland that are being actively managed

Table 2 shows the numbers of sites and their areas which have at least 10% heather cover (which may not be the total area of a site, as explained above) in terms of the extent of conservation management. The same data is presented in percentage form in Tables 3 and 4.

Tables 3 and 4 suggest that both the percentage of sites which are not receiving any conservation management and the percentage of the area of sites which are not receiving any management are relatively low. However, these figures need to be interpreted with caution. This is because these figures only indicate if some (any) conservation management is occurring on a site and they do not indicate whether the amount of conservation management that is occurring is sufficient to maintain its nature conservation interest.

To assess whether sufficient conservation management is occurring on a site to safeguard its wildlife interest requires in depth knowledge of individual sites. It was not possible to collect such detailed information in a questionnaire of this type. However a more detailed sample survey of county heathland management projects was also undertaken to ascertain the precise areas of heathland in different project areas receiving conservation management on an annual basis (see below).

The questionnaire also asked respondents to identify sites managed by the light grazing of sheep, cattle and ponies. A summary of the findings is shown in Table 5.

Table 2. The numbers of lowland heathland sites and their areas with at least 10% heather cover in terms of the extent of conservation management

County	The number of sites in single or multiple ownership or tenureship in which all of the land parcels are receiving some conservation management	The number of sites in multiple ownership or tenureship where only some of the land parcels are receiving some conservation management	The number of sites which are not receiving any conservation management	The number of sites where it is not known if they are receiving any conservation management	The total number of sites in all categories
West Sussex	5 (> 110.9 ha)	3 (> 93.3 ha)	10 (> 0.2 ha)	2 (> 0.5 ha)	20 (> 204.9 ha)
Berkshire	9 (85.8 ha)	2 (150 ha)	9 (24.9 ha)	6 (33.4 ha)	26 (294.1 ha)
West Midlands	4 (291 ha)	0 (0 ha)	1 (6.4 ha)	1 (NA)	6 (> 297.4 ha)
Staffordshire	15 (299.4 ha)	3 (359 ha)	1 (4.3 ha)	33 (217.2 ha)	52 (879.9 ha)
Shropshire	7 (> 152.1 ha)	1 (50 ha)	2 (10 ha)	19 (> 15.9 ha)	29 (> 228 ha)
Norfolk	18 (> 684 ha)	6 (121.1 ha)	7 (> 81.7 ha)	25 (> 81 ha)	56 (> 967.8 ha)
Somerset	9 (> 303.7 ha)	0 (0 ha)	0 (0 ha)	1 (9.5 ha)	10 (> 313.2 ha)
Surrey	23 (2,232.3 ha)	0 (0 ha)	3 (628.6 ha)	6 (126.6 ha)	32 (2,987.5 ha)
Mid and North Hampshire	24 (> 609.3 ha)	0 (0 ha)	3 (33 ha)	8 (54 ha)	35 (> 696.3 ha)
North Yorkshire	1 (22 ha)	2 (270.5 ha)	0 (0 ha)	0 (0 ha)	3 (292.5 ha)
Dorset	12 (1,118 ha)	24 (3,601 ha)	5 (275 ha)	1 (10 ha)	42 (5,004 ha)
Total					311 (> 12,165.6 ha)

NA = Not available

> = Greater than

Table 3. The percentage of lowland heathland sites with at least 10% heather cover in terms of the extent of conservation management

County	The percentage of sites in single or multiple ownership or tenureship in which all of the land parcels are receiving some conservation management	The percentage of sites in multiple ownership or tenureship where only some of the land parcels are receiving some conservation management	The percentage of sites which are not receiving any conservation management	The percentage of sites where it is not known if they are receiving any conservation management	The total number of sites in all categories
West Sussex	25%	15%	50%	10%	20
Berkshire	35%	8%	35%	23%	26
West Midlands	67%	0%	17%	17%	6
Staffordshire	29%	6%	2%	63%	52
Shropshire	24%	3%	7%	66%	29
Norfolk	32%	11%	13%	45%	56
Somerset	90%	0%	0%	10%	10
Surrey	72%	0%	9%	19%	32
Mid and North Hampshire	69%	0%	9%	23%	35
North Yorkshire	33%	67%	0%	0%	3
Dorset	29%	57%	12%	2%	42
				Total	311

Table 4. The percentage of the area of lowland heathland sites with at least 10% heather cover in terms of the extent of conservation management

