BALLARD MEADOW AND WOODLAND

ANNUAL REPORT FOR APRIL 2022 – MARCH 2023

INTRODUCTION

This is The Friends of Ballard Water Meadow's third annual report. Our work on the site is directed by the Management Plan (2020-2024) where we follow the Work Programme from which our Annual Work Plan and monthly work schedules are derived. Like many plans, and our work plan is no different, the majority of work has been achieved whilst some tasks, usually outside our control, remain wanting.

The hot weather in July and August 2022 was unprecedented. The first heatwave in July saw record temperatures in the UK (40.3°C in Lincolnshire) and was closely followed for a couple of weeks in August as well. As if to make up for it, the heavy rains of October and November flooded part of the Meadow and washed-out a footbridge.



1. CONSERVATION AND HABITAT MANAGEMENT

The trees planted in February 2022 in compartment 7 had their guards and stakes removed, allowing them to spread and grow-on. The majority did well despite it being very dry in April. Also, as it was so dry, contractors were able to get into the meadow with heavy equipment and remove the arisings from their earlier tree-felling work.

We cleared the edges of the main path through the woodland and removed some of the lengths of timber. These were cut into shorter lengths for our "wood-walls". We started a new one close to our shed in W12. These also double as compartment boundaries in the woodland. As we moved along the path, bramble was cleared so as not to interfere with safe passage. The long-term plan is to have a grassy/wildflower margin between the edge of the gravel path and the first "row" of newly planted hazel saplings. This will only be 1-2m wide, but will give the feel of a woodland ride. It also creates a corridor for butterflies for example, which can move more freely within the wood looking for nectar sources.

In our woodland glades, bracken is cut on a regular basis in May and June to prevent it becoming a dominant species and blocking light from the more delicate flowers. Both glades were cleared successfully. Also, in the southern glade (W11) we installed a temporary rope-barrier to prevent access. The Bluebells were being trampled unnecessarily here when people were looking at our "bug-hotel". It was decided to move this to the grassy area beside our shed, re-stocked with small sections of timber and covered in mesh. This is now being used by solitary bees.

In the meadow, with help from the Fernhill Friends, we began a more structured programme of controlling Hemlock Water-dropwort; a native but invasive species. In 2022 it was compartments M5 and M11. Two methods are used; removing the flower heads only on some plants in part of the area to be cleared, and cutting the plant at ground level in another. We remove all the arisings and leave in a pile near our access gate for later collection. These compartments were then cut and the arisings collected, later in the year. Two different compartments will be managed this way in 2023 and so on. We cut in June and the timing was right, as it hadn't regrown and seeded by the time Richard Harvey (farmer/cattle owner) came in to cut these sections in July. The friends then collected the arisings from the cutting, piled them near the gate and these were removed by the Town Council for composting.

The cattle came back onto the Meadow in early September, only to break-through the fencing and into Ballard School grounds a day or two after. The staff at the school were none too pleased, so the cattle were removed.

The north and east sections of fencing were replaced in October, as well as the kissing-gate framework at the end of Hazelwood Avenue, and the bridge across the north-south ditch. This work was arranged through the Town Council who called-in local fencing contractors to do the work. When the fencing work had been completed, 5 Dexter cattle were back on the Meadow on Sunday 20 November and stayed until 12 January.

The FBWM have adopted the small clearing (Green) between Woar Copse and Fawn Gardens in order to increase its value to wildlife. We are implementing a new cutting regime where only half the area is cut each year. All cuttings are removed. By cutting and removing the arisings we will reduce the nutrient input, making it more attractive to the more delicate wild flowers. These in turn will attract more invertebrates and pollinators. By leaving half uncut and long, this allows invertebrates to go through their life-cycle undisturbed; many of which overwinter as eggs or larvae in upright, hollow plant stems and around their bases. We cut one half and removed the cuttings in late August which were bagged and removed for composting by the Town Council, for which many thanks.

As mentioned, we are embarking on a plan to create a more diverse woodland ride through Woar Copse. As we move through the woodland, clearing individual compartments, the edge of the gravel path will be kept clear of bramble and lengths of timber. Eventually, both edges of the gravel path through the woodland will be cut to a metre or so wide. Over time this will encourage grasses and woodland flowers to grow instead of the bramble making it more attractive to invertebrates.

Our two permanent woodland glades (compartments W4 and W11) have been cut and cleared of bramble and last years' vegetation, ready for a wild flower show in the spring. This work started in autumn 2020 and already there are signs that the woodland ground flora is spreading and becoming more varied. We have also started to clear the bramble and small shrubs from the area of woodland near our workbase. This section in our coppice cycle (W12) was cleared, and the area planted with 150 more hazel saplings, in late February. Our last task in this compartment, until we return to do more work here in 10 years' time, was to have our now traditional breakfast bonfire in early March, marking the end of the conservation management work season. Sadly, many of the Hazel saplings did not take and we will have to re-plant in November.

We are fortunate in being able to apply to the Woodland Trust for free native hedgerow shrubs and in November we planted around 50 saplings along the new fence line at the eastern end of the meadow in compartment M12. More are being requested for 2023.

During the winter storms of 2021, a large, old willow collapsed across the ditch in M12 near to the Guide Hut entrance. For the last couple of years, we have been reducing the spread of the willow in this corner of the site, so cutting and clearing this was added to our programme. Cutting the old timber back, causes the willow to sprout new, fresh growth (like pruning and coppicing) as well as opening-up ground below to allow meadow plants to spread. If left, it can act as a holdfast for bramble which tends to smother the more delicate meadow flora.

As with any cutting or clearing that we do, it creates material that we have to get rid of. The most efficient way of dealing with this material is to burn it, so we've had a few bonfires to keep on top of things. We are mindful of wind direction and the amount of wood-smoke burning may generate, and each time we burn Hampshire Fire and Rescue are informed. Any material not burnt is stacked into habitat piles in selected locations or piled near the entrance gate, ready for removal and composting by the Town Council.

