

Meddon Green Local Nature Reserve

Management Plan 2017-27



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Hartland Parish Council



1. Introduction

This management plan updates and develops the first plan which covered the period 2007-2017.

2. Aim

To secure the long term future of Meddon Green through the continued management of the site as a Local Nature Reserve (LNR) for the benefit of wildlife, education and access.

3. Background

Local Nature Reserves (LNRs) are for both people and wildlife. They are places with wildlife or geological features that are of special interest locally. They offer people special opportunities to study or learn about nature or simply to enjoy it.

Natural England recommends that LNRs should be:

- normally greater than 2ha in size
- capable of being managed with the conservation of nature and/or the maintenance of special opportunities for study, research or enjoyment of nature as the priority concern.

LNRs should also be either:

- of high natural interest in the local context or
- of some reasonable natural interest and of high value in the local context for formal education or research or
- of some reasonable natural interest and of high value in the local context for the informal enjoyment of nature by the public.

Meddon Green fits these criteria.

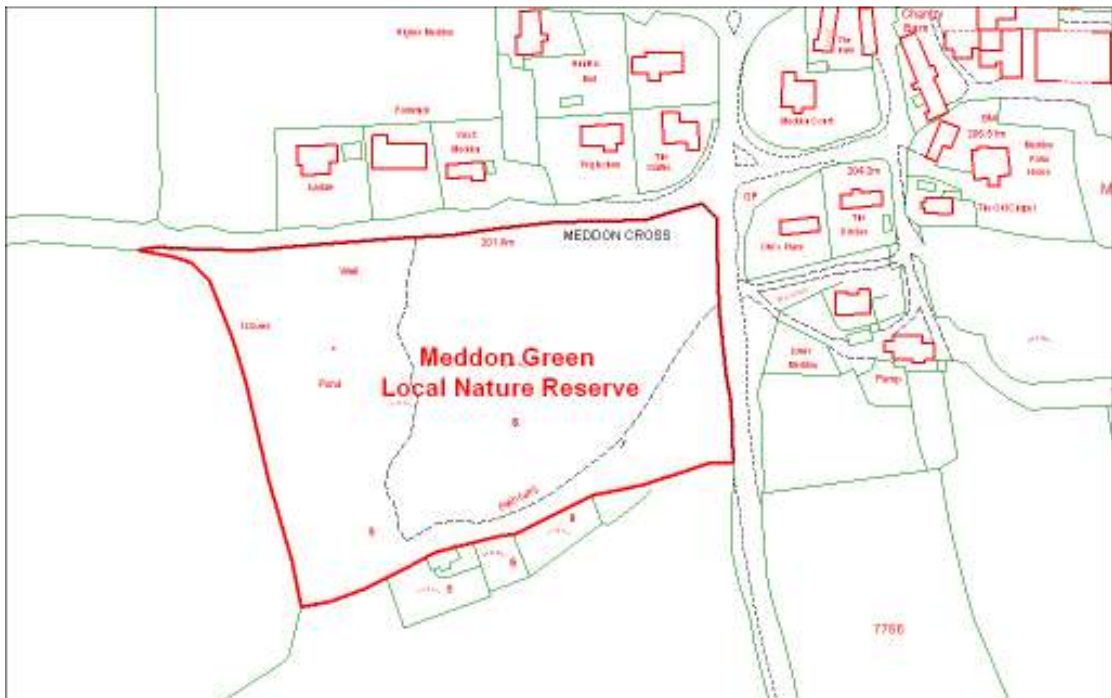
4. Location

Grid Ref: SS 277 177

Meddon is a hamlet of 28 houses situated approximately 13 miles west of Bideford in North Devon. It lies within the parish of Hartland, Torridge District.

Meddon Green covers approximately 1.7 hectares (4.2 acres) and lies on the south west side of the hamlet, adjacent to a small residential area. It is bounded on two sides by quiet country roads and two sides by agricultural fields.

5. Map



6. Ownership

The site was acquired by Hartland Parish Council in 2003. No owner of the site could be found in the late 1980's and therefore the Parish Council commenced an ownership claim in 1993. This was not contested and the parish council became the legal owner in 2003.

Meddon Green was not claimed as common land following the Commons Registration Act (1965) and there are no known commoners or common rights.

Hartland Parish Council declared Meddon Green as a Local Nature Reserve in November 2006.

7. Soils/Geology

The geology of the area is comprised of massively bedded sandstones with alternating fine grained sandstone and shale horizons. These lacustrine deposits are part of the upper carboniferous Bude formation.

Soils comprise of a brown earth with an acidic pH of around 6.

8. Achievements

During the 1980s a local builder put in a claim for ownership of Meddon Green in order to acquire planning permission for housing. This was subsequently turned down.

The site has suffered from the dumping of rubble and refuse on occasions along its northern boundary and at the north east corner of the site a septic tank has been installed, serving the residents opposite.

