the species recovery trust

2022 Site Report

Marsh Clubmoss New Forest Census

This project is generously funded by Natural England

We are hugely grateful to all our volunteers and partners for their continued commitment to surveillance in the New Forest.

Summary

- A full census of all known Marsh Clubmoss populations in the New Forest was carried out in 2020, following on from a full census in 2015/16, which built upon baseline data gathered in a similar survey in 2008.

- Between 2008 and 2020 there was an **overall increase** in estimated **plant numbers of 46%** and of **sites by 4%**. This followed a 33% decline in estimated plant numbers and decline in sites by 4% from 2008-2015. This illustrates that Marsh Clubmoss numbers can show large fluctuations year to year, whilst site numbers remain relatively stable, with local extinctions largely balanced by discovery of new recorded sites (either through improved reocrdedng or genuine new colonisation). Of the 47 sites recorded in 2008, 10 sites are thought to have become locally extinct, whilst 12 sites have been newly recorded.

- On balance, the geographical range of Marsh Clubmoss has not significantly changed since 2008, although there has been some contraction around the southern Beaulieu sites.

- Previously, our analysis suggested that populations over 100 had a high robustness for survival. Whilst nearly all populations over 100 plants have continued to survive since the 2008 survey, two unfortunately have not, so it is likely a bigger population is needed to ensure more reliable survival.

- The most common sites are in pond, bog and mire habitats, with ponds and track populations appearing to be most vulnerable to decline and local extinction. Numbers of plants across sites in each habitat appear to be either stable or increasing over the 12 year period.

- Four populations have grown by over 1000% since 2008.

Introduction

The Species

Marsh Clubmoss (*Lycopodiella inundata*) is a short-lived perennial of mires and wet heaths, and belongs to an ancient group of plants most closely related to the ferns. Its growth form comprises short prostrate shoots, which divide, typically into two apices. In the summer most plants bear single upright cone-like shoots (strobili) which produce spores. Despite prolific production of spores in some years vegetative propagation appears to be the main way that populations persist, meaning it is a poor coloniser of new sites.

Marsh Clubmoss is classified as Endangered on the UK Red List, and therefore considered to be facing a high risk of extinction in the wild. It is listed in Section 41 of the NERC Act which names ‘Species of Principal Importance’ for the purpose of conserving biodiversity, meaning public bodies have to pay due regard to its conservation. It currently occupies 24% of its known historical range, and has suffered severe declines outside of its stronghold area, especially in the Thames Basin and Cornwall. Its current English stronghold is the New Forest and to a lesser extent the Dorset Heaths and Cumbria.

As with other ferns it has a life cycle consisting of a gametophyte and sporophyte generation. The gametophytes are thought to develop underground, but have seldom been observed in this species. The gametophyte also has complex mycorrhizal associations, which needs more research as it may have a significant impact on the ability of the plants to colonise new sites.

During severe winters the plants die back to their terminal bud, however surveys in recent years have found plants surviving intact throughout milder winters. Where the plants occur on top of spongy vegetation, such as Sphagnum mires, large sections of the plants appear to run underground, emerging sporadically to form new plants.

Distribution of Marsh Clubmoss in England and Wales

Marsh Clubmoss typically grows at the transition between mires and wet heaths, where the thick cover of Sphagnum is reduced, but the soils are still more or less permanently wet. Despite its name it does not require inundation of water, but will survive this for short periods of time.

The general perception is that is requires bare peat, however several of the undisturbed mire sites in the Forest show that the species can also occur in totally undisturbed wet habitats with no bare soil present at all, which possibly points towards its survival in periods of time and habitats where this disturbance was not present.

The greatest requirement of Marsh Clubmoss is relatively open, but not too compacted conditions, where it can colonise bare ground of low growing Sphagna beds, but is not too heavily disturbed by trampling. The availability of this habitat in the New Forest explains why this area is such a stronghold for the species, but it is still vulnerable to localised extinction should these conditions change at any of its sites. From observation it appears that the plants have never recolonised a site once it has gone extinct.

In the New Forest it is found in four types of habitat, outlined later in the report.

The Project

As part of our national work of monitoring all known sites across England and Wales, The Species Recovery Trust has been carrying out regular monitoring in the New Forest. The purpose of this is to ensure that populations remain robust in this area, as well as gaining a better understanding of the species' ecology, population dynamics and response to environmental stress.

In 2008 a full census of all known New Forest populations was carried out, with the intention of establishing a baseline of population sizes across the Forest. This survey revealed the presence of 53 populations.

Between 2015 & 2016, all sites were revisited. Five new populations were discovered and 12 sites were identified as at-risk from local extinction. At most sites there was a decrease of plants from 2008, and several populations could not be relocated, however some sites showed dramatic increases and some previously unrecorded sites were found.

Since 2016 we have been recruiting volunteers to cover as much of the network of sites as possible.

In 2020, all the sites were revisited again, combining volunteers and staff surveys to fill any gaps.

Distribution in the New Forest

Marsh Clubmoss is well distributed across the Forest, present on most areas except for the afforested areas surrounding Lyndhurst and Fritham.

There are five areas where metapopulations exist:

- Ogden Purlieu
- Plaitford/West Wellow
- Strodgemoor Bottom/Vales Moor
- Matley Heath to Longdown
- Duckhole Bog

These areas consist of several populations that are close enough to be interlinked, and which have the potential for recolonisation to occur if they become locally extinct.