It is the very nature of meadows that they crave to be woodland. Initially, if left unmanaged or as a legacy of inappropriate management, bramble and small woody shrubs begin to colonise. Before long, scrub and then woodland develops. At Ballard Meadow, the bramble creeps in from the edges and soon, as it becomes too dense, livestock won't touch it, allowing it to become very well established. So, we have to keep it in check. Each year we intervene by clearing bramble and woody material from the edges of two selected compartments and remove any large obstacles. This takes place in winter and we focused our attention on two compartments next to the stream, compartments M6 and M8. The work was done by the end of March.



We have been supported in our management work by Paul Brockman BEM and students from Ringwood School. They have helped coppice the hazel growing against the stream as part of their woodland management training. We won't be touching the small area of ground between the stream and the new fence, so the cut material is stacked here to allow to rot away naturally.

These habitat heaps and stacked timber (wood-walls) will provide additional, undisturbed habitat for wildlife.

There is still a large amount of old timber stacked against the edges of the gravel path through the woodland. This is mainly holly, cut a few years ago. We are gradually taking this out, cutting it into shorter lengths and stacking it on our woodland compartment boundaries, providing a more useful habitat for fungi to colonise and invertebrates to overwinter. The path edges will then be mown annually, creating a narrow woodland ride edge and encouraging a variety of wildflowers.

Although not strictly within the boundary of the Ballard Meadow and Woodland site, the small patch of scrub and woody vegetation (Willow, Sycamore and bramble) at the entrance to the wood at the end of Hazelwood Avenue, has been cleared and the arisings burnt or taken away by the Town Council. We are hoping that this area will be cut and cleared annually from now on.



2. RECORDING

Two types of records are kept; events which occur on-site that have a bearing on management or wildlife including volunteer effort (see below), and wildlife recording that is more structured taking the form of a detailed survey, census or transect.

A variety of birds use the site. An annual Common Bird Census is a way of assessing those birds which establish territories and may go on to use the site for breeding. A bird seen in April for example, does not mean it is breeding but if recorded singing, or carrying nesting material, then it probably means it is establishing, or has, a territory. Full details of the census done for 2022, is available on the Friends of Ballard Water Meadows website and a summary is shown in APPENDIX 1.

New Milton Town Council and the Group engaged the services of a local entomologist, Bryan Pinchen to undertake the third annual insect survey. The results have been delayed as Bryan was taken ill at the end of the survey season in September 2022.

The Butterfly Transect undertaken on the site is registered as part of the UK Butterfly Monitoring Scheme. Butterflies are counted along a fixed route and the results feed into national records via local or County recorders. This way, across the country, the status of individual species is known year by year. This year, Ann Gorman, Pam Petherbridge and Rhona Copp contributed, and the 2022 transect summary is shown in APPENDIX 2.

Pam, also our stream surveyor, sampling water chemistry and macro-invertebrates, continued on a monthly basis when there was water in the stream. Elsewhere in the New Forest, streams were

sampled for their water chemistry, and now more detailed macro-invertebrate studies have started.

There are plants which are associated with particular habitats and are known as Indicator Species. These are recorded annually, by individual compartment by Ann. Each of the meadow indicator species is assessed more closely in terms of either counts or the percentage cover over the ground (where individuals are too numerous to count easily), whereas the woodland element is recorded, simply as presence or absence. All plants recorded to date by year, across the whole site (our Master List) is shown in APPENDIX 3.

The plant list is by no means complete and new species are recorded each year. In 2022 there were three new species found in the meadow (Snowflake, Barren Strawberry and Oval Sedge) and one in the woodland (Snowdrop).

New for 2023, after receiving a generous donation from the Hampshire Biodiversity and Information Centre (HBIC) of Hampshire County Council, we purchased a mains-powered Robinson Mercury Vapour moth trap. A second donation from Cllr Blunden enabled the Group to purchase a powerful, re-chargeable battery pack. This enables the Group to also make use of a smaller, more portable battery-powered moth-trap, and can be used away from a mains power supply, not only at Ballard but elsewhere in the town. Calm evenings will be chosen in late spring and summer and moths will be recorded, with experts on-hand, and released unharmed using this specialist equipment.

3. INFRASTRUCTURE

There are checks on the infrastructure (gates, fences, bridges etc) on a regular basis. Small repairs we can do ourselves but the larger jobs require assistance and when anything fails, we inform the Town Council. This year new stock-proof fencing was installed along the northern and eastern boundaries of the meadow.

The strong winds bringing down many branches and heavy rain in the autumn created blockages in the concrete culvert in the north-east corner of the site. The knock-on effect of this was to send the stream water through the meadow. Regular checks at the culvert are now in place. Any blockages here are removed quickly.

4. VOLUNTEER WORK EFFORT

During the period 1 April 2022 to 31 March 2023 the Friends of Ballard Water Meadow volunteers, the Fernhill Friends and the school students' working parties clocked-up a total of 1,556 manhours. We continue to meet twice weekly, Friday and Sunday mornings at 09.30 at our workbase on Lake Grove Road.

5. LIAISON AND ADMINISTRATION

The Friends of Ballard Water Meadow are grateful for the help and support from officers and members of New Milton Town Council and in particular, the Estates and Facilities Management Team. Throughout the year the Group has worked closely with Fernhill Friends, who helped clear Hemlock Water-dropwort from the Meadow, and donated proceeds from various fund-raising events, for which we are grateful.

In order to increase our profile, as one of a number local community groups, we held an event in July to celebrate National Meadow Day and were joined by the New Milton Men's Shed.