Local residents are keen to see this area managed for wildlife and with help from various conservation organisations have undertaken some scrub and path clearance.

Local residents have been involved with management of the site since the early 1990s. Since declaration in 2006 there have been regular meetings of the Meddon Green LNR Management Committee which comprises of representative from Hartland Parish Council, local residents and co-opted members (such as North Devon Biosphere and Devon Wildlife Trust). This committee has helped implement the Management Plan 2006-17 through organizing practical work days, public events and applying for grant aid.

9. Habitats

Culm Grassland

Meddon Green is identified as an area of Culm Grassland on Devon Wildlife Trust's Culm Grassland Inventory. Culm grassland is the wet acid unimproved grassland found over the culm measure soils of North Devon. Culm is one three main types of Rhos pasture found in Devon.

The Devon Biodiversity Action Plan (BAP) recognised culm grassland as a UK priority habitat and aimed to maintain and enhance 13,500 hectares and recreate 500 hectares from 1997 to 2010. Culm grassland was included within the Purple Moor Grass and Rush Pastures Habitat Plan. The plan outlined the importance of managing the grassland in order to conserve it.

Culm grassland is also recognised as a nationally important habitat for the marsh fritillary butterfly (*Furodrgas aurinia*), a UK BAP species, which has seen severe reduction in population size both in the UK and mainland Europe in the recent past. Although the marsh fritillary has not been recorded at Meddon Green, the site is situated within an area where there is a high degree of habitat continuity and a number of marsh fritillary populations.

The Devon BAP had an objective that all culm grasslands over 0.5 hectares should have a management plan which, when implemented, would conserve the habitat whilst providing improved public awareness through access and education.

Culm grasslands were traditionally grazed by cattle and/ or burnt. Grazing helps keep the habitat open and slows down the rate at which scrub tends to dominate a site.

Although there are around 530 recorded culm grassland sites in north and west Devon, Meddon Green is the only Culm Grassland Local Nature Reserve in the county.

Hazel Coppice

Hazel coppice is a very important habitat for many species, in particular the dormouse. Evidence of dormice at Meddon Green has been confirmed and it is important that any management work carried out takes account of this species' requirements. Dormice need hazel bushes that produce a lot of nuts which are an important food source in the autumn to build up their body weight for their long winter hibernation. If hazel bushes are too old or too young their fruiting is reduced. A programme of coppicing small amounts of hazel each year generally helps ensure a regular supply of hazel nuts.

Ponds

There are two ponds on Meddon Green. One is comparatively small and the other larger, both are important man-made habitats that increase the diversity of the site. The largest pond is particularly important for breeding dragonflies. All the ponds have silted up over the years and are in need of clearance. The largest pond is also becoming overgrown with willow and bramble. Although the willow offers good shelter around the pond, it also shades the open water allowing leaves to drop into the pond in the autumn, thereby speeding up the siltation process

Wet Woodland

Wet woodland occurs on poorly drained or seasonally wet soils, usually with alder, birch and willows as the predominant tree species. It is a valuable part of culm grassland habitats but it is important that a balance between the two habitats is achieved. It is important that areas of wet woodland on the site of greater conservation value are retained but those areas of less importance can be converted back to grassland. Willows can be important for their lichens and epiphytic flora. Areas of lichen interest need to be identified and kept as wet woodland.

10. Resources

Human resources

The Local Nature Reserve (LNR) is situated at the heart of the community. A local volunteer workforce works under the guidance of the Committee.

Grants

Any major projects need grant aid. The management committee is responsible for identifying and applying for grants.

Health & Safety

Any use of hand tools, power tools and plant must take appropriate consideration of Health and Safety requirements.

11. Objectives

The objectives of the management plan are as follows:

- 9.1 To conserve for the future Meddon Green as a wildlife resource.
- 9.2 To involve the local community in management of the site
- 9.3 To provide well managed access and educational facilities that address the requirements of locals and visitors and which do not compromise other interests.
- 9.4 To maintain and, where appropriate, increase areas of open grassland and prevent further scrub encroachment.
- 9.5 To manage woodland areas for the benefit of dormice, lichens and other wildlife.
- 9.6 To manage the ponds to maintain a balance of open water and aquatic vegetation.
- 9.7 To continue light grazing of the site during the summer months.
- 9.8 To monitor the wildlife present to ensure that management retains and hopefully increases the biodiversity value of the site.
- 9.9 To promote understanding of the importance of culm grassland and its associated wildlife
- 9.10 To record species present on the reserve and to share this information, where beneficial

12. Prescriptions

In order to achieve the objectives of the Management Plan, the following prescriptions will be carried out.

10.1 Maintain informal paths to ensure access for people to enjoy the site in a controlled manner making sure sensitive areas are avoided.