County	The percentage of the area of sites in single or multiple ownership or tenureship in which all of the land parcels are receiving some conservation management	The percentage of the area of sites in multiple ownership or tenureship where only some of the land parcels are receiving some conservation management	The percentage of the area of sites which are not receiving any conservation management	The percentage of the area of sites where it is not known if they are receiving any conservation management	The total area of heathland (ha)
West Sussex	54%	46%	0.1%	0.2%	> 204.9
Berkshire	29%	51%	8%	11%	294.1
West Midlands	98%	0%	2%	NA	> 297.4
Staffordshire	34%	41%	0.5%	25%	879.9
Shropshire	67%	22%	4%	7%	> 228
Norfolk	71%	13%	8%	8%	> 967.8
Somerset	97%	0%	0%	3%	313.2
Surrey	75%	0%	21%	4%	2,987.5
Mid and North Hampshire	88%	0%	5%	8%	> 696.3
North Yorkshire	8%	92%	0%	0%	292.5
Dorset	22%	72%	5%	< 1%	5,004
				Total	> 12,165.6

NA = Not available
 > = Greater than
 < = Less than

Table 5. The numbers and areas of lowland heathland sites which are receiving some conservation management by grazing

County	Number of sites receiving some management by grazing and their area	Total number of sites and their area	Proportion of sites and their area receiving some management by grazing
West Sussex	0 (0 ha)	20 (> 204.9 ha)	0% (0%)
Berkshire	2 (42.5 ha)	26 (294.1 ha)	8% (14%)
West Midlands	0 (0 ha)	6 (> 297.4 ha)	0% (0%)
Staffordshire	2 (12.8 ha)	52 (879.9 ha)	4% (1%)
Shropshire	1 (50 ha)	29 (> 228 ha)	3% (22%)
Norfolk	8 (515.6 ha)	56 (> 967.8 ha)	14% (53%)
Somerset	8 (> 275 ha)	10 (> 313.2 ha)	80% (88%)
Surrey	0 (0 ha)	32 (2,987.5 ha)	0% (0%)
Mid and North Hampshire	4 (161.7 ha)	35 (> 696.3 ha)	11% (23%)
North Yorkshire	3 (292.5 ha)	3 (292.5 ha)	100% (100%)
Dorset	3 (648 ha)	42 (5,004 ha)	7% (13%)
Totals	31 (1,998.1 ha)	311 (>12,165.6 ha)	(Averages) 21% (29%)

In overall terms 10% of sites covering 16% of the total area of open heathland are receiving some management by grazing.

The questionnaire also asked respondents to identify sites which it seems are being "deliberately neglected" through a lack of management so that their nature conservation interest declines in order to secure planning permission for their development. The questionnaire established one such site in Berkshire and ten such sites (24% of the total number of sites) in Dorset covering a total of 971 ha or 19% of the total area of heathland with at least 10% heather cover in Dorset. It should be stressed however that "deliberate neglect" is a difficult concept to define and even harder to prove; owners or occupiers of sites may have little in the way of a "deliberate" desire to neglect sites and instead may be motivated by more complex factors. No sites with Section 29 Nature Conservation Orders were identified.

2.2 Detailed sample survey of County Heathland Management Projects

As explained above it was not feasible to request detailed information as to whether sufficient conservation management is occurring on individual sites in the general

questionnaire survey. Accordingly a detailed "sample survey" of all existing and proposed County Heathland Management Projects was undertaken by telephone. This was designed to establish the area of heathland in a County or project area receiving active conservation management on an annual basis. The findings were as follows.

2.2.1 North East Hampshire Heathland Management Project area

About 300 hectares out of a total of some 3,000 ha are currently being managed on an annual basis by all organisations combined in the project area. This equals 10% per annum.

2.2.2 Dorset Royal Society for the Protection of Birds (RSPB) heathland project

This project has a project area of approximately 2,000 hectares. The project is managing about 80 ha per annum which equals about 4% of the project area on an annual basis.

2.2.3 Surrey

The total area of heathland managed on an annual basis by all organisations combined is about 1,135 ha or 38% of a total area of 2,988 ha. Surrey has a County Heathland Management Project.

2.2.4 Staffordshire

The total area of lowland heathland managed on an annual basis by all organisations combined is about 120 ha or 6% of the total area of 1,939 ha. Staffordshire has a County Heathland Management Project.

2.2.5 West Midlands

The total area of heathland managed on an annual basis by all organisations combined is about 42.5 ha or 8% of the total area of 545 ha.