Through our membership of Conservation Connection New Forest South, a small piece of ground was donated by the Town Council in Long Meadow Village Green in Barton on Sea. This small area, like the patch at the entrance to Fawcett's Field in 2021, was sown with native wildflower seed in April 2022. There was a large amount of dormant seed from previous sowings by the Town Council and Corn Marigold dominated the patch in the summer. We also joined-in with their celebrations at the Bee Fayre in August. Our own final fund-raising event was on New Milton market in December, selling gift packs of native wildflower seed.

Our trips out were few, but we managed to visit the restoration work at Downton Quarry in May (at the invitation of New Milton Sand and Ballast), we were guided by Phil Collier on two occasions around Barton Common and we visited Sims Wood on the North Solent National Nature Reserve in July, where we were rewarded with a spectacle of butterflies including White Admiral and Silverwashed Fritillary.

As part of our Community Involvement, the Chairman was invited to attend a spring festival at Our Lady of Lourdes church, the Remembrance Day commemoration at the War Memorial in New Milton and a Christmas Carol service at St Mary Magdalene Church.

The Committee of the Friends of Ballard Water Meadow meets regularly and before any special event. Our Annual General Meeting was held at the new Crematorium along Stem Lane in October, at the invitation of the Crematorium staff, and our thanks go to them for supporting us on the evening. The committee was re-elected and two new members appointed.

The Committee in 2022/23 comprised:

Chairman: Bob Lord Secretary: Ann Gorman

Treasurer/Membership Secretary: Pam Petherbridge

Town Council Representative: Steve Clarke

Media/Engagement: Mandy Hayes

This venue has been offered by the Crematorium staff again for the 2023 AGM.

6. ENGAGEMENT AND MEDIA

6.1 Engagement

Ballard Water Meadow and Woodland welcomes many people every day throughout the year. People come to walk, watch the birds, look at the wildflowers and generally enjoy this beautiful environment. We have dog walkers, families, the elderly, and youngsters. There is something for everyone at this little oasis almost in the centre of town.

Our visitors seem very keen to know more about the Habitats and wildlife at the site and the conservation work of The Friends so this year we have been putting up some informative posters. Each month we publish a 'What to Look For' poster and also informative posters at different times highlighting our conservation work or nature's spectacles, such as the Bluebells and Foxgloves.

We continue to forge links with local schools and colleges and in 2022 we welcomed students from Ringwood School, Bournemouth University and Brockenhurst College.

We also have close-links with a proposed new Community Garden, planned for establishment in Fawcett's Field, New Milton in 2023. Pam is our representative on the Community Garden Committee.

6.2 Signage

The Friends are currently working with New Milton Town Council to update all the signage at Ballard. There will be a Heritage Style board at the main entrance with information about the history of the site and the work of the Friends. There will also be new informative lecterns around the site highlighting the special nature of Ballard with its meadow, woodland and water habitats.

6.3 Litter Pickers

With such a heavy footfall, there is also the inevitable remains of human activity. The majority of people do respect this fragile area and there are many who pick up litter around the site. So much so, that you will barely see litter nowadays. A huge thank you to everyone who helps keep the site so clean.





6.4 The PUPS

Dog mess was a problem on the site. In June 2022 a group of dog walkers decided to do something about it and the Pick-Up Poo Squad (PUPS) was formed. On the first day, 178 deposits were picked up from the paths and verges. Since then, dog poo bag dispensers have been put up and the PUPS go out every day, chat to other dog walkers, top up the bag dispensers and pick up any deposits they see.

The PUPS have been delighted with the positive response from the public and calculate that in a year about 2000 extra 'deposits' have been removed over and above those that would have normally been picked up without this campaign. That's a lot of 'mess' decomposing and altering the natural habitats!



Please Pick Up The Poo!

Volunteers work here
Nature lives here

And no one wants to see it, smell it or step in it!

Thank you from The Ballard PUPS (Pick Up Poo Squad)

7. OTHER EVENTS

During the year we have had a rough-sleeper in a tent in the Meadow. He was reported to Social Service and hopefully now has a more secure place to live.

8. MEMBERSHIP

The Friends of Ballard Water meadow are grateful to all those who have renewed their membership for the year. As with all membership groups, there is a turnover and this year we welcomed several new members. Our membership for 2022/23 stood at 59.

To celebrate the support of the membership, and to pay special tribute to one founder member, we held a Member's Day in September. All members were invited to the workbase, where we served snacks and refreshments as a "thank-you" for supporting the Friends of Ballard Water Meadow. Our special tribute was to Enid Knight, who, in the late 1990s alerted naturalists and local authorities to the reversion of Ballard Meadow from grassland to scrub. Following surveys and the classification of the Site of Importance for Nature Conservation in 1998, Enid was instrumental in forming the Friends' Group which was established in 2005.

9. ACKNOWLEDGEMENTS

As mentioned above, the Friends of Ballard Water Meadow cannot operate in isolation. As a not-for-profit group, we rely heavily on membership subscriptions and donations to keep us running. We have been more fortunate this year in being able to once again, generate some income from fund-raising events.

We have received donations from several sources as well as our members, for which many thanks and this is gratefully received. All our accounts can be obtained from the Treasurer on request.

The Committee would particularly like to thank: Westerleigh Group (New Forest Crematorium), HBIC, Fernhill Friends, New Milton Town Council, New Milton Town Councillors Geoff Blunden and Steve Clarke, Paul Brockman BEM and Priestlands School and last, but not least all the willing volunteers who help, come rain or shine.

