BROADMOOR COMMON LOCAL NATURE RESERVE FIVE-YEAR WORKS PROGRAMME 2017 - 2021

WOOLHOPE PARISH COUNCIL

Final Report
June 2017

CONTENTS

1 INTRODUCTION

The attached works programme gives the proposed habitat management by compartment and year. It is assumed that this management programme will run from 2017 to 2021, with the habitat management component beginning in July 2017.

A map of the management compartments and units is provided in Appendix 1.

A summary of future habitat management work is attached as a master sheet for quick reference to the proposed work in any one year across the whole site (Appendix 2). Costs have not been included for habitat management activities as these could vary considerably depending upon the level of involvement by commoners, local residents, parishioners and other volunteers, and/or the requirement for contractors.

Additional management priorities relating to setting up a site management group, local liaison, signage and access, statutory duties and monitoring are summarised below and are included on a separate summary sheet (Appendix 3).

A mapped summary of habitat works is provided for grassland (Appendix 4) and woodland/scrub management units (Appendix 5).

The sections below describe the main management aims and actions, where they should be carried out (see also Appendix 1) and when. A list of key practical considerations is also provided.

Finally, a list of resources, including potential funding opportunities, is provided in Appendix 6.

2 HABITATS

2.1 Grassland

Broadmoor Common supports a large area of rare flower-rich grassland important for wildlife. This area is at risk from a lack of regular grazing and/or cutting, which could lead to dominance of coarse grasses and colonisation by scrub and trees, and thus requires a structured annual cutting regime for the short to medium term, with reinstatement of grazing the long-term goal.

Management Aims and Actions

- Adopt a suitable cutting regime to maintain the flower-rich grassland habitat and prevent dominance by undesirable competitive grasses and herbs.
- Control scrub and trees on the Common to limit the encroachment of scrub and trees into the grassland.
- Reinstatement of a traditional, low intensity grazing regime should be the preferred long-term management option.

Where

- 2a, 2b, 4b and 5a - improved and/or semi-improved grassland
- 3a - unimproved grassland
- 1d, 4a - wet grassland/mire/fen meadow
- 1e - calcareous grass bank

When

- Units 2a, 2b, 3a, 4b, 5a – mid-July to mid-August
- Units 1d and 4a – mid-August to mid-September
- Unit 1e – August/September

Practical considerations

- Cutting should take place during a period of stable, dry weather when the ground is less susceptible to vehicle damage and rutting. It is better to cut late to avoid wet conditions than adhere strictly to the timings.
- Wet grassland habitats are more susceptible to vehicular damage; smaller machinery should be considered for these areas.
- A late cut every five years would help late flowering species to set seed.
- A proportion of the grassland should be left uncut each year; 25% for grassland areas south of the Woolhope to Mordiford Road, and 50% for wet grassland north of the road. Alternatively, for smaller units, such as 5a and 4b, the grass could be cut three years out of four. Unit 4a could be cut every two years.
- Cuttings should be removed to reduce and maintain the low nutrient status of the soil; however, cuttings can be left for up to a week to allow seeds to fall off before being collected.
- If not being used for livestock feed or bedding, cuttings should be disposed of outside the Common boundary wherever possible; a suitable location should be sought and an appropriate agreement put in place.
- Vary the height of the cut across the site to provide structural diversity (e.g. between 5-15 cm or 2-6 inches).
- Do not cut lower than 5 cm (2 inches); scalping of the ground (very low cutting height) should be avoided.
- Cuttings from unimproved grassland areas (3a) can be used as 'green hay' to help restore improved/semi-improved grassland areas including 2a, 2b, 4b and 5a (see Natural England, 2010 for method).
- Monitoring should be undertaken every 5 years to enable an informed judgement on the success of the cutting regime, and to inform ongoing and future management.

2.2 Woodland

Woodland on the Common should be managed to maximise its biodiversity value, comprising a mosaic of high forest (non-intervention areas), a network of sunny rides and glades, and areas of coppice with standards.

Management Aims and Actions

- The woodland edge should be taken back to increase the extent of the grassland while retaining an important woodland-scrub-grassland interface.