2.2.6 Suffolk Sandlings

In the Suffolk Sandlings Project area the total area of heathland managed on an annual basis is about 192 ha or 26% of the total Sandlings project area of 744 ha.

2.2.7 Berkshire

The total area of heathland managed on an annual basis by all organisations combined is about 21 ha or 7% of the total area of 293 ha.

2.2.8 West Sussex

The total area of heathland managed on an annual basis by all organisations combined is about 217 ha or 32% of the total area of 671 ha.

These figures suggest that even in areas where there are currently Heathland Management Projects the areas of heathland managed for nature conservation on an annual basis tend to be relatively low proportions of the total resource. Furthermore, this detailed sample survey is biased in that data were only available for Counties or project areas that already have or in some cases are about to begin, Heathland Management Projects. Therefore the extent of management in other Counties which do not have Heathland Management Projects may, at least in general, be lower.

3. **THE COUNTRYSIDE COMMISSION'S COUNTRYSIDE STEWARDSHIP SCHEME**

The questionnaire that was sent to English Nature Conservation Officers and County Heathland Management Project Officers requested detailed comments on Countryside Stewardship which is at present the only national lowland heathland management scheme. Respondents were asked to comment on what they consider to be the advantages and disadvantages of this. They were also asked to describe whether the pattern of ownership and tenureship in the County affects the Countryside Stewardship scheme.

The comments that were received were as follows.

3.1 West Sussex

Advantages of Countryside Stewardship

- a. It identifies lowland heathland as a target habitat.
- b. It provides resources for undertaking reasonable management work.

Disadvantages

- a. To qualify a whole package of landscape, access and archaeology is needed otherwise just nature conservation is perceived as a low priority.
- b. The lack of trained ecologists providing an input into Countryside Stewardship.
- c. Funds are only provided for "new" works such as site improvement; in many cases the good sites are suffering from neglect and will deteriorate.

3.2 Mid/North Hampshire

No detailed comments received.

3.3 Surrey

Countryside Stewardship has had a good take-up on Surrey heathland. By far the largest part of this has been local authorities. This is hardly surprising as, apart from the Ministry of Defence, English Nature and National Trust, local authorities are the largest landholders. Private take-up has occurred but private ownership is fairly minor in Surrey.

A major criticism of Stewardship nationally is that the level of payments are rarely sufficient to tempt a private owner who is not very keen to carry out heathland management work. In the case of local authorities in Surrey, Stewardship has given the boost to work which they were intending to do if they had the money. Whether they will make themselves bankrupt in the process remains to be seen! As a point of comparison at one site tenders for clearance of about 5 ha of mostly dense scrub varied from £14,000 to £4,000-£5,000. Stewardship provided £2,500.

With regard to the kind of advice given by the Stewardship Officer and relations between him/her and the Project and other heathland managers, the experience in Surrey is also more positive than many other counties. In all, therefore, Countryside Stewardship has been a very good thing for Surrey heathland. How this develops in the long term is another matter. There is a desperate need for adequate resource input to continue and indeed build on the good work, particularly when it comes to the more difficult area of introducing extensive grazing.

3.4 Berkshire

Advantages/disadvantages

- a. Countryside Stewardship is only useful on sites where owners are sympathetic and co-operative; for example not the part of one site that is being neglected.
- b. Management of some of the sites is being carried out by enthusiastic but not very knowledgeable volunteers - there is therefore a potential for mis-management.

- c. Following on from a. above - Stewardship doesn't necessarily target the sites English Nature would like to see managed.

3.5 Somerset

There is only one Countryside Stewardship scheme operating on heathland in this county and it is above the 300 metre contour. It is therefore not possible to comment on its effectiveness except to say it is ineffective because there aren't any schemes.

3.6 Norfolk

- a. There is no Stewardship in the Broads. The Countryside Commission put money directly into the Broads Authority.
- b. There is little Stewardship in Breckland; the assumption is that the Breckland Environmentally Sensitive Area (ESA) will take in most heathland, as indeed it does. However, Stewardship does have the advantage of putting money into site management by swiping/mowing where grazing is not possible, unlike the ESA. This is a two-edged sword if grazing is the better option - but better than nothing.
- c. On the whole Stewardship fulfils what we would want of it. Depending on tenure patterns and the amount of heathland reclamation to be done the money on offer is a greater or lesser incentive. It clearly does not cover all the costs. However, in the case of one site in particular Stewardship has funded and sustained a truly local community group of volunteers to become equipped to manage the site in a low key way and publicise their activities strongly locally.