Bob Lord Chairman

September 2023

10. APPENDICES

APPENDIX 1 - COMMON BIRD CENSUS 2022

APPENDIX 2 - BUTTERFLY TRANSECT 2022

APPENDIX 3 - UPDATED PLANT LIST (1998-2022)

APPENDIX 1 - COMMON BIRD CENSUS 2022 (Summary)

A. BREEDING BIRDS

Common Name	Scientific Name	Territories
Stock Dove	Columba oenas	5 (6)
Woodpigeon	Columba palumbus	18 (19)
Great Spotted Woodpecker*	Dendrocopos major	2 (3)
Jay	Garrulus glandarius	1 (2)
Magpie	Pica pica	1 (2)
Jackdaw	Coloeus monedula	2 (3)
Carrion Crow*	Corvus corone	3
Coal Tit	Periparus ater	4 (5)
Blue Tit	Cyanistes caeruleus	14 (15)
Great Tit	Parus major	6 (7)
Long-tailed Tit	Aegithalus caudatus	2
Chiffchaff	Phylloscopus collibita	4 (5)
Blackcap	Sylvia atricapilla	5
Goldcrest	Regulus regulus	3
Wren	Troglodytes troglodytes	15
Nuthatch*	Sitta europaea	4 (5)
Starling	Sturnus vulgaris	2 (3)
Blackbird	Turdus merula	15 (17)
Song Thrush	Turdus philomelos	2 (3)
Robin	Erithacus rubecula	15 (17)
House Sparrow	Passer domesticus	1
Dunnock	Prunella modularis	10
Chaffinch	Fringilla coelebs	5 (6)
Greenfinch	Chloris chloris	3
Goldfinch	Carduelis carduelis	4 (5)

^{* -} denotes nest (seen, bird at nest, entering nest site or young calling in nest)

B. NON-BREEDING BIRDS PRESENT ON ONE OR MORE OCCASIONS

Common Name	Scientific Name	Notes
Mallard	Anas platyrhynchos	A pair – visit 4
Swift	Apus apus	Single bird – visit 6
Grey Heron	Ardea cinerea	Two over - visit 5
Green Woodpecker	Picus viridis	Calling – visit 1
Treecreeper	Certhis familiaris	Single bird - visit 1
Redwing	Turdus iliacus	Single bird - visit 1
Bullfinch	Pyrrhula pyrrhula	Male calling – visit 1

Data collected by: Bob Lord

APPENDIX 2 - BUTTERFLY TRANSECT 2022 (Summary)

	TRANSECT S	ECTION	
SPECIES	1	6	7
	south edge	meadow	Woar copse
Small/Essex Skipper		15	
Large Skipper		1	
Brimstone	1	2	1
Large White	5	13	6
Small White	3	58	2
Green-veined White		1	
Orange Tip	3	6	
Small Copper		4	
Common Blue	2	33	
Holly Blue	2	2	1
Red Admiral	2	3	4
Painted Lady			1
Peacock	2		1
Small Tortoiseshell		1	
Comma		3	2
Marbled White		3	
Ringlet		1	
Speckled Wood	3	6	22
Gatekeeper	19	51	3
Meadow Brown	16	115	23

Extracted from: Ballard Water Meadow Transect Report (New Forest Transect Group/Friends of Ballard Water Meadow 2022).

Observers: Ann Gorman, Pam Petherbridge, Rhona Copp

Ringlet and Small Tortoiseshell – first records.

APPENDIX 3 – UPDATED PLANT LIST 1998-2022 (all habitats)

			Common		Yea	r recorde	ed	
Stat	Loc	Species	Common name	1998- 2018	2019	2020	2021	2022
**		Acer campestre	Field Maple					
nn	W	A. platanoides	Norway Maple	Х				
	w	A. pseudoplatanus	Sycamore	X	Х	Х	Х	Χ
		Achillea millefolium	Yarrow	Х	Х	Х	Х	Χ
	m	A. ptarmica	Sneezewort				Х	Χ
**		Adoxa moschatellina	Moschatel					
	m	Agrostic capillaris	Common Bent	Х	Х		Х	Χ
		A. stolonifera	Creeping Bent	Х			Х	Χ
*	cm	Ajuga reptans	Bugle		Х	Х	Х	Χ
		Alliaria petiolata	Garlic Mustard			Х	Х	
nn		Allium triquestrum	Three-cornered Leek		Х	Х	Х	
**		A. ursinum	Ramsons					
		A. vineale	Crow Garlic		Х	Х		
	m	Alopecurus geniculatus	Marsh Foxtail	Х		Х	Х	Χ
	m	A. pratensis	Meadow Foxtail	X			Х	Χ
		Anagallis arvensis	Scarlet Pimpernel		Х			
**	W	Anemone nemorosa	Wood Anemone	Х	Х	Х	Х	Χ
	W	Anthoxanthum odoratum	Sweet Vernal-grass	Х	Х	Х	Х	Χ
	С	Anthriscus sylvestris	Cow Parsley	Х	Х	Х	Х	Χ
		Apium nodiflorum	Fool's Water-cress	Х				
	mw	Arrhenatherum elatius	False Oat-grass	Х			Х	
	m	Artemisia vulgaris	Mugwort	Х		Х	Х	Χ
	m	Arum italicum	Italian Lord and Ladies				Х	Χ
	m	A. maculatum	Cuckoo Pint		Х	Х	Х	Х
		Athyrium filix-femina	Lady-fern			Х		
	m	Bellis perennis	Daisy		Х	Х	Х	Χ
	W	Betula pendula	Silver Birch		Х	Х	Х	
**	W	Blechnum spicant	Hard Fern					
**	W	Brachypodium sylvaticum	False-brome	Х				
**		Bromopsis ramosa	Wood-brome					
		Bromus hordaceus	Soft-brome					
**		Calamagrostis epigejos	Wood Small-reed					
	m	Caltha palustris	Marsh Marigold		Χ	Χ	Χ	Χ
		Calystegia sepium	Hedge Bindweed	Х		Χ	Х	Х