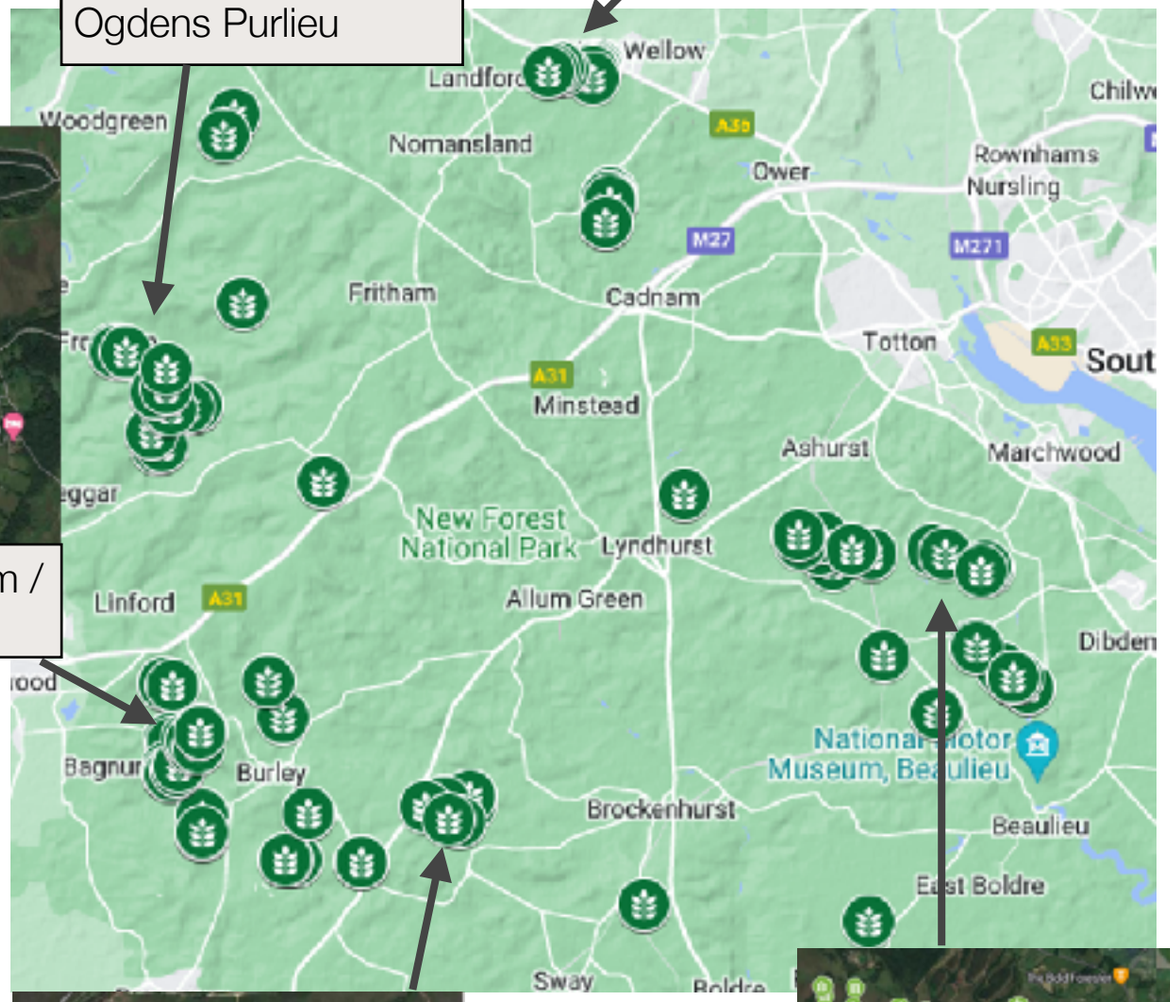
Outside of these five areas, populations are relatively isolated, however their occurrence on trackways, means there is still the potential for movement of material and spores in these areas.

Static maps are presented below and an interactive map can be viewed here.