3.7 Shropshire

The Stewardship scheme for heaths in Shropshire has been taken up by the Wildlife Trust, County Council and one of the District Councils. It provides an incentive for

some management to be started but in many cases it is doubtful whether they will ever get on top of the tree invasion problem as grazing/burning is not possible.

3.8 Staffordshire and the West Midlands

Stewardship has been confined to sites owned by Local Authorities. It has certainly encouraged Local Authorities to undertake heathland management. Interest by private owners is significantly less enthusiastic although one or two golf courses are considering whether they should join the scheme.

3.9 North Yorkshire

- a. The levels of payment particularly for fencing and scrub clearance are not adequate.
- b. Has the advantage of a ten year agreement which is more suitable than the initial three years of a Wildlife Enhancement Scheme for the rehabilitation of heathland.

3.10 Dorset

No detailed comments received.

3.11 Conclusions: Countryside Stewardship

The fact that Countryside Stewardship includes lowland heathland as a landscape type is very welcome. However, it is clear that there are also some problems with the Stewardship scheme. In particular the levels of payment tend to be lower than the actual costs of heathland management operations and in some counties there are concerns about the ad hoc way in which Stewardship has been targeted. In particular Stewardship may have tended to go primarily to conservation organisations rather than private landowners.

There is also the question as to whether the total amount of Countryside Stewardship is sufficient to maintain England's lowland heathland resource. By 1992 the total area of Countryside Stewardship agreements in England was 6,268 ha. This is only 19.6% of the 32,000 ha of open heathland with at least 10% heather cover and it should be remembered that this excludes the area of former heathland that has been invaded by bracken, scrub, woodland and grassland requiring restoration on which some of the Stewardship work has also been undertaken.

4. THE COSTS OF MANAGING LOWLAND HEATHLAND

In order to estimate the total cost of managing England's lowland heathland resource information has been summarised here on the costs of heathland management operations as at 1993.

4.1 Countryside Stewardship

Countryside Stewardship makes the following payments for lowland heathland. Agreements are for ten years.

4.1.1 Management of existing heath

(LH1) £20/ha/year base payment to sustain the heath.

(LH2) £30/ha/year additional measures to improve existing heath.

The base payment is made on all agreed areas for measures necessary to prevent a decline in the heath, for example rotational cutting. The additional payment is made on heathland for more comprehensive management programmes to improve the long-term quality of the heath, for example by regular grazing.

4.1.2 Re-creation of lowland heath

(LH3) £250/ha/year.

Re-creation of heathland on cultivated or forestry land.

4.1.3 Supplementary payment for initial measures to regenerate heathland vegetation

(LHs) Supplementary payment for initial measures to regenerate heathland vegetation: £50/ha/year for up to 5 years.

It should be noted however that the levels of payment in Countryside Stewardship tend to be lower than the actual costs of heathland management operations (see Section 3.10).

4.2 Wildlife Enhancement Scheme - Coversand Heathland and Peatland Sites of Special Scientific Interest (Yorkshire and Humberside)

This scheme makes the following payments. Agreements are initially for a three year period.

4.2.1 Annual management payment

The annual management payment is £70/ha/year. This covers the reintroduction of grazing stock, cutting scrub and bracken, cutting or rotovating firebreaks and controlling water levels in ditches.

4.2.2 Fixed costs payments

Fixed cost payments are given in Table 6.

4.3 Heathland management costs from the Dorset (Royal Society for the Protection of Birds) heathland project

These are shown in Table 7.

Table 6. Fixed costs payments for the Wildlife Enhancement Scheme - Coversand Heathland and Peatland (all costs are inclusive of VAT)

1.	Fencing £3.75/m	
	* posts at 3 metre centres.	
	* rabbit netting only where essential cost and attached to existing fence - additional cost £0.85/m.	
2.	Fence line preparation £1.00/m	
	* levelling of ground	
	* take down old fence materials	
	* flail vegetation along fence line	
3.	Stock Corrals £10/m	
	* Corrals to be comprised of post and 4-rail fence	
4.	Gates and Stiles	
	* 3.6 m gate including posts, all fittings and erection	£250
	* 3.0 m gate including posts, all fittings and erection	£200
	* Wicket gate including posts, all fittings and erection	£150
	* Stiles - material and erection	£35
5.	Scrub cutting and disposal	
	* Dense scrub cutting and disposal	£400/acre
	* Scattered scrub cutting and disposal	£250/acre
	* Spraying scrub with Krenite	£100/acre
6.	Hydrological Works (maximum figures per item)	
	* Dipwells - installation and materials	£20
	* Ditch blocking - up to 1.5 m width	£200
	- over 1.5 m and revetments	£500
	* Bunding - earth works	£1,000
7.	Creation of Fire Breaks	
	* Heavy duty flail	£17/hr