APPENDIX 3 – UPDATED PLANT LIST 1998-2022 (all habitats) continued

					Yea	r recorde	ed	
Stat	Loc	Species	Common name	1998- 2018	2019	2020	2021	2022
**		Campanula trachelium	Nettle-leaved Bellflower					
**		Cardamine amara	Large Bitter-cress					
	m	C. flexuosa	Wavy Bitter-cress				Х	Х
	m	C. pratensis	Cuckoo Flower		Х	Х	Χ	Χ
*	m	Carex disticha	Brown Sedge	Х		Х		
		C. divulsa	Grey Sedge					
		C. flacca	Glaucous Sedge	Х				
	m	C. hirta	Hairy Sedge	Х	Х	Х	Χ	Χ
**		C. laevigata	Smooth-stalked Sedge					
	m	C. ovalis	Oval Sedge					Х
**		C. pallescens	Pale Sedge					
**		C. pendula	Pendulous Sedge		Х	Х	X	Х
		C. pilulifera	Pill Sedge				Х	Х
**	mw	C. remota	Remote Sedge	Х		Х	X	Х
**		C. strigosa	Thin-spiked Wood Sedge					
**	w	C. sylvatica	Wood Sedge	Х		Х	X	Х
**		Carpinus betulus	Hornbeam					
**		Cephalanthera longifolia	Narrow-leaved Helleborine					
	m	Centaurea nigra	Common Knapweed	Х	Χ	Х	Х	Х
		Centaurium erythraea	Common Centaury		Х			Х
	m	Cerastium fontanum	Common Mouse-ear	Х	Х	Х	Х	Х
**		Ceratocapnus claviculata	Climbing Corydalis					
	w	Chamerion angustifolium	Rosebay Willow-herb				Χ	Х
**		Chrysosplenium oppositifolium	Opposite-leaved Golden Saxifrage					
	w	Circaea lutetiana	Enchanter's-nightshade	Х	Х	Х	Х	Х
	m	Cirsium arvense	Creeping Thistle	Х	Х	Х	Х	Х
	m	Cirsium palustre	Marsh Thistle	Х		Х	Х	Х
	m	C. vulgare	Spear Thistle	Х	Х	Х	Χ	Х
**		Colchicum autumnale	Autumn Crocus					
	mw	Conopodium majus	Pignut	Х	Х	Х	Х	Х
**		Convalleria majalis	Lilly-of-the-Valley					
	m	Coronopus didymus	Lesser Swine-cress	Х		Х	Х	
	w	Corylus avellana	Hazel	Х	Х	Х	X	Х
**		Crategus laevigata	Midland Hawthorn					
	mw	C. monogyna	Hawthorn	Х	Х	Х	Х	Х
		Crepis capillaris	Smooth Hawk's-beard					
	С	Cynosaurus cristatus	Crested Dog's-tail				Х	Х

APPENDIX 3 – UPDATED PLANT LIST 1998-2022 (all habitats) continued

					Yea	r recorde	ed	
Stat	Loc	Species	Common name	1998- 2018	2019	2020	2021	2022
	w	Cytisus scoparius	Broom			Х	X	Х
	mw	Dactylis glomerata	Cocksfoot	X	Х	Х	X	Х
	m	Dactylorhiza fuchsii	Common Spotted-orchid					Х
	m	D. maculata	Heath Spotted-orchid		Х	Х	X	
*	m	D. praetermissa	Southern Marsh-orchid	X	Х	Х	Х	Χ
**		Daphne laureola	Spurge Laurel					
	m	Deschampsia cespitosa	Tufted Hair-grass	X				
	W	Digitalis purpurea	Foxglove	X	Х	Х	X	Х
		Dipsacus fullonum	Teasel		Х			
**		D. pilosus	Small Teasel					
**		Dryopteris affinis	Scaly Male-fern					
		D. carthusiana	Narrow Buckler-fern					
	W	D. dilatata	Broad Buckler-fern	X		Х		
	W	D filix-mas	Male-fern	X	Χ	Х	Χ	Χ
	m	Eliocharis palustris	Common Spike-rush	X		Х	Х	Х
**		Elymus caninus	Bearded Couch					
	m	Elytrigia repens	Common Couch	X				
	m	Epilobium hirsutum	Great Willowherb					
	W	E. montanum	Broad-leaved Willowherb	X	Х	Х		
		E. parviflorum	Hoary Willowherb	X	Х	Х		
	m	E. tetragonum	Square-stalked Willowherb	X	Χ	Χ		
**		Epipactis helleborine	Broad-leaved Helleborine					
**		E. muelleri	Narrow-lipped Helleborine					
		E. purpurata	Early Purple-orchid					
	m	Equisetum fluviatile	Water Horsetail				Χ	Χ
		E. palustre	Marsh Horsetail	X				
**		E. sylvaticum	Wood Horsetail					
**		Euphorbia amygdaloides	Wood Spurge		Χ	Х	Х	
	W	Fagus sylvatica	Beech	X	Х	Х	Х	Х
	mw	Festuca arundinacea	Tall Fescue	X				
**		F. gigantea	Giant Fescue	X				
	m	F. pratensis	Meadow Fescue	Х			Х	Χ
	m	F. rubra	Red Fescue	X			Χ	Χ
·	m	Filipendula ulmaria	Meadowsweet		Χ	Χ	Χ	Χ