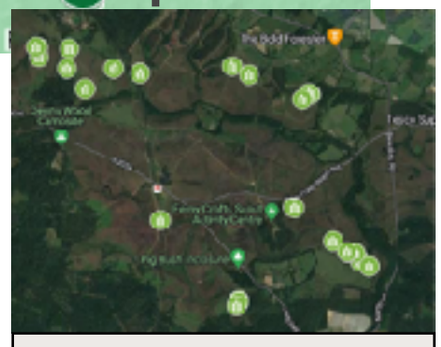
Ogdens Purlieu

Plaitford/West Wellow

Strodgemoor Bottom / Vales Moor

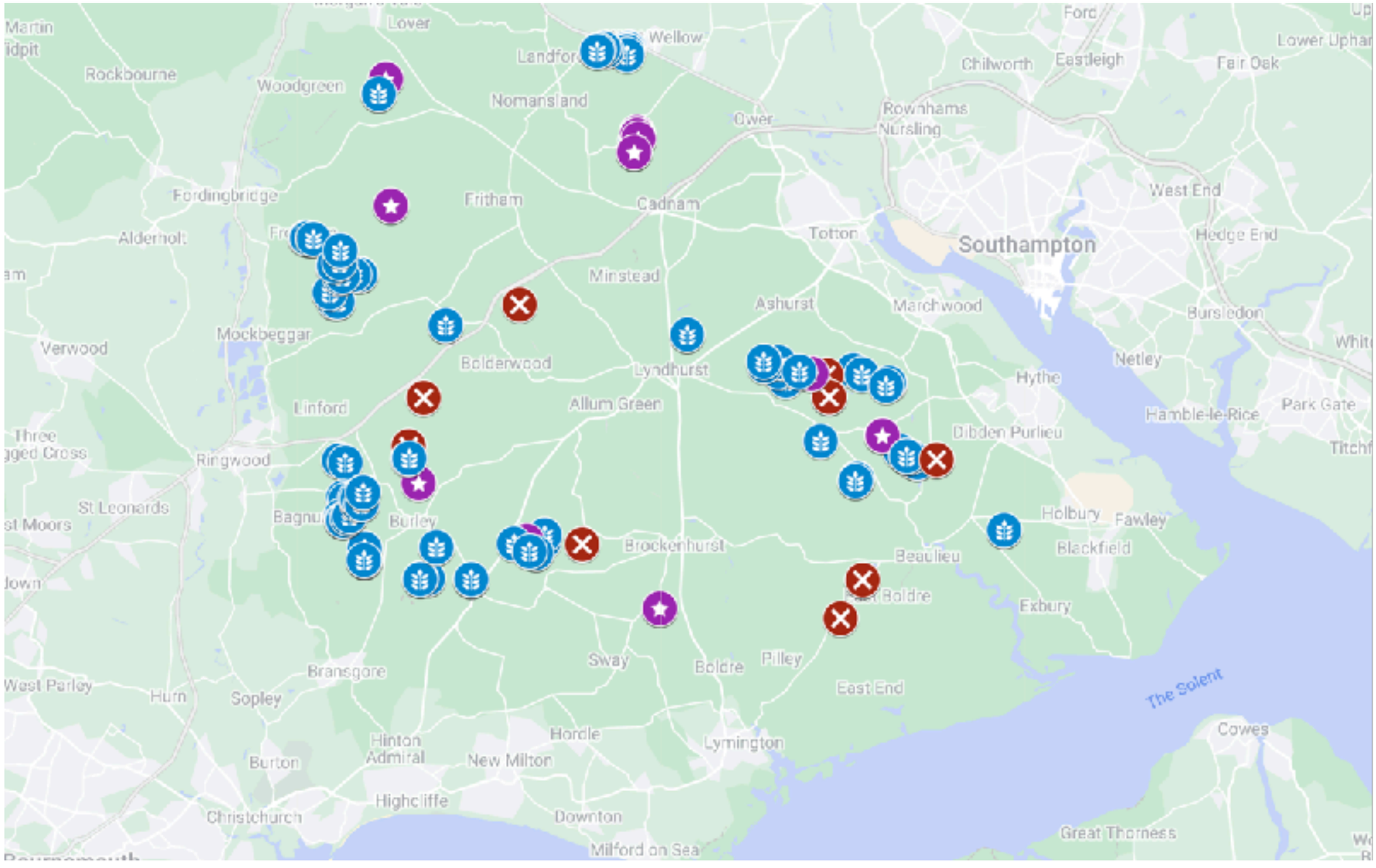


Duckhole Bog



Matley Heath to Longdown

Extinctions and Newly Discovered Sites



Newly recorded site since 2008

Extant site 2008 – 2020

Local extinction 2008 - 2020

Habitats in the New Forest

Marsh Clubmoss typically occurs in five habitat types in the New Forest.

Tracks and paths

Bare peat kept open by trampling across wet heath (typically NVC M16 Erica tetralix-Sphagnum compactum wet heath) and more rarely, mire, support the majority of the populations, and most of the largest ones. Plants are typically associated with consolidated bare wet peat at track edges, or on receding peat faces within the track where it crosses a slope. There does not seem to be a direct correlation between population size and severity of trampling and poaching in these tracks though it is noticeable that fewer strobili were present in severely trampled areas. Although most populations found in tracks and paths are associated with human access, a smaller number are associated with pony tracks. This habitat type encompasses the majority of sites in the Forest.

Wet heath

A small number of populations occur in open peaty ground in wet heath away from any pony or human-used tracks. These are typically smaller than many of the track populations and are usually associated with a shallow depression feature in the wet heath, such as a shallow flood channel or old ruts from vehicles. A small number of isolated populations are simply found where wet heath is sparsely vegetated, typically at the wet heath/mire interface and growing amongst sparse cover of White beak-sedge *Rhynchospora alba*, Carnation sedge *Carex panicea*, Bog asphodel *Narthecium ossifragum* and sundews *Drosera* species.

Valley mire

In a few locations open mire (NVC: M21a Narthecium ossifragum-Sphagnum papillosum valley mire; Rhynchospora alba-Sphagnum denticulatum sub-community) was a favoured microhabitat type for *L. inundata*. In particular, the extensive valley mire complex known as Cranes Moor and Vales Moor, south-west of Burley, supported a strong metapopulation growing amongst *Sphagnum denticulatum*, *S. papillosum*, *S. tenellum*, *Narthecium ossifragum* and other true mire plants. Some of the sub-populations recorded at Plaitford Common and Ogdens were also growing directly in similar vegetation.

These populations initially seem unusual, as plants are usually encountered on bare soil. However, closer examination often reveals that the plants are effectively using mats of *Sphagnum* (usually *S. cuspidatum*) essentially as a wet matrix-type soil (like growing plants hydroponically). The growth form of this type of Sphagnum in the wetter mires ensures consistent low-growing mats which means the Clubmoss is not outcompeted, whereas it is rare to observe it on the more dome-forming *Sphagnum* such as *papillosum* and *palustre*.