- Retained woodland can be left largely as non-intervention but would benefit from being partially thinned, with planting of new trees (suitably protected from browsing), to allow an uneven age structure to develop over the long-term. Thinning should include small-scale selective felling of individual trees or small groups of trees.
- Other woodland areas require rotational coppicing to increase light and improve the overall structural diversity of the woodland.
- Areas of coppiced woodland should be protected from deer browsing, by fencing and/or dead-hedging to enable regeneration to take place. Fencing should not impede access along paths and should be hidden from view (especially from the road) where possible.
- A deadwood component should be introduced into the woodland, at the woodland-grassland interface and close (within 50 m) to the ponds (to act as amphibian hibernacula).
- Discarded cuttings and brash should be removed from the remnant ancient woodland. Investigate this small woodland further for origins and ancient woodland indicator (AWI) species. This will inform future management of this area.

Where

- 1a - ancient woodland remnant
- 1b - secondary woodland

When

- Units 1a and 1b - November to February

Practical considerations

- Health and safety requirements are essential for tree felling and scrub clearance (see below) activities.
- Consultation with nearby residents should be undertaken prior to clearance of selected features, so that residents are aware and any issues can be identified (e.g. some trees may provide screening for properties and may therefore be retained).
- Any specimen trees and older boundary trees, such as larger oaks and aspen, should be identified and protected.
- Areas of felled trees along the woodland edge should be subsequently managed to help expand the grassland whilst retaining a woodland-scrub-grassland interface.
- Felled trees will provide a source of firewood for local residents and volunteers, and as a resource for adding dead wood into the woodland and along the woodland edges. Compact wood piles should be stacked directly on the ground and left to decay naturally.
- Small scale rotational coppicing, leaving some standards such as oak, should be undertaken and managed to allow woodland regeneration; fencing is required to prevent deer browsing of these areas but should be located so as not to impede access along established pathways. Licensing may apply; seek advice from Natural England.
- Woodland activities should consider the requirements and life-cycle of hazel dormice (European Protected Species), which is present on the Common.

- Cuttings and brash from felling activities should be burnt away from established grassland in small heaps, in a controlled manner.

2.3 Scrub and hedgerows

Scattered trees, scrub thickets and hedgerows on the Common boundary are important habitats for invertebrates, breeding and wintering birds, amphibians and reptiles. These features need managing sensitively and rotationally to help improve and expand the grassland whilst providing a continual and structurally varied resource for scrub and hedgerow associated species, and suitable connectivity between woodland and scrub areas.

Management Aims and Actions

- Developing scrub islands should be reduced in extent within the main grassland areas (2b and 3a) and pushed back along the woodland edge (1c) to reduce encroachment into the grassland.
- Retained and pushed back woodland edge scrub should be scalloped to create a more structurally varied zoned edge structure to the vegetation and increase the length of available edge habitat and microclimates.
- Scrub management should be undertaken rotationally, on a ten-year cycle, to produce a varied age-structure.
- Scrub surrounding gorse should be cleared to allow expansion of the valuable gorse component. Gorse should be managed rotationally on a ten-year cycle.
- Adjacent landowners should be consulted and encouraged to undertake sympathetic management on hedgerows bordering the Common.

Where

- 1c, 2c and 3b - scrub
- Not mapped - boundary hedgerows

When

- Units 1c, 2c and 3b - November to February
- Boundary hedgerows - November to February

Practical considerations

- Woodland edge scrub should cover several metres in width; these areas should be cut on a rotational basis every ten-years with one tenth of the edge habitat cut each year, or one fifth cut every two years; cutting is preferable in short non-adjacent sections.
- Some larger stands of bramble scrub should be allowed to develop but not allowed to encroach too much into the main body of the grassland.
- Cutting or mowing will be undertaken between November and February, to avoid the bird breeding season (March to August), and to leave berry-bearing species to provide food for birds and mammals in the Autumn (September-October).
- Cutting scrub can be undertaken by brush cutters or tractor-mounted flail; areas of tall herb vegetation can be mown.
- Scrub clearance should consider the requirements of hazel dormice, which may use this habitat.