APPENDIX 3 – UPDATED PLANT LIST 1998-2022 (all habitats) continued

Stat Loc Species Common name 1998-2018 2019 2020 2021 2022						Yea	r recorde	ed	
Mar Fraxinus arises Author Dutch Marsh Mar	Stat	Loc	Species	Common name		2019	2020	2021	2022
Galeopsis tetrahit	**		Frangula alnus	Alder Buckthorn					
w Galanthus sp. Snowdrop X X *** Galium aparine Goosegrass/Cleavers X		mw	Fraxinus excelsior	1 1 2 1 1	X	Χ	X X X X X X X X X X X X X X X X X X X	Х	
mw Galium aparine Goosegrass/Cleavers X			Galeopsis tetrahit	Common Hemp-nettle	X			Χ	
*** G. odoratum Woodruff m G. palustre Marsh Bedstraw X <td></td> <td>W</td> <td>Galanthus sp.</td> <td>Snowdrop</td> <td></td> <td></td> <td></td> <td></td> <td></td>		W	Galanthus sp.	Snowdrop					
m G. palustre Marsh Bedstraw X <td></td> <td>mw</td> <td>Galium aparine</td> <td>Goosegrass/Cleavers</td> <td>X</td> <td>Χ</td> <td>Χ</td> <td>X</td> <td>Х</td>		mw	Galium aparine	Goosegrass/Cleavers	X	Χ	Χ	X	Х
m Geraneum dissectum Cut-leaved Crane's-bill X	**		G. odoratum	Woodruff					
mw G. robertianum Herb Robert X <td></td> <td>m</td> <td>G. palustre</td> <td>Marsh Bedstraw</td> <td></td> <td></td> <td></td> <td></td> <td></td>		m	G. palustre	Marsh Bedstraw					
*** Geum rivale Water Avens mw G. urbanum Wood Avens/Herb Bennet X X X X m Glechoma hederacea Ground-ivy X X X X m Glyceria fluitans Floating Sweet-grass X X X X m Giyceria fluitans Floating Sweet-grass X		m	Geraneum dissectum	Cut-leaved Crane's-bill				Х	
mw G. urbanum Wood Avens/Herb Bennet X <		mw	G. robertianum	Herb Robert	X	Χ	Х	Х	Х
m Glechoma hederacea Ground-ivy X<	**		Geum rivale	Water Avens					
m Glyceria fluitans Floating Sweet-grass X X Gnaphalium uliginosum Marsh Cudweed X <td< td=""><td></td><td>mw</td><td>G. urbanum</td><td>Wood Avens/Herb Bennet</td><td></td><td>Χ</td><td>Χ</td><td></td><td></td></td<>		mw	G. urbanum	Wood Avens/Herb Bennet		Χ	Χ		
Gnaphalium uliginosum Marsh Cudweed X		m	Glechoma hederacea	Ground-ivy					Χ
mw Hedera helix Ivy X		m	Glyceria fluitans	Floating Sweet-grass				Х	
*** Heiraceum agg. Hawkweed X X X *** Helleborus viridis Green Hellebore X <td< td=""><td></td><td></td><td>Gnaphalium uliginosum</td><td>Marsh Cudweed</td><td>X</td><td></td><td></td><td></td><td></td></td<>			Gnaphalium uliginosum	Marsh Cudweed	X				
*** Helleborus viridis Green Hellebore mw Heracleum sphondylium Hogweed X <td></td> <td>mw</td> <td>Hedera helix</td> <td>Ivy</td> <td>X</td> <td>Χ</td> <td>Х</td> <td>Х</td> <td>Х</td>		mw	Hedera helix	Ivy	X	Χ	Х	Х	Х
mw Heracleum sphondylium Hogweed X			Heiraceum agg.	Hawkweed		Χ	Х	Χ	
mw Holcus lanatus Yorkshire-fog X<	**		Helleborus viridis	Green Hellebore					
** W H. mollis Creeping Soft-grass X Image: Creeping Soft-grass X		mw	Heracleum sphondylium	Hogweed	X		Χ	Χ	Χ
** Hordelymus europaeus Wood Barley ** w Hyacinthoides non-scripta Bluebell X<		mw	Holcus lanatus	Yorkshire-fog		Χ	Χ	Х	Х
** w Hyacinthoides non-scripta Bluebell X X X X X X ** Hydrocotyle vulgaris Marsh Pennywort X X X X X X ** Hypericum androsaemum Tutsan X X X X X X ** H. pulchrum Slender St John's-wort Image: Slender S	**	W	H. mollis	Creeping Soft-grass	X				
*# Hydrocotyle vulgaris Marsh Pennywort X	**		Hordelymus europaeus	Wood Barley					
** Hypericum androsaemum Tutsan X<	**	W	Hyacinthoides non-scripta	Bluebell		Χ	Χ	Χ	Χ
** H. pulchrum Slender St John's-wort X	*#		Hydrocotyle vulgaris	Marsh Pennywort					
m Hypochaeris radicata Cat's-ear X	**		Hypericum androsaemum	Tutsan	X	Χ	X	X	X
** mw Ilex aquifolium Holly X	**		H. pulchrum	Slender St John's-wort					
** w Iris foetidissima Stinking Iris X <th< td=""><td></td><td>m</td><td>Hypochaeris radicata</td><td>Cat's-ear</td><td></td><td>Χ</td><td></td><td></td><td>Χ</td></th<>		m	Hypochaeris radicata	Cat's-ear		Χ			Χ
m I. pseudacorus Yellow-flag X X X X m Juncus acutiflorus Sharp-flowered Rush X X X X X mw J. bufonius Toad Rush X X X mw J. effusus Soft Rush X X X	**	mw	Ilex aquifolium	Holly	X	X			
m Juncus acutiflorus Sharp-flowered Rush X	**	W	Iris foetidissima	Stinking Iris					
mw J. bufonius Toad Rush X X mw J. effusus Soft Rush X X X		m							
mw J. effusus Soft Rush X X X X		m	Juncus acutiflorus	Sharp-flowered Rush	X		X	X	
		mw	J. bufonius	Toad Rush		X			X
** Lamiastrum galeobdelon Yellow Archangel X		mw	J. effusus	Soft Rush	X		X		X
	**		Lamiastrum galeobdelon	Yellow Archangel				Х	