Seepage lines/flushes

Seepage lines and flushes in wet heath and at the upper edges of valley mires are a relatively frequent microhabitat and, possibly because these areas tend to be un-trampled by humans and livestock, the individual plants are larger and bear good numbers of strobili. In some locations e.g. Hyde Common neighbouring populations seemed to be linked by a single seepage line.

Disused sand/gravel pits

This is a rarer habitat in the Forest, and the two sites where plants are found in this habitat have both declined in recent years.

Summary of Sites and Population Counts

Site	Sub-sites	Grid ref.	Location	2008		2015/16		2020		
				Est. no. plants	Area (m^2)	Est. no. plants	Area (m^2)	Est. no. plants	Area (m^2)	Habitat type
1		SU199017	Turf Hill Inclosure track					170	25	T
2		SU268022	Silver Stream area nr Red Hill			10		0		WH/P
3	a-d	SU174126	Hyde Common	73	3.25	31	3.25	125	7.25	WH/P
4	a-c	SU175125	Hyde Common	231	36.9	124	100.9	258	140	M
6	a-d	SU 187038	Strodgemoor Bottom	80	10	121	34	392	62	M/WH
7		SU189036	Strodgemoor Bottom	10	2	112	8	34	8	P
8		SU182107	North Hollow, Ibsley	300	150	125	150	440	150	M
9	a, b	SU184106	North Hollow, Hyde	2500	1500	332	1500	1030	1500	T
10		SU184104	North Hollow. Hyde	15	3	21	3	111	3	T
11	a,b	SU183116	Ogdens	17	1	10	1	31	80	M
12	a-g	SU186112	Ogdens Purlieu	27	2	1079	103	1148	118	M/P
14		SU194016	Dur Hill Down	300	80	63	80	260	40	WH
15	a-d	SU192035	Cranes Moor	645	2015	378	2036.5	669	2005	M
16		SU203137	Gaze Hill (Alderhill)			400	120	168		T
17	a-g	SU286159	Stagbury hill					844		WH
18		SU213043	North of Forest Road					126	10	T
19	a,b	SU194040	Vales Moor	225	40	157	6	180	14	M
20	a-c	SU185050	Foulford Bottom					662		T
21		SU295000	Setley Plain					43	8	WH
25	a-c	SU187030	Cranes Moor	25	6.25	80	60.25	209	160.3	M/WH
26	a-c	SU 189031	Cranes Moor	630		320	30	771	120	M
27	a,b	SU209051	White Moor Bottom	90	7	222	83	111	4.25	P
30		SU209055	Harvest Slade Bottom	40	2	0	0			T
33		SU214071	Backley Plain	15	0.25	0	0			P
39	a-c	SU216010	Holmsley Ridge	260	2	13	1	271	12.04	P
40		SU219021	Pigsty Hill, Burley	11	3	20	1	409	17	P
44	a,b	SU231010	Station Road, Holmsley	51	100	9	100	106		P
45	a,c,d,f	SU 249022	Duckhole West					212		M
46	a,d	SU256025	Duckhole Bog	11	1	121	1	431	6	T
47	a,b	SU253019	Duckhole Bog	650	250	420	100	595		T
56		SU247103	SW of Lucas Castle	100	8	0	0			T
57		SU222096	Slufters Pond, Bratley Plain	180	30	60	30	2	0.04	M
58	a-c	SU273190	Plaitford Common	405	50		0	404	25.6	M

Site	Sub-sites	Grid ref.	Location	2008		2015/16		2020		Habitat type
				Est. no. plants	Area (m^2)	Est. no. plants	Area (m^2)	Est. no. plants	Area (m^2)	
59	a-d	SU276189	Plaitford Common	940	88	1000	225	1519	1240	M
62	a-e	SU283189	West Wellow Common	129	50	16	4	1075	88	M/WH
66		SU304093	Fair Cross, Lyndhurst	2	0.01	9	0.01	21	0.28	P
70		SU330084	Matley Heath	225	50	150	50	70	50	P
71		SU330083	Matley Heath	1200	175	129	175	62	175	P
73	a, b	SU335084	Matley Heath	3000	1200	1740	1200	2815	1200	P
74		SU337078	Matley Heath	90	30	39	34	70	34	P
75		SU342081	Fulliford Bog	450	120	68	120	226	120	T
76		SU349057	Shatterford, Denny Lodge	45	1	6	1	25	1	T
77		SU351080	Longdown Inclosure, nr	30	0.5	0	0			P
78		SU352072	Black Down	325	60	201	15	0		P
79		SU346080	North of Fulliford Passage			230	96	150	96	T
80		SU360082	Peel Hill	200	4	230	20	90	20	P
82		SU363080	Longdown Inclosure, nr	8	1	50	2	80	2	P
83		SU363080	Ipley Inclosure	135	800	72	6	1600	86	P
91	a,b	SU 370060	Ferny Crofts NEW					310	14	M
92	a-e	SU379053	Gurnetfields Furzebrake	80	25	25	25	573	85	T
93		SU382050	Starpole Pond, W of	1		7		1		T
97	a-c	SU361044	Pig Bush	160	151	15	1	55	2.03	T
102		SZ357998	Bagshot Moor	5	0.09	0	0			P
104		SU364011	Hatchet Pond, S of	18	0.09	0	0	0		P
107		SU389051	N of Foxhunting Inclosure	1		0	0	0		T
116		SU412028	Beaulieu Heath East	9	0.3	9	0.03	0		T
118		SU194020	Brown Loaf	10		15	1	1		M
122		SU201179	Hale Purlieu			220	9	400	4	M
123	a-e	SU287160	Furzley Common			920	50	1054	94	M

Key to habitat type: T: track (>1m), WH: wet heath, M: mire, P: path (<1m).