10.2 Maintain grassland through a scrub clearance programme. Stumps to be treated after cutting and/or sprayed with herbicide the following summer to prevent any re-growth.

10.3 Maintain areas of grassland by summer grazing.

10.4 Carry out a limited area of coppicing to improve the habitat for dormice.

10.5 Clear scrub around the borders of the ponds to reduce shading and leaf drop.

10.6 Remove silt and vegetation from the larger pond.

10.7 Continue to carry out surveys of the flora and fauna of the site and feed information back to Devon Biodiversity Record Centre.

10.8 Develop wider community involvement with the site.

10.9 Seek external funding for projects, where applicable.

10.10 Develop interpretation boards to advertise both the presence of the reserve and to inform and advise visitors.

10.11 Arrange an annual programme of events to maximize the enjoyment and understanding of the Reserve.

10.12 Promote the existence and significance of the reserve more widely.

10.13 Continue meetings of the steering group, which includes local residents, Hartland Parish Council, Meddon Village Hall and co-opted specialists.

13. The Action Plan

The lead partner for each of the actions is identified in bold.

| Action | By Whom | Month | Frequency |
|---|---|--|--------------------------|
| Footpath Maintenance | Volunteers | First cut April Second cut June | Ongoing |
| Maintain grassland by removal of scrub | Volunteers | December - Feb | Ongoing – Annual Review |
| Maintain grassland by grazing | Volunteer in liaison with Local Farmer | July - September | Ongoing |
| Hazel coppicing | Volunteers & Specialist | November - February | Ongoing |
| Scrub clearance around ponds | Volunteers & Specialist | November - February | Year 1 |
| Pond raking & silt removal | Volunteers & Specialist | September - October | Year 1 – Review Annually |
| Maintain fencing and water supply | Volunteers & Specialist | By June Annually | Ongoing |
| Improve & Maintain Vehicular Access | Volunteers & Specialist | Year 1 | Ongoing |
| Species Survey | Volunteers & Specialist | Throughout year | Ongoing |
| Install & Maintain Bench(es) | Volunteers & Specialist | Year 1 | Annually |
| Install & Maintain Interpretation Board | Volunteers & Specialist | Year 1 | Annually |

Appendix 1. Species List

The following species have been recorded at Meddon Green since 2003

Plants

SPECIES LIST RECORDED

(p) = found only in pond

Abundance follows the DAFOR scale - D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare

| Name (Stace 1999) | English name | Abundance |
|--|------------------------|-----------|
| <i>Agrostis stolonifera</i> | Creeping Bent | o |
| <i>Anagallis tenella</i> | Bog Pimpernel | lf |
| <i>Angelica sylvestris</i> | Wild Angelica | lf |
| <i>Anthoxanthum odoratum</i> | Sweet Vernal-grass | lf |
| <i>Apium nodiflorum</i> | Fool's Water-cress | o |
| <i>Arrhenatherum elatius</i> | False oat grass | |
| <i>Athyrium filix-femina</i> | Lady-fern | o |
| <i>Berula erecta</i> | Lesser water-parsnip | |
| <i>Blechnum spicant</i> | Hard-fern | r |
| <i>Callitriche agg.</i> | Water-starwort | lf(p) |
| <i>Calluna vulgaris</i> | Heather | r |
| <i>Cardamine flexuosa</i> | Wavy Bitter-cress | o |
| <i>Cardamine pratensis</i> | Cuckoo-flower | lf |
| <i>Carex echinata</i> | Star Sedge | lf |
| <i>Carex ovalis</i> | Oval Sedge | r |
| <i>Carex panicea</i> | Carnation Sedge | lf |
| <i>Carex viridula subsp. oedocarpa</i> | Common Yellow-sedge | o |
| <i>Centaurea nigra</i> | Common Knapweed | o |
| <i>Circaea lutetiana</i> | Enchanter's-nightshade | o |
| <i>Cirsium palustre</i> | Marsh Thistle | |
| <i>Cirsiumarvense</i> | Creeping thistle | o |
| <i>Claytonia sibirica</i> | Pink Purslane | r |
| <i>Corylus avellana</i> | Hazel | r |
| <i>Crataegus monogyna</i> | Hawthorn | o |