- Landowners undertaking sympathetic hedgerow management should manage their hedgerows to generate a continuous, thick and bushy hedgerow structure while allowing the hedgerows to flower and fruit. Practices to be encouraged include the following:
    - Tall and spindly hedgerows should be restored by layering or coppicing; this should be done to hedgerows over 3-4 m in height.
    - Long-term management will include periodic trimming on a 2 to 3-year rotational basis, at the end of winter after berries have been eaten by birds and small mammals, and before the bird nesting season begins, but allowing the hedgerow to incrementally increase in height within its natural life-cycle.
    - Hedgerow management should aim to generate an 'A' shape hedge, with a dense structure, of approximately 2-2.5 m in height.
    - Any gaps within the hedgerow should be planted to improve connectivity along the hedgerow as well as the variety of species present; native species, preferably of locally-sourced provenance, should be used.
    - Hedgerows could be further enhanced by addition of hedgerow trees, such as oak, field maple and rowan.

2.4 Ponds and ditches

The two ponds on the Common are a valuable wildlife resource and have the potential to support many specialised plants and invertebrates. However, they are currently overgrown and unmanaged and require restoration.

Management Aims and Actions

- Both ponds will require a water supply to prevent them drying out; drainage across the Common should be investigated to help identify and rectify any water flow issues into and out of the ponds.
- The ponds should be cleaned out, with removal of accumulated silt, organic debris, and dead vegetation from the pond bed, reduction of excessive bulrush growth from former open water areas, and reduction of excessive shading around the ponds from overhanging trees and scrub.
- Pond margins should be managed, and where necessary re-profiled, to provide shallow slopes and shelves for newly colonising aquatic plants and invertebrates.
- Pond maintenance (measures as above, albeit reduced in scale) should be undertaken periodically, every 3-5 years, to maintain the pond in a good condition.
- Once the ponds have been fully restored, a dipping platform should be considered as an educational tool for local schools; this is best located on the easternmost pond, away from the public highway.
- An investigation into the drainage function of the boundary ditches along the southern part of the Common should take place. Their original purpose, to help drain the Common so as to improve the value of the grazing, is now unnecessary, and thus they could potentially be filled in to restore the original drainage pattern on this part of the Common, or managed (e.g. sluiced, re-profiled) to provide a new linear pond and a greater variety of microhabitats along their length.

Where

- Unit 6 - ponds (x2)
- Not mapped - boundary ditches (south of main road)

When

- Unit 6 - November to February
- Boundary ditches - November to February

Practical considerations

- Pond restoration works are best carried out during the winter months when impacts to aquatic species, including breeding amphibians are minimised.
- A buffer zone of at least 2-3 m around the pond banks should be left uncut to prevent any grass or scrub cuttings from entering the pond, to prevent vehicular disturbance around the pond during grass mowing, and to help reduce future nutrient inputs resulting from localized water runoff.
- The ponds will require occasional management to maintain and enhance the availability of microhabitats, both below and above the water, and to prevent future deterioration resulting from natural succession, over shading, accumulation of organic matter and/or excessive sediment, or colonization by vigorous species (e.g. bulrush) or invasive non-native species.
- The ponds should not be stocked with fish as these generally have a detrimental effect on the biodiversity of small waterbodies.
- Ongoing monitoring will inform the requirement for any management actions.
- Ditch management, such as re-profiling, should be carried out by mechanical excavator during dry conditions over the winter period; excavated soil should not be deposited onto the grassland but should be utilized elsewhere, for example ploughed into an arable field.