Population Trends

There have been some dramatic changes in the twelve years from 2008-2020, and some trends are examined below. While some of these changes are due to natural fluctuations, it is likely that some will be due to changes in surveyors and our improving ability to find plants. We currently have 3 censuses (2008, 2015/16 and 2020).

Overall picture

Year	Number of extant sites	Number of local extinctions	Newly recorded sites
2008	47	n/a	n/a
2015/16	45	7	5
2020	49	3	7

On balance, the geographical range has not changed since 2008.

The number of local extinctions has largely been balanced by newly recorded sites (new finds/new populations)

Comparing total number of plants for all sites, a very crude measure, we can see that 2015/16 was a poor year for this species, with numbers much higher in 2008, and over double in 2020. Hopefully over time we will have a greater understanding of what affects the populations year to year, but climate and changing land use are likely to be a key factors.

Year	Number of individuals
2008	13964
2015/16	9379
2020	20409

Local Extinctions and Vulnerabilities

Ten sites are thought to have become locally extinct since 2008. These are:

Silver Stream area near Red Hill, New Forest
Harvest Slade Bottom
Backley Plain
SW of Lucas Castle
Longdown Inclosure, nr
Black Down
Bagshot Moor
Hatchet Pond, S of
N of Foxhunting Inclosure
Beaulieu Heath East

These local extinctions have occurred due to track upgrading work, habitat changes (outcompeted by grasses) and changes in hydrology, however for several sites no clear cause is known.

The 2008 report identified two good-sized populations that were considered vulnerable to excessive trampling, by humans and livestock including one at Duckhole Bog (47) and another at Gurnetfields Furzebrake (92). With the third data point in 2020 we can see the numbers at Duckhole Bog appear relatively stable, whilst there was a large increase at Gurnetfields Furzebrake in 2020.

The 2020 survey highlights two sites at risk of local extinction since the 2015/16 survey. These are Silver Stream area near Red Hill (2) where 0 plants were recorded in 2017 & 2020, and Starpole Pond (93) where only one plant was recorded in 2008, 7 in 2015/16 and one in 2020.

Robustness and Population Size

Previously, our analysis suggested that populations over 100 had a high robustness for survival. Whilst nearly all populations over 100 plants have continued to survive since the 2008 survey, 78-Blackdown which had an estimated 325 plants in 2008 is thought to now be locally extinct, and 56-SW of Lucas Castle which had 100 plants in 2008 has also become locally extinct. It is likely therefore that a bigger population is needed to ensure survival.

Whilst populations under 10 plants are at risk of local extinction, they can however survive, if the habitat conditions are sufficient, and can increase to much larger populations in some years. For example, the populations at Duckhole Bog (46) and Pigsty Hill, Burley (40) have both increased from populations of 11 in 2008 to over 400 in 2020.

Newly Recorded Sites

Five new sites were recorded during the 2015/2016 survey:

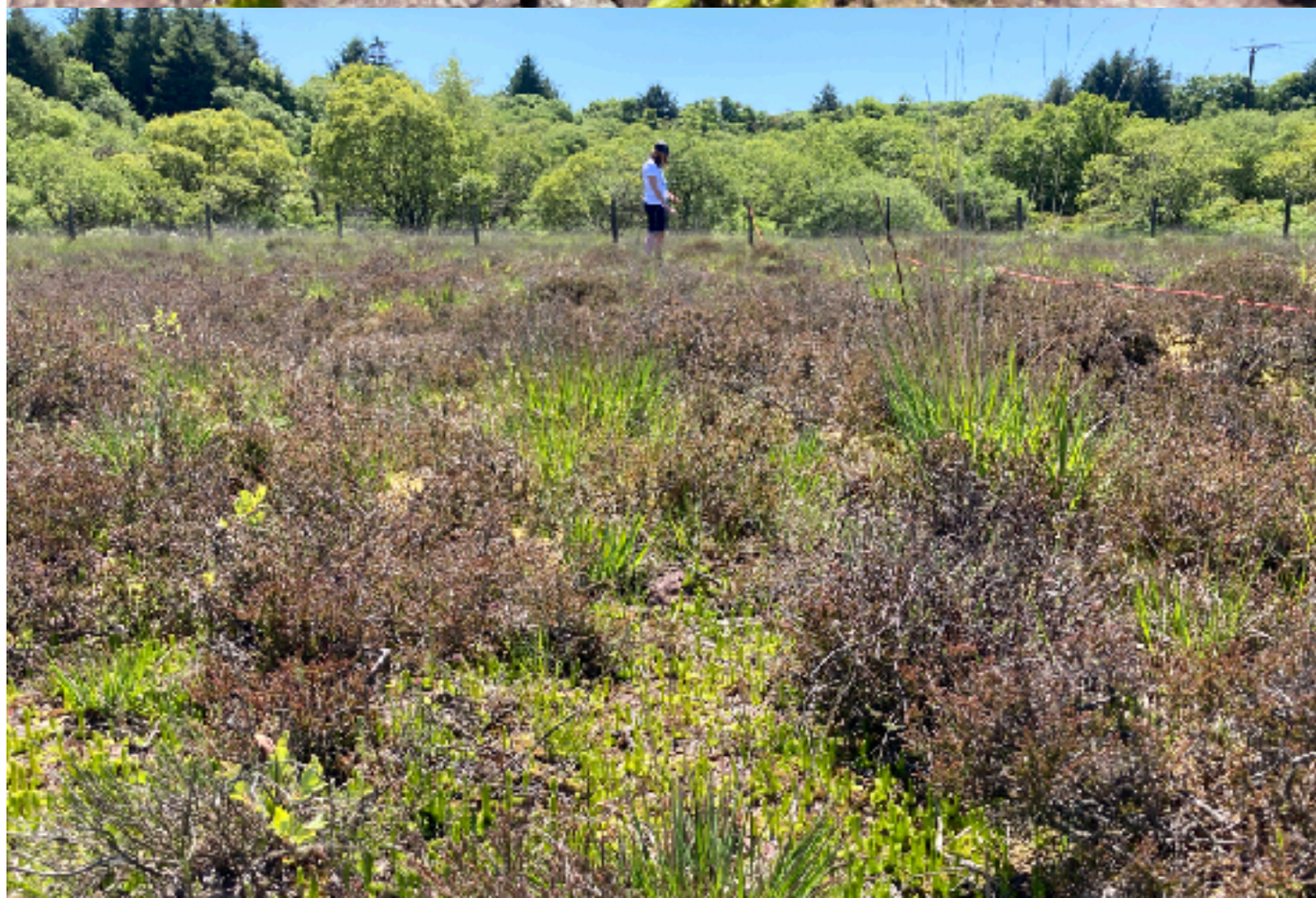
Site	Location
2	Silver Stream area near Red Hill
16	Gaze Hill (Alderhill)
79	North of Fulliford Passage
122	Hale Purlieu
123	Furzley Common