					Yea	r recorde	ed	
Stat	Loc	Species	Common name	1998- 2018	2019	2020	2021	2022
		Lamium purpureum	Red Dead-nettle		Х			
	mw	Lapsana communis	Nipplewort		Х	Х	Х	Х
**		Lathraea squamaria	Toothwort					
**		Lathyrus linefolius	Bitter-vetch					
	m	L. pratensis	Meadow Vetchling		Х	Х	Х	Х
		L. sylvatica	Wood Vetch					
**		L. sylvestris	Narrow-leaved Everlasting Pea					
*	mc	Leucanthemum vulgare	Oxeye Daisy			Х	Х	Х
	m	Leucojum vernum	Snowflake					Χ
		Linaria purpurea	Purple Toadflax			Х	Х	
	m	Lolium perenne	Perennial Rye-grass	Х	Х	Х	Х	Χ
	W	Lonicera periclymenum	Honeysuckle	Х	Х	Х	Х	Х
	m	Lotus corniculatus	Common Bird's-foot Trefoil	Х	Х	Х	Х	Χ
	m	L. pedunculatus	Greater Bird's-foot Trefoil	Х	Х	Х	Х	Х
	m	Luzula campestris	Field Wood-rush			Х	Х	Х
**		L. forsteri	Southern Wood-rush					
**	W	L. pilosa	Hairy Wood-rush			Х		
**		L. sylvatica	Great Wood-rush					
*#	m	Lychnis flos-cuculi	Ragged Robin	X	Χ	Х	X	Χ
**		Lysimachia nemorum	Yellow Pimpernel	Х				
	m	Lythrum salicaria	Purple-loostrife	X	Χ	Х	X	Χ
		Malus pumilla	Apple	Х				Х
**	W	M. sylvestris	Crab Apple	X	Χ	Х		
	m	Matricaria discoidea	Pineappleweed		Х	Х	X	Χ
**#	W	Melampyrum pratense	Common Cow-wheat	X				
**	W	Melica uniflora	Wood Melick	Х	Χ	Χ	Χ	Χ
	m	Mentha aquatica	Water Mint	Х			Χ	Χ
**	W	Milium effusum	Wood Millet					
**	W	Moehringia trinerva	Three-nerved Sandwort	Х			Χ	Χ
	m	Myosotis discolor	Changing Forget-me-not			X	Х	Х
		M. scorpoides	Water Forget-me-not	Х				
		Narcissus pseudonarcissus	Daffodil					
	m	Nasturtium officinale	Common Watercress			Χ	Χ	
**		Neottia nidus-avis	Bird's-nest Orchid					

					Yea	r recorde	ed	
Stat	Loc	Species	Common name	1998- 2018	2019	2020	2021	2022
	mw	Oenanthe crocata	Hemlock Water-dropwort	Х	Х	Х	Х	Х
	m	O. pimpinelloides	Corky-fruited Water-dropwort		Х	Х	Х	Х
**		Orchis mascula	Early Purple-orchid					
**		Oreopteris limbosperma	Lemon-scented Fern					
	m	Osmunda regalis	Royal Fern		Χ	Х	Х	Х
**	W	Oxalis acetosella	Wood Sorrel		Χ	Х	Х	X
**		Paris quadrifolia	Herb Paris					
nn	W	Pentaglottis sempervirens	Green Alkanet		Х	Х	Х	Х
	m	Persicaria hydropiper	Water-pepper	Х	Х	Х		Х
		Persicaria maculosa	Redshank	Х				
		Petasites hybridus	Butterbur				Х	
	m	Phleum bertolonii	Smaller Cat's-tail	Х				
	m	P. pratense	Timothy	Х		Х	Х	Х
**	W	Phylitis scolopendrium	Hart's Tongue		Х	Х		
		Pilosella officinarum	Mouse-ear Hawkweed					
		Pinus sp	Pine	Х				
	m	Plantago lanceolata	Ribwort Plantain	Х	X	Х	Х	Х
	mw	P. major	Greater Plantain		Х	Х	Х	
**		Platanthera chlorantha	Greater Butterfly-orchid					
	W	Poa annua	Annual Meadow-grass	Х	X	Х	Х	Х
**	W	P. nemoralis	Wood Meadow-grass	Х				
	m	P. pratensis	Smooth Meadow-grass			Х	Х	Х
	W	P. trivialis	Rough Meadow-grass	X	Х	Х	Х	Х
**		Polygonatum multiflorum	Solomon's Seal					
	m	Polygonum aviculare	Knotgrass	X		Х	Х	
**		Polypodium vulgare	Common Polypody	X		Χ	Х	Х
**		Polystichum aculeatum	Hard Shield-fern					
**		P. setiferum	Soft Shield-fern	Х				
**		Populus tremula	Aspen					
	m	Potentilla anserina	Silverweed	Х	Χ	Х	Χ	X
		P. erecta	Tormentil		Х			
	m	P. reptans	Creeping Cinquefoil	Х	Х	Х	Х	Х
**		P. sterilis	Barren Strawberry					Х
**		Primula vulgaris	Primrose	Х		Х	Х	Х