3 ADDITIONAL MANAGEMENT PRIORITIES

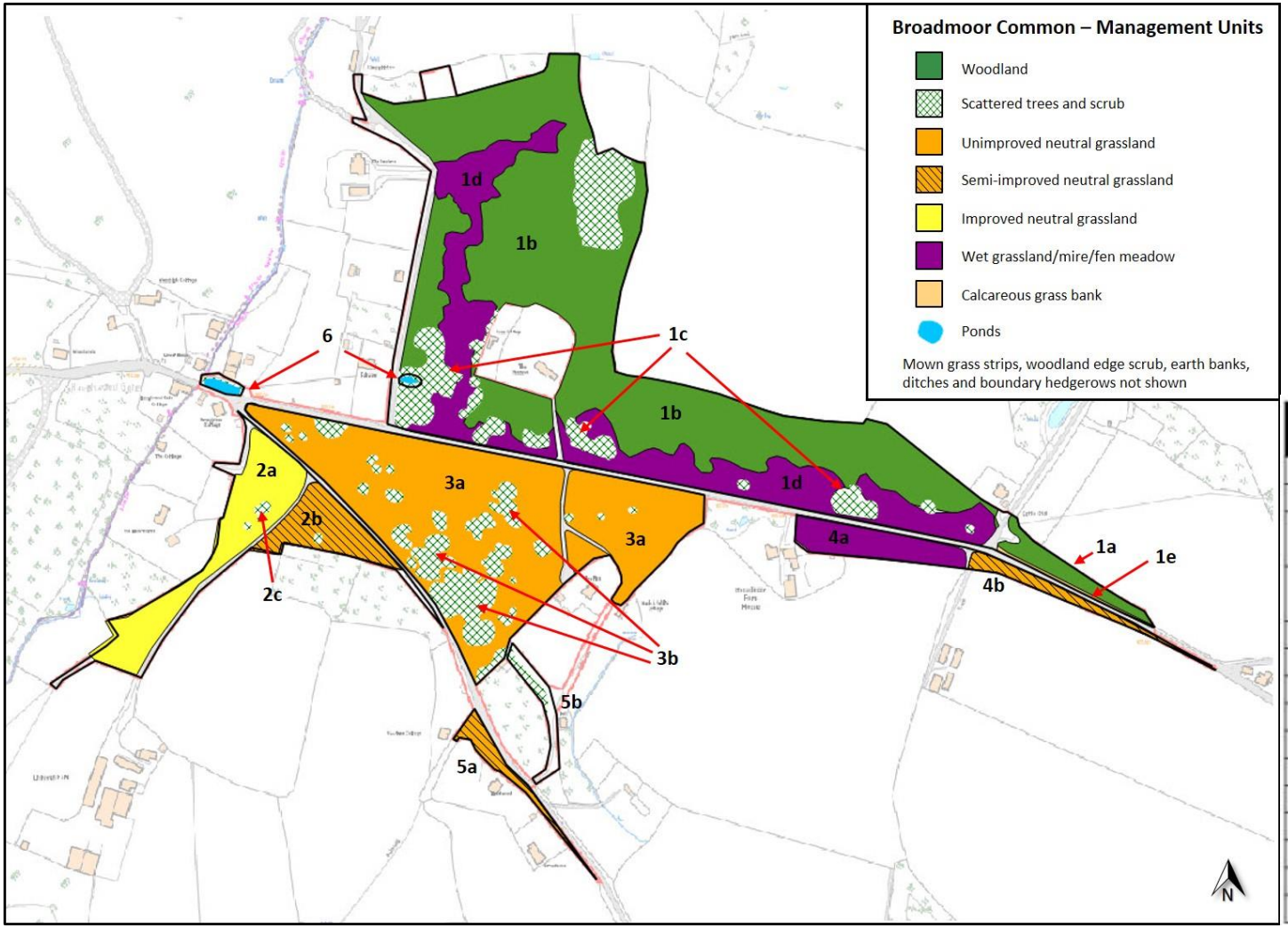
A site management group, affiliated to WPC, will be able to oversee the success of the management plan and prepare, facilitate/implement the rolling annual work programme. The group will pursue sources of funding to support the management of the Common and allow a more rapid and ambitious implementation of the plan. The group will encourage community participation in management of the Common, undertake ongoing liaison with residents, commoners and other stakeholders, and ensure information is available on management activities.

Objectives:

- Set up Broadmoor Common Management Group with formal constitution and terms of reference.
- Seek appointment of voluntary local warden(s).
- Set up a volunteer management group to help with practical management, and a volunteer events group for fundraising, education and local community engagement.

- Provide and maintain a suitable path network for residents and visitors and prepare a signage strategy for the Common.
- Encourage greater sense of ownership of the Common by the local community.
- Undertake ongoing liaison and provide access to information on management.
- Undertake statutory duties as site owner and manager.
- Set up biodiversity monitoring group and undertake a programme of monitoring to steer and report on the success of future management.