Seven new sites have been recorded since the 2015/16 surveys:

Site	Location	Est no. of plants in 2020	Year first recorded
21	Setley Plain	43	2016
1	Turf Hill Inclosure track	170	2017
17	Stagbury Hill	844	2017
18	North of Forest Road	126	2017
45	Duckhole West	212	2017
91	Ferny Crofts NEW	310	2018
20	Foulford Bottom	662	2020

These records may pertain to genuine new sites, or sites which have not been previously found.

Of these new sites, the population at Silver Stream has declined and is now thought to be extinct.



Percentage Change in Population

To analyse percentage change in populations, the populations were divided into 5 cohorts and the number of sites were counted within each cohort.

Population Change between 2008 and 2020	No. of sites
Likely to have become extinct	10
Decreased	14
No change	2
Increased	22
Newly recorded site	11

The populations were then further divided to look more closely at size of population increases and decreases.

Population Change between 2008 and 2020	No. of sites
Likely to have become extinct	10
Decreased by more than 50%	8
Decreased by 1-49%	6
No change	2
Increased by 1-49%	6
Increased by 50-99%	3
Increased by >100%	13
Newly recorded site	11

Percentage Change in Population (cont.)

Four populations have grown by over 1000% since 2008. These are;

Site	Location	Estimated no. plants			Type of habitat
		2008	2015/16	2020	
12	Ogdens Purlieu	27	1079	1148	M/P
46	Duckhole Bog	11	121	431	T
40	Pigsty Hill, Burley	11	20	409	P
83	Ipley Inclosure	135	72	1600	P

Key to habitat type: T: track (>1m), M: mire, P: path (<1m).

The two largest sites recorded in 2008 showed dramatic declines in the 2015/16 survey, however both also showed large increases in 2020 illustrating how populations can fluctuate significantly year on year.

Site	Grid ref.	Location	Est. no. of plants			% Change (2008 to 2020)
			2008	2015/16	2020	
9	SU184106	North Hollow, Hyde	2500	332	1030	-59
73	SU335084	Matley Heath	3000	1740	2815	-6

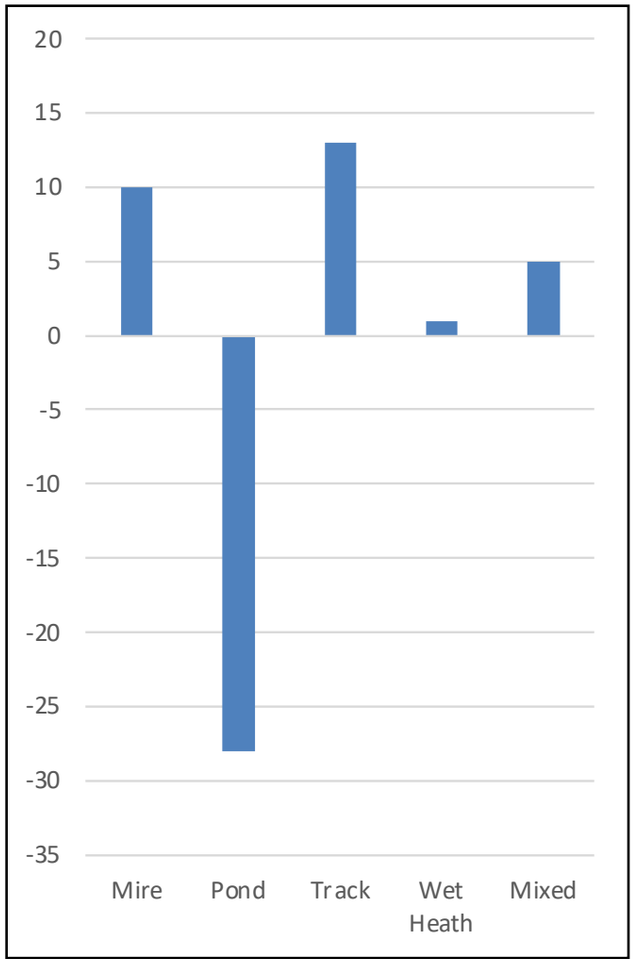
Another example of widely fluctuating population size over time is at West Wellow Common (62), which varied from 129 in 2008, 36 in 2015/16 and 1075 in 2020.