					Yea	r recorde	ed	
Stat	Loc	Species	Common name	1998- 2018	2019	2020	2021	2022
	mw	Prunella vulgaris	Selfheal	X	Χ	Х	Х	Х
**	W	Prunus avium	Wild Cherry			Х	Х	Х
	mw	P. spinosa	Blackthorn	X	X	Х	Х	Х
		Pseudofumaria lutea	Yellow Corydalis					
	mw	Pteridium aquilinum	Bracken	X	Χ	Х	Х	Х
	m	Pulicaria dysenterica	Common Fleabane	X	Χ	Χ	Χ	Χ
**		Pulmonaria longifolia	Narrow-leaved Lungwort		Х	Х	Х	Х
nn	m	Quercus ilex	Evergreen Oak	X	Χ	Х		
**		Q. petrea	Sessile Oak					
	mw	Q. robur	English Oak	X	Х	Х	Х	Х
*	m	Ranunculus acris	Meadow Buttercup	X	Χ	Х	Х	Х
**		R. auricomus	Goldilocks					
	m	R. bulbosus	Bulbous Buttercup			Х	Х	Х
	W	R. ficaria	Lesser Celandine	X	Х	Х	Х	Х
*#	m	R. flammula	Lesser Spearwort	X	Χ	Х	Х	Х
		R. lingua	Greater Spearwort		Х			
	mw	R. repens	Creeping Buttercup	X	Х	Х	Х	Х
**		Ribes nigrum	Black Currant					
**	W	R. rubrum	Red Currant	X				Х
**	W	Rosa arvensis	Field Rose	X				Х
	W	R. canina	Dog Rose	Х	Х	Х	Х	Х
	mw	Rubus fruticosus	Bramble	X	Х	Х	Х	Х
	W	R. ideaus	Raspberry		Х			Х
*		Rumex acetosa	Common Sorrel	Х	Х	Х	Х	Х
	m	R. conglomeratus	Clustered Dock	X				
	m	R crispus	Curled Dock	X	Х	Х		
	m	R. obtusifolius	Broad-leaved Dock	X	Χ	Х	Χ	Χ
	W	R. sanguineus	Wood Dock	X				
**		Ruscus aculeatus	Butcher's Broom					
	m	Salix caprea	Goat Willow			Х	Х	Х
		S. cinerea	Common Sallow	X				
	W	Sambucus nigra	Elder	X	Х	Х	Х	Х
**		Sanicula europaea	Sanicle			Х	Х	Х

					Yea	r recorde	ed	
Stat	Loc	Species	Common name	1998- 2018	2019	2020	2021	2022
**		Scirpus sylvaticus	Wood Club-rush					
		Scrophularia nodosa	Common Figwort		Χ	Χ	Χ	Х
**		Sedum telephium	Orpine				X X X X X X X X X X X X X X X X X X X	
	m	Senecio jacobaea	Ragwort	X	Χ	Χ		Χ
	mw	S. vulgaris	Groundsel		Χ	Х		Х
**		Serratula tinctoria	Saw-wort					
	W	Silene dioica	Red Campion	X	Χ	Х	Х	Х
		Sium latifolia	Greater Water-parsnip					
	w	Solanum dulcamara	Woody Nightshade	X	Х	Х	Х	Х
		S. nigra	Black Nightshade					
**#	W	Solidago virgauria	Goldenrod	X				
		Sonchus asper	Prickly Sow-thistle	X	Х	Х	Х	Х
		S. oleraceous	Smooth Sow-thistle		Х	Х		Х
	W	Sorbus aucuparia	Rowan	X	Χ	Х	Х	Х
**		S. torminalis	Wild Service				+ ^-	
**		Stachys officinalis	Betony					
	m	S. sylvatica	Hedge Woundwort	X	Χ	Х	Х	Х
		Stellaria alsine	Bog Stitchwort	X				
	m	S. graminea	Lesser Stitchwort	Х	Χ	Х	Х	Х
	w	S. holostea	Greater Stitchwort	X				
**		Tamus communis	Black Bryony	Х				
	mw	Taraxacum sp.	Dandelion		Х	Х	Х	Х
	w	Taxus baccata	Yew	Х			Х	Х
	w	Teucrium scorodonia	Wood Sage				Х	Х
**		Tilia cordata	Small-leaved Lime					
	m	Trifolium campestre	Hop Trefoil		Х	Х		
		T. dubium	Lesser Yellow-trefoil	X	Х	Х	Х	Х
	m	T. pratense	Red Clover	Х	Х	Х		Х
	m	T. repens	White Clover	X	Х	Х		Х
		Tripleurospermum inodorum	Scentless Mayweed	X		Х	Х	Х
	mw	Ulex europaeus	Gorse	X	Х	Х	Х	Х
	w	Ulmus procera	English Elm	X		Х	Х	Х

APPENDIX 3 - UPDATED PLANT LIST 1998-2022 - continued

					Yea	r recorde	ed	
Stat	Loc	Species	Common name	1998- 2018	2019	2020	2021	2022
	mw	Urtica dioica	Common Nettle	X	Χ	Х	Χ	Х
		U. urens	Small Nettle		Χ			
**		Vaccinium myrtilis	Bilberry					
		Verbascum thapsus	Common Mullein			X	X	Χ
	m	Veronica beccabunga	Brooklime		Χ	Χ	Χ	X
*	m	V. chamaedrys	Germander Speedwell	X	Χ	Χ	Χ	Χ
		V. hederifolia	Ivy-leaved Speedwell				Χ	X
**		V. montana	Wood Speedwell					
#	W	V. officinalis	Heath Speedwell	X				
		V. persica	Common Speedwell		Χ		Χ	
		V. serpyllifolia	Thyme-leaved Speedwell		X		X	Х
**		Viburnum opulus	Guelder Rose					
	m	Vicia cracca	Tufted Vetch	X				
	m	V. hirsuta	Hairy Tare				X	
	m	V. sativa	Common Vetch			Х	Х	Х
**		V. sepium	Bush Vetch					
		V. sylvatica	Wood Vetch					
		V. tetrasperma	Smooth Tare		Х	Х		
	С	Viola odorata	Sweet Violet				Х	Х
**		V. palustris	Marsh Violet					
**	mc	V. reichenbachiana	Early Dog-violet				Х	
_		V. riviniana	Common Dog-violet		Х		Х	

Data collected by Ann Gorman and Bob Lord.

NOTES

Stat (Status): ** - denotes Ancient Woodland Indicator species (South of England – from Rose, F. 2006. The Wild Flower Key)

* - denotes neutral grassland/meadow indicator species (from HBIC/HLS)

- denotes Notable species (vulnerable/near threatened - from HBIC)

nn - non-native/doubtfully native

Loc (Location): m - meadow

w – wood c – clearing

New plant species for 2022

Meadow		Woodland	
Carex ovalis	Oval Sedge	Galanthus sp	Snowdrop
Leucojum vernum	Snowflake		
Potentilla sterilis	Barren Strawberry		