APPENDIX 1: MANAGEMENT UNITS AND HABITATS



Unit	Habitat
1a	Ancient woodland
1b	Secondary woodland
1c	Scrub (bramble, willow, gorse)
1d	Wet grassland/mire/fen meadow
1e	Calcareous road verge
2a	Improved grassland
2b	Semi-improved grassland
2c	Scrub patches
3a	Unimproved grassland
3b	Tree and scrub islands
4a	Wet grassland/mire
4b	Semi-improved grassland
5a	Semi-improved grassland
5b	Path, scrub
6a	Ponds

APPENDIX 2: FIVE-YEAR WORKS PROGRAMME – HABITAT MANAGEMENT

OBJECTIVE	HABITAT	ACTION	WHEN	WHO	YEAR				
					2017	2018	2019	2020	2021
					MANAGEMENT UNITS				
2	Grassland	Cut 75% by area annually on a rotational basis, leaving 25% uncut annually, OR cut each compartment three years out of four	Mid-July - mid-Aug	Com	2a, 2b, 4b, 5a	2a, 2b, 4b, 5a	2a, 2b, 4b, 5a	2a, 2b, 4b, 5a	2a, 2b, 4b, 5a
		Cut 75% by area annually on a rotational basis, leaving 25% uncut annually.	Mid-July - mid-Aug	Com	3a	3a	3a	3a	3a
	Wet grassland/mire/fen	Cut 50% by area annually on a rotational basis, leaving 50% uncut annually.	Mid-Aug - mid-Sept	Com	1d	1d	1d	1d	1d
		Cut every two years.	Mid-Aug - mid-Sept	Com	4a		4a		4a
	Calcareous grass bank	Annual cut.	Aug - Sept	H'ways	1e	1e	1e	1e	1e
	Scrub Islands south of road	Remove 50% scrub islands and maintain by cutting every 3-5 years thereafter.	Nov - Feb	Cont and/or Vol		2c, 3b			2c, 3b
3	Woodland edge	Take back edge of invading woodland. Work on 20% of the woodland edge each year for the first five years. Maintain scrub on a 10-year rotation.	Nov - Feb	Cont and/or Vol	1b	1b	1b	1b	1b
	Woodland	Small scale rotational felling/coppicing within retained woodland. Work to open up existing paths and create interconnected small glades.	Nov - Feb	Cont and/or Vol	1b	1b	1b	1b	1b
		Establish 3-4 larger scale felled areas/deer exclosures where funding allows. Stagger felling of areas every 4-5 years and maintain on a 15-year rotation.	Nov - Feb	Cont	Reliant on funding				
		Establish several dead wood piles from felled material when available.	Nov - Feb	Vol	1b		1b		1b
	Remnant ancient woodland	Remove of dumped brash/cuttings within remnant ancient woodland. Investigate origins/AWI species.	Nov - Feb	Vol	1a	1a			

4	Scrub	Push back and scallop woodland edge scrub. Work on 20% scrub annually for the first five years. Maintain scrub, including gorse, on a 10-year rotation.	Nov - Feb	Vol	1c	1c	1c	1c	1c
	Gorse scrub	Selective scrub clearance around gorse to help increase gorse component. Clear old gorse to allow regeneration.	Nov - Feb	Vol	1c	1c	1c	1c	1c
	Hedgerows	Explore opportunities for sensitive hedgerow management with adjacent landowners	n/a	MG	✓	✓			
5	Ponds	Investigate drainage of water into ponds	n/a	MG	6	6			
		Dredge ponds, remove dead vegetation and large bulrush stands (leave some in margins) (but with shallow margins and shelves)	Nov - Feb	Vol		6	6		
		Cut back 75% overhanging trees and scrub to reduce shade	Nov - Feb	Vol		6	6		
		Maintain by clearing scrub and excessive aquatic plants (bulrush) every 3 years.	Nov - Feb	Vol					6
	Ditch on southern boundary	Investigate drainage function of ditches along southern boundary. Consider management to block or improve.	n/a	MG	✓	✓			

Key: Com – commoners; H'ways – Highways; Cont – contractor; Vol – volunteers (with lead from MG); MG – Broadmoor Common Management Group; and W – volunteer warden(s)