Changes in populations across habitat types

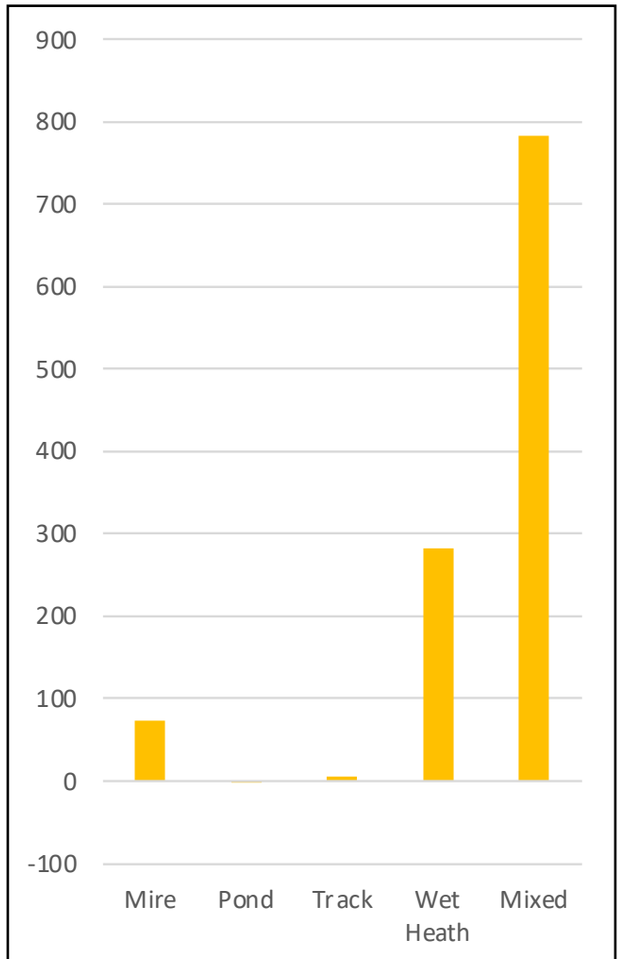
Below is a breakdown of population changes by habitat type between 2008 and 2020. It is difficult to draw many conclusions at this point in time, however we can see that the most common sites are in pond, bog and mire habitats, and that ponds and track populations appear to be the most vulnerable to decline and local extinction. Numbers of estimated plants across sites in each habitat appear to be either stable or increasing.

Population Change between 2008 and 2020	No. of sites for each habitat				
	Mire	Pond	Track	Wet Heath	Mixed
Likely to have become extinct	0	5	4	1	1
Decreased	3	5	5	1	0
No change	0	0	1	0	0
Increased	6	8	3	2	5
Newly recorded site	4	0	5	0	0

Habitat type	Number of sites		% change in no. sites	Number of plants		% change in no. plants
	2008	2020		2008	2020	
Mire	10	14	**10**	3583	6251	**74**
Pond	18	13	**-28**	5675	5739	**-1**
Track	13	14	**13**	4062	4323	**6**
Wet Heath	1	3	**1**	300	1147	**282**
Mixed	5	5	**5**	334	2949	**783**



Graph 1: Percentage change in number of extant sites by habitat type between 2008 and 2020



Graph 2: Percentage change in number of estimated plants by habitat type between 2008 and 2020

Threats

The following factors are considered to be the greatest threats to Marsh Clubmoss in the New Forest.

- **Changes in the use of tracks and pathways, from either increased use or cessation of use.**

- **Resurfacing of trackways, especially where the fill spills onto the sides of the track**

- **Changes in grazing patterns, either increasing or decreasing and associated changes in vegetation**

- **Changes in site hydrology, especially where this impacts the drawdown zone of ponds**

On the whole, scrub encroachment and under-grazing appears to be less of an issue in the Forest with current grazing regimes keeping these two in check. This is a dramatically contrasting pattern to other sites in the south of England, and as such the New Forest can still be considered to be a success story for the conservation of this and other species of damp disturbed mires and heaths.