Table 7 Staff numbers, equipment and time required and cost of various heathland management operations, per hectare (1992) (Auld, M.H.D., personal communication)

Operation	Staff Required	Equipment	Time	Cost
Pine clearance (Material up to 35 years old giving 50% ground cover)	4	3 chainsaws + handtools, 2 tractors, silage trailer, woodchipper, safety equipment	35 hrs	£1,728
Birch clearance (Material up to 35 years old giving 50% ground cover)	4	As above + herbicide (Garlon 4), required protective equipment	36 hrs	£1,830
Rhododendron clearance (Material up to 30 years old giving 50% ground cover)	4	As for birch clearance	52 hrs	£2,669
Gorse management (Material up to 20 years old giving 90% ground cover)	4	3 chainsaws + handtools, safety equipment, water bowser, (material is burnt), posts, rabbit netting (regrowth is fenced off)	46 hrs	£2,300
Bracken clearance: swiping	1	Tractor, swipe.	3.5 hrs	£60
knapsack sprayer	3	2 knapsack sprayers, herbicide (Asulam), required protective equipment, water bowser)	6 hrs	£353
ULVA (ultra low volume applicator)	3	2 ULVAs, other equipment as for knapsack sprayer	3 hrs	£238
6 m boom	1	Tractor, 6 m boom sprayer, water bowser, herbicide (Asulam), required protective equipment	1.5 hrs	£170
Heather foraging/firebreak creation	2	2 tractors, 2 silage trailers, 1 double-chop forage harvester, rotovator	5 hrs	£168

5. OVERALL CONCLUSIONS

5.1 The extent of heathland management

The questionnaire survey showed that there are lowland heathland sites which are not receiving any conservation management. However it was not possible to request information on the areas within individual sites receiving conservation management in the questionnaire as this requires very detailed knowledge. This information was gathered instead by conducting a detailed sample survey of County Heathland Management Projects. This indicated that even in counties with Heathland Management Projects the areas of heathland managed for nature conservation on an annual basis tend to be relatively low proportions of the total resource. Therefore there appears to be a problem with the lack of management of lowland heathland. Without management heathland will be invaded by bracken and scrub and eventually be lost to woodland.

Further information on the extent of lowland heathland management will be available when the national Sites of Special Scientific Interest sample survey is undertaken. This will examine a hundred lowland heathland sites and collect information on the extent of conservation management of these sites.

5.2 Heathland management by the grazing of sheep, cattle and ponies

The questionnaire found that in overall terms 10% of sites covering 16% of the total area of open heathland are receiving some management by grazing. This does not mean that the entire area of these sites is grazed.

The light grazing of lowland heathland is desirable for nature conservation for a number of reasons (Michael, 1993). In particular grazing animals can be used to suppress the regeneration of invasive scrub. The questionnaire survey results suggest that whilst some grazing remains on lowland heathland sites, it needs to be re-introduced to the majority if heathland management is to be put on an ecologically sustainable basis. In the absence of grazing there is a never-ending commitment to the mechanical cutting and removal of invasive scrub. Whilst valuable if grazing is not a practical option, the mechanical management of large areas tends to be relatively time consuming and expensive.

5.3 The "deliberate neglect" of heathland sites

With the exception of Dorset the questionnaire found little evidence of the "deliberate neglect" of heathland sites through a lack of management so that their nature conservation interest declines in order to secure planning permission for their development.

5.4 Countryside Stewardship

Whilst Countryside Stewardship is very welcome in that it provides funds for heathland management throughout England, the questionnaire indicated that it also has limitations. These are principally that the payment levels are lower than the actual costs of carrying out heathland management operations and its targeting primarily at conservation organisations rather than private landowners.

5.5 The costs of managing lowland heathland

The costs of managing lowland heathland have been assembled from a number of sources. These figures are useful in that they allow estimates to be made of the total cost of managing the heathland resource.

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7. ACKNOWLEDGEMENTS

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This report forms part of English Nature's National Lowland Heathland Programme. It was typed by English Nature's word processing service.

APPENDIX 1

26 May 1993

Dear

BRIEF REVIEW OF THE EXTENT OF LOWLAND HEATHLAND MANAGEMENT IN ENGLAND

To promote the conservation of lowland heathland I am undertaking a brief review of the extent of heathland management in key English Counties.