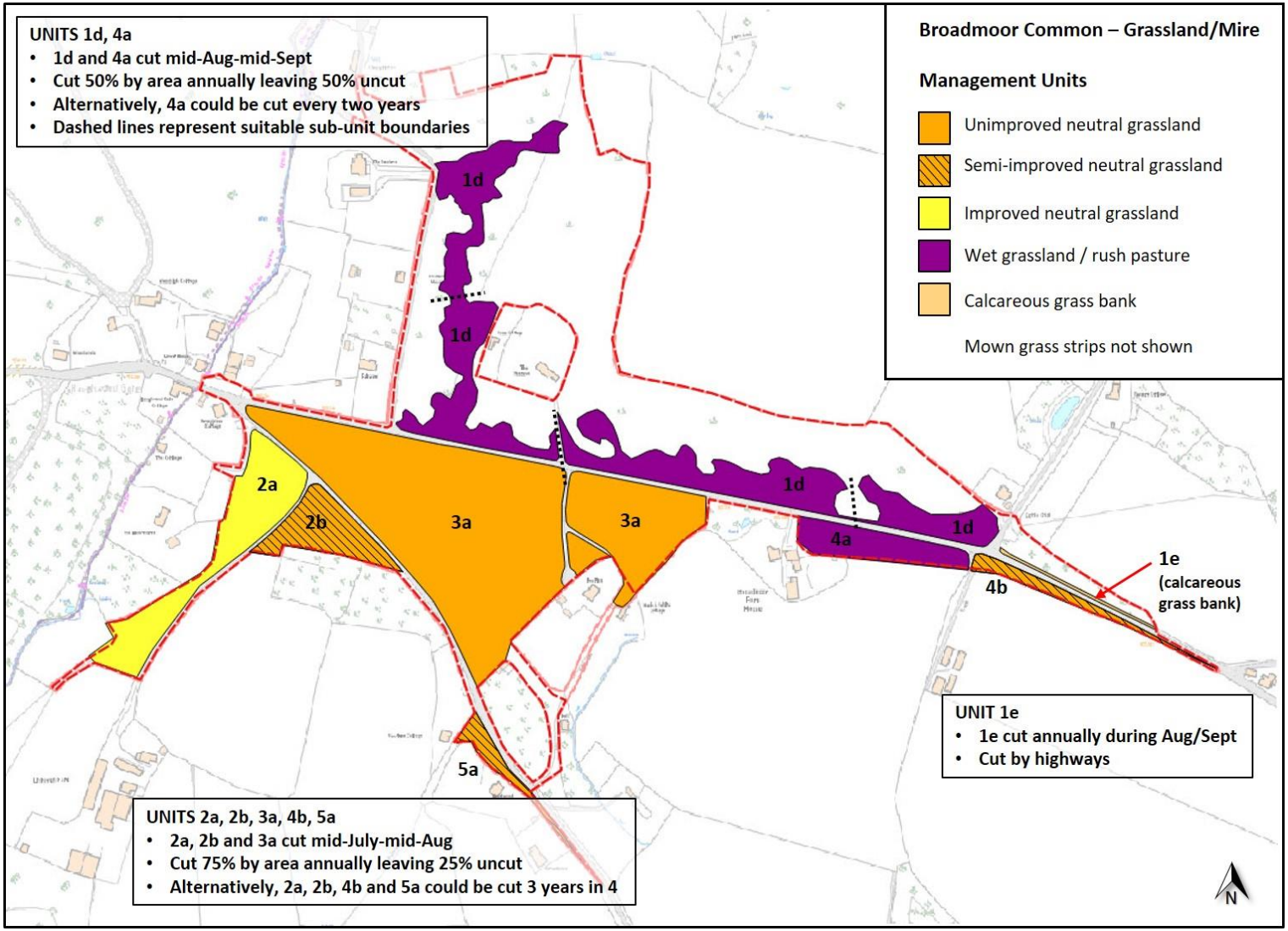
APPENDIX 3: FIVE-YEAR WORKS PROGRAMME – ADDITIONAL MANAGEMENT PRIORITIES

OBJECTIVE	TASK	ACTION	WHO	YEAR				
				2017	2018	2019	2020	2021
1	Set up site management group, appoint local warden(s), set up management & monitoring groups, seek funding	Set up management group (full members, co-opted members) with formal constitution and terms of reference	WPC	✓				
		Investigate available best practice resources and approach established groups for advice	MG	✓	✓	✓	✓	✓
		Identify and appoint local volunteer/honorary warden(s)	MG	✓	✓			
		Set up volunteer groups (management, monitoring, activities)	MG	✓	✓	✓		
		Explore funding opportunities from statutory bodies, charities and other sources	MG	✓	✓	✓	✓	✓
6	Paths	Mark out existing Rights of Way and identify desired routes for new path network. Consult with commoners/residents	MG	✓	✓			
		Consult with commoners/residents on suitable path network with new routes connecting existing Rights of Way and paths	MG	✓	✓			
		Implement with clearance of trees, scrub and mowing at appropriate times as above. Seek funding for boundary styles.	Vol	✓	✓	✓	✓	✓
7	Signage	Consult with commoners/residents on suitable, seek funding	MG	✓	✓			