| | | |
|----------------------------------|-----------------------------|-------|
| <i>Dactylorhiza praetermissa</i> | Southern Marsh-orchid | o |
| <i>Deschampsia cespitosa</i> | Tufted Hair-grass | f |
| <i>Digitalis purpurea</i> | Foxglove | o |
| <i>Dryopteris affinis</i> | Scaly Male-fern | lf |
| <i>Dryopteris dilatata</i> | Broad Buckler-fern | lf |
| <i>Eleocharis palustris</i> | Common Spike-rush | lf(p) |
| <i>Epilobium montanum</i> | Broad-leaved Willowherb | o |
| <i>Filipendula ulmaria</i> | Meadowsweet | f |
| <i>Galeopsis tetrahit</i> | Common Hemp-nettle | r |
| <i>Galium aparine</i> | Cleavers | o |
| <i>Galium palustre</i> | Common Marsh-bedstraw | f |
| <i>Geranium lucidum</i> | Shining Crane's-bill | lo |
| <i>Geranium dissectum</i> | Cut-leaved cranesbill | |
| <i>Glechoma hederacea</i> | Ground-ivy | o |
| <i>Heracleum sphondylium</i> | Hogweed | o |
| <i>Holcus lanatus</i> | Yorkshire-fog | lf |
| <i>Hydrocotyle vulgaris</i> | Marsh Pennywort | lf(p) |
| <i>Hypericum undulatum</i> | Wavy St Johnswort | r |
| <i>Juncus acutiflorus</i> | Sharp-flowered Rush | lf |
| <i>Juncus bulbosus</i> | Bulbous Rush | o |
| <i>Juncus conglomeratus</i> | Compact Rush | la |
| <i>Juncus squarrosus</i> | Heath Rush | o |
| <i>Lathyrus pratensis</i> | Meadow Vetchling | o |
| <i>Lemna minor</i> | Common Duckweed | lf(p) |
| <i>Lotus pedunculatus</i> | Greater Bird's-foot-trefoil | f |
| <i>Luzula multiflora</i> | Heath Wood-rush | o |
| <i>Lychnis flos-cuculi</i> | Ragged-Robin | |
| <i>Lycopus europaeus</i> | Gypsywort | |
| <i>Lythrum portula</i> | Water-purslane | la(p) |
| <i>Matricaria discoidea</i> | Pineappleweed | |
| <i>Mentha aquatica</i> | Water Mint | f |
| <i>Molinia caerulea</i> | Purple Moor-grass | o |
| <i>Myosotis scorpioides</i> | Water forget-me-not | |
| <i>Myosotis secunda</i> | Creeping Forget-me-not | o |

| | | |
|---------------------------------------|------------------------|-------|
| <i>Oenanthe crocata</i> | Hemlock Water-dropwort | la |
| <i>Parentucellia viscosa</i> | Yellow Bartsia | |
| <i>Pedicularis sylvatica</i> | Lousewort | o |
| <i>Pentaglottis sempervirens</i> | Green Alkanet | r |
| <i>Poa trivialis</i> | Rough Meadow-grass | f |
| <i>Potentilla erecta</i> | Tormentil | o |
| <i>Prunella vulgaris</i> | Selfheal | o |
| <i>Pulicaria dysenterica</i> | Common Fleabane | lf |
| <i>Ranunculus acris</i> | Meadow Buttercup | o |
| <i>Ranunculus flammula</i> | Lesser Spearwort | lf |
| <i>Ranunculus repens</i> | Creeping Buttercup | o |
| <i>Rubus fruticosus agg.</i> | Bramble | la |
| <i>Rumex acetosa</i> | Common Sorrel | lf |
| <i>Rumex obtusifolius</i> | Broad-leaved Dock | o |
| <i>Salix aurita</i> | Eared Willow | f |
| <i>Salix cinerea subsp. oleifolia</i> | Rusty Willow | lf |
| <i>Senecio aquaticus</i> | Marsh Ragwort | o |
| <i>Silene dioica</i> | Red Campion | la |
| <i>Solanum dulcamara</i> | Bittersweet | o |
| <i>Stachys sylvatica</i> | Hedge Woundwort | o |
| <i>Stellaria graminea</i> | Lesser Stitchwort | o |
| <i>Stellaria uliginosa</i> | Bog Stitchwort | o |
| <i>Symphytum x uplandicum</i> | Russian Comfrey | o |
| <i>Trifolium repens</i> | White Clover | |
| <i>Tripleurospermum inodorum</i> | Scentless mayweed | |
| <i>Ulex europaeus</i> | Gorse | o |
| <i>Urtica dioica</i> | Common Nettle | l f |
| <i>Valeriana officinalis</i> | Common Valerian | f-la |
| <i>Veronica beccabunga</i> | Brooklime | lf(p) |
| <i>Vicia cracca</i> | Tufted vetch | |

Insects

Common darter

Beautiful demoiselle

Banded demoiselle

Large red damselfly

Blue tailed damselfly

Emperor dragonfly

Broad-bodied chaser

Sericomyia silentis (hoverfly)

Mammals

Dormouse

Roe Deer

Birds

Barn owl

Snipe

Cuckoo (heard 9/6/10)

Moths

Green Carpet (*Colostygia pectinataria*)

Ruby Tiger (*Phragmatobia fuliginosa*)

Setaceous Hebrew Character (*Xestia c-nigrum*)

Pale Pinion (*Lithophane hepatica*)