The information I require is:

- (1) The area of heathland in the County that is being actively managed.
- (2) Any evidence that heathland sites are being deliberately neglected so that their nature conservation interest declines in order to secure planning permission for their development.
- (3) Your comments on the advantages and disadvantages of Countryside Stewardship, which is the only national lowland heathland management scheme.
- (4) Any information you may have on the costs of managing lowland heath. This is needed to estimate the total cost of managing England's heathlands.

I appreciate that you are very busy and that requesting this information is a considerable imposition on you. However this information is essential if we are to secure the long term funding of heathland management. I would therefore be extremely grateful for your help in answering the questions above. A brief form is attached. I would be very grateful if you could return this to me by 1 August 1993.

With many thanks.

Yours sincerely

Dr N Michael
Heathland ecologist

1. Extent of active management of lowland heath in the County

(a) Please state name of County.

(b) Please find attached a print out of heathland sites in your County. Please label these as follows;

1. Please tick (✓) sites that are receiving active conservation management eg scrub control, controlled heather burning or cutting, bracken control or light grazing.
2. Alternatively, if there are sites in multiple ownership or tenureship which are only receiving active management on part of the site please indicate this by putting a (P) next to them.
3. Please put a cross (x) by sites that are not being actively managed.
4. Please put a question mark (?) next to sites where you are not sure whether or not they are receiving active management.
5. Please put a (G) by sites which are managed by light grazing of sheep, cattle or ponies.
6. Please put a (D) by sites it seems are being "deliberately neglected" so that their nature conservation interest declines in order to secure planning permission for their development.
7. Please put an (S) next to sites which currently have Section 29 Nature Conservation Orders on them specifically on the grounds of "deliberate neglect" as defined above.
8. Please put a (C) by three or so sites which have Countryside Stewardship agreements which I could visit.

Please note that individual sites or ownership and tenureship will not be identified when the results of the review are collated.

2. Countryside Commission's Countryside Stewardship scheme

I would be very grateful for your comments on what you consider to be the advantages and disadvantages of this. Please provide named examples of sites that illustrate your points. How does the pattern of ownership and tenureship in the county affect the Countryside Stewardship Scheme? I attach a printout of Stewardship uptake for your region.

3. Details of the costs of heathland management

I am collecting information on the costs of carrying out heathland management and restoration. In particular I would be very grateful if you could send me any information you may have on the costs of the following on a per hectare basis:

1. Fencing sites.
2. Light grazing.
3. Scrub control.
4. Controlled heather burning or cutting.
5. Creating firebreaks.
6. Bracken control.
7. Heathland restoration (please provide brief details of techniques involved).
8. Others (please specify).

Please return to:

Nick Michael, Heathland Ecologist, English Nature, Northminster House, Peterborough, Cambridgeshire, PE1 1UA. (Tel: 0733 318331 direct).

Thank you for your time and help.

	northern region	north west region	yorkshire and humberside	midlands region	eastern region	south east region	north west region	total access	total agreement area
UPLANDS									
Tier 1	1224	1273	2100				141		4738
Tier 2	38	137							175
Tier 3	1177	834	621	225			199		3055
Access	835	229	382	152			150	1747	
Special Projects	37								37
TOTALS									
Total area of access	1049	836	960	555	694	1353	1566	7013	
TOTAL (Tiers 1+2+3 plus Special Projects)	5257	3597	4705	1346	2714	5997	5914		29531

commission region	northern region	north west region	yorkshire & humberside	midlands region	eastern region	south east region	south west region	total access	national
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CHALK AND LIMESTONE

Agreement area	233	1018	1533	155	347	1496	3035	2590	7817
Access	29	607	463	74	160	395	862		

LOWLAND HEATH

Agreement area	215	79	3	294	465	1125	686	390	2867
Access				42	84	120	144		

WATERSIDE LANDSCAPE

Agreement area	500	175	290	673	1645	3281	741	1845	7303
Access	77		64	288	426	816	174		

COASTAL LANDSCAPE

Agreement area	1834	81	159		257	96	1113	442	3539
Access	108		51		23	23	237		

UPLANDS

Agreement area	2475	2244	2721	225			340	1747	8005
Access	835	229	382	152			150		

TOTALS

Access area All 5 landscapes	1049	836	960	555	694	1353	1566	7013	
Agreement area All 5 landscapes	5257	3597	4705	1346	2714	5997	5914		29531