8	Encourage local community involvement	Prepare strategy (i.e. website, social media) for dissemination of information regarding Common management and progress	MG	✓	✓			
		Encourage active management participation by local community residents	MG	✓	✓	✓	✓	✓
		Encourage use of Common by local schools, societies, etc. for education/social activities	MG		✓	✓	✓	✓
9	Ongoing Liaison with stakeholders	Seek advice and help when needed from statutory bodies, charities and other groups and individuals	MG	✓	✓	✓	✓	✓
		Provide encouragement and support to volunteer groups	MG	✓	✓	✓	✓	✓
10	Statutory duties	Ensure statutory approval, H&S and relevant insurance for management actions on the Common are in place	WPC, MG	✓				
		Ensure contractors undertaking work on the Common adhere to statutory obligations	WPC, MG	✓				
11	Monitoring	Ensure baseline information/recording system in place for monitoring programme	MG	✓	✓			
		Identify knowledge gaps	MG, Vol		✓	✓		

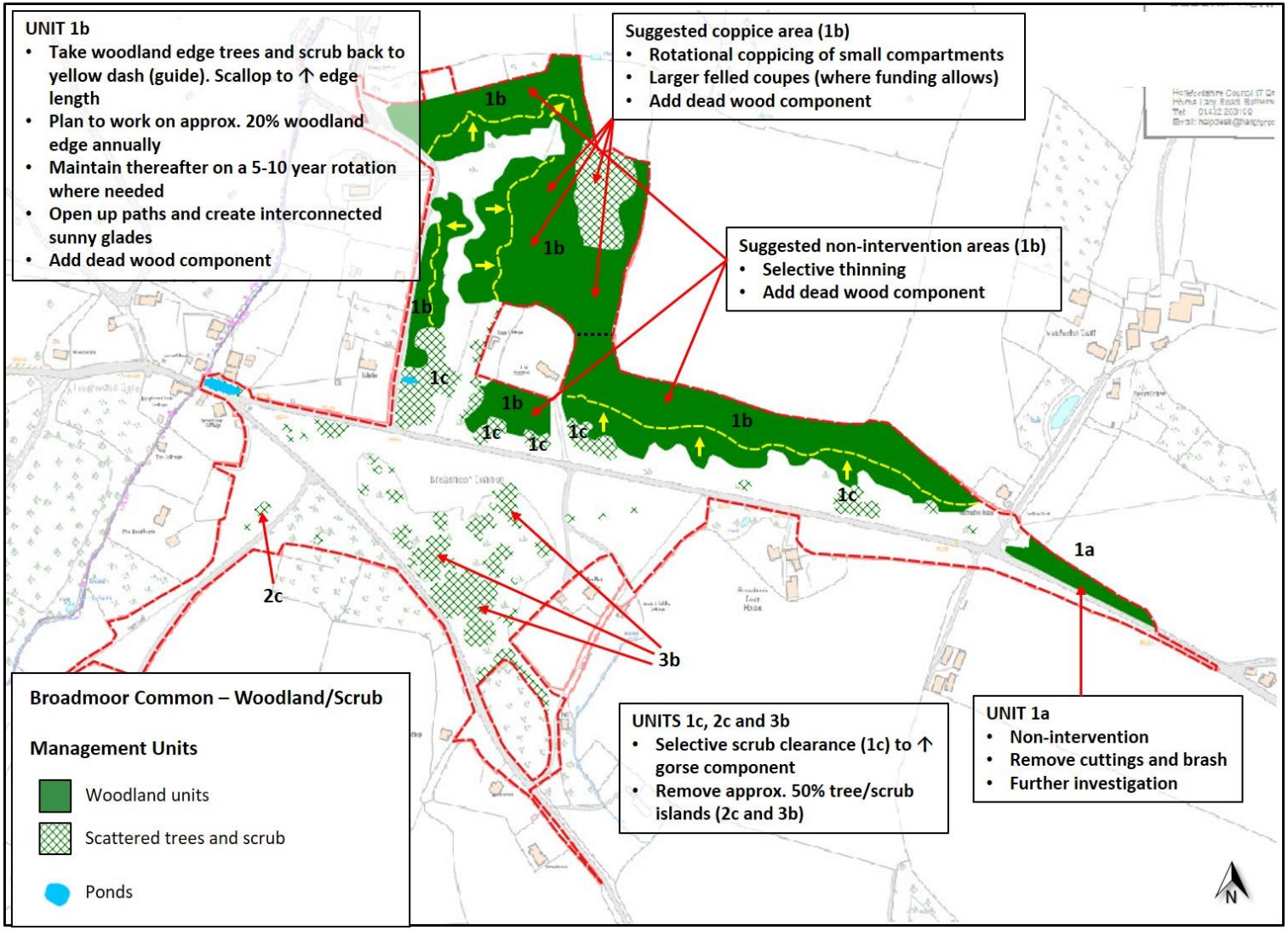
		Annual walkover of paths, common and boundaries to identify issues, report back to MG	W	✓	✓	✓	✓	✓
		Annual monitoring of indicator species (selected plants, butterflies, dormice) by volunteer individuals and groups	Vol	✓	✓	✓	✓	✓

Key: Com – commoners; H'ways – Highways; Cont – contractor; Vol – volunteers (with lead from MG); MG – Broadmoor Common Management Group; and W – volunteer warden(s)

APPENDIX 4: GRASSLAND UNITS – SUMMARY OF HABITAT WORKS



APPENDIX 5: WOODLAND AND SCRUB UNITS – SUMMARY OF HABITAT WORKS



APPENDIX 6: RESOURCES

- Crofts, A. & Jefferson, R.G. (1999). *The Lowland Grassland Management Handbook.* 2nd Edition. English Nature & The Wildlife Trusts.

- Forestry Commission (2010). *Practice Guide: Managing ancient and native woodland in England*. Forestry Commission, Bristol.

- Natural England Commons fact sheets, No. 1 to 17

- Natural England (2010). *Technical Information Note TIN063. Sward enhancement: diversifying grassland by spreading species-rich green hay.* June 2010.

- Natural England (2012). *A Common Purpose: A guide to Community Engagement for those contemplating management on Common Land*. Revised Edition.

- RSPB. Gorse Management Techniques. https://www.rspb.org.uk/ourwork/conservation/advice/gorse/techniques.aspx

- RSPB. Scrub Management Techniques. https://www.rspb.org.uk/Images/scrubmanagement_england_tcm9-207551.pdf

- Foundation for Common Land Toolkit (and Fact sheets & Guidance notes therein): http://www.foundationforcommonland.org.uk/common-land-toolkit

- Herefordshire Meadows Forum: http://www.herefordshiremeadows.org.uk/

- Bromyard Downs Common Association: http://bromyarddowns.co.uk/

- Herefordshire Commons Network: http://bromyarddowns.co.uk/commons-network/

- Coppett Hill Common: http://www.coppett-hill.org.uk/

Potential Sources of Funding:

- Woolhope Dome Environmental Trust
- Landfill tax funding
- Lottery funding
- Countryside Stewardship (NE)
- High and mid-tier Stewardships (NE)
- Boundary hedgerow and restoration grant (NE)
- Welcome to Our Future (http://www.wtof.org.uk/)