Looking forward

Project aims 2020-2030

Continue to regularly monitor sites, and ensure a full census is carried out in 2025

Carry out some small trial plant translocations within the Forest, aimed at researching whether this can be successfully carried out

Widen out survey areas at known hotspots to look for new sub-sites

Continue to recruit and train volunteers to carry out site management

Appendix 1: Data for all Marsh Clubmoss sub sites with sub-sites and full grid references

Site	Sub site	Grid ref.	Location	2008			2015/16			2020			Type of habitat
				Est. no. of plants	Area (m)	Area (m^2)	Est. no. of plants	Area (m)	Area (m^2)	Est. no. of plants	Area (m)	Area (m^2)	
1		SU 19902 17498	Turf Hill Inclosure track							170	1 x 25	25	
2		SU 26884 02256	Silver Stream area near Red Hill, New Forest				10			0			
3	a	SU1743812619	Hyde Common	23	0.5 x 0.5		20	0.5 x 0.5	0.25	28	6 x 0.5	3	WH
3	b	SU1744512627	Hyde Common	50	1 x 3		11	1 x 3	3	30	6 x 0.5	3	P
3	c	SU 17445 12627	Hyde Common							42	1 x 1	1	
3	d	SU 17436 12606	Hyde Common							25	0.5 x 0.5		
4	a	SU1758712579	Hyde Common	225	6 x 6		74	10x10	100	58	10x10	100	M
4	b	SU1762112578	Hyde Common	6	0.3 x 0.3		150	0.3 x 0.3	0.09	140			M
4	c	SU 17701 12583	Hyde Common							60	5 x 8	40	
6	a	SU 18739 03809	Strodgemoor Bottom				30	2 x 2	4	39			M
6	b	SU 18816 03705	Strodgemoor Bottom	80	5 x 2		91	10 x 3	30	66			WH
6	c	SU 18850 03651	Strodgemoor Bottom							220	5 x 5	25	
6	d	SU 18879 03642	Strodgemoor Bottom							67	3 x 1	3	
7		SU1891703605	Strodgemoor Bottom	10	2 x 1	2	112	8 x 1	8	34	8 x 1	8	P
8		SU1829410730	North Hollow, Ibsley Common	300	5 x 30	150	125	5 x 30	150	440	5 x 30	150	M
9	a	SU1843310692	North Hollow, Hyde	2500	300 x 5		332	300 x 5	1500	1030	300 x 5	1500	T
9	b	SU1853210420	North Hollow, Hyde	See 9a	See 9a			See 9a		See 9a			T
10		SU1843010436	North Hollow. Hyde	15	1 x 3	3	21	1 x 3	3	111	1 x 3		T
11		SU1839511663	Ogdens	17	1 x 1	1	10	1 x 1	1	8	10 x 6		M
11		SU1837611606	Ogdens							23	5 x 4		
12	a	SU1861211236	Ogdens Purlieu	17	1 x 1	1	16	1 x 1	1	790	30 x 1	30	P
12	b	SU1860511286	Ogdens Purlieu	10	1 x 1	1	17	1 x 1	1				P
12	c	SU1869711296	Ogdens Bog				46	1 x 1	1	49	3 x 1		M
12	d	SU1908711338	Ogdens Pine Copse Mire				1000	10 x 10	100				M
12	e	SU1930011352	Ogdens Trackway							230	18 x 3	45	
12	f	SU1929611364	Ogdens Pathway NEW										
12	g	SU1860511750	Ogdens Little Dockens							12	3 x 3	9	
12	h	SU1863212173	Ogdens Little Dockens New							67	30 x 1		

Site	Subsite	Grid ref.	Location	2008			2015/16			2020			Type of habitat
				Est. no. of plants	Area (m)	Area (m^2)	Est. no. of plants	Area (m)	Area (m^2)	Est. no. of plants	Area (m)	Area (m^2)	
14		SU1946701683	Dur Hill Down	300	20 x 4	80	63	20 x 4	80	260	40 x 1		WH
15	a	SU1922703591	Cranes Moor	500	200 x 10	2000	70	200 x 10	2000	390	200 x 10	2000	M
15	b	SU1898803196	Cranes Moor	See 15a	See 15a		170	8 x 4	32				M
15	c	SU192038	Cranes Moor				58	2 x 1	2	73	2 x 1	2	M
15	d	SU1935803611	Cranes Moor	145	5 x 3	5	80	2.5 x 1	2.5	206	2.5 x 1	2.5	M
16		SU 20335 13705	Gaze Hill (Alderhill)							168			
17	a	SU 28627 15950	Stagbury hill							552	no info		
17	b	SU 28677 15994	Stagbury hill							45	no info		
17	c	SU 28671 16054	Stagbury hill							246	no info		
17	d	SU 28636 16001	Stagbury hill							1	no info		
17	f	SU 28655 15994	Stagbury hill										
17	g	SU 28658 16067	Stagbury hill							0			
18		SU 21310 04300	North of Forest Road Burley							126	10 x 1	10	
19	ha	SU1943804016	Vales Moor	225	10 x 4		157	6 x 1	6	180	4 x 4	12	M
19	b	SU 19435 03965	Vales Moor							34	2 x 1	2	
20		SU 18599 05072	Foulford Bottom							200	Multiple		
20	b	SU 18601 05064	Foulford Bottom							450	Multiple		
20	c	SU 18808 04997	Foulford Bottom							12			
21		SU 29531 00098	Setley Plain							43	4 x 2		
25	a	SU1879103028	Cranes Moor	22	3 x 2		40	30 x 2	60	90			M
25	b	SU1871103026	Cranes Moor	3	0.5 x 0.5		40	0.5 x 0.5	0.25	94			WH
25	c	SU 18711 03026	Cranes Moor							25	10 x 10	100	
26		SU 18960 03179	Cranes Moor						36	736	30 x 30		M
26	b	SU 18950 03132	Cranes Moor Outliers							30	Scattered		
26	c	SU 18907 03102	Cranes Moor				320	10 x 3	30	5	10 x 3	30	
27	a	SU2097805147	White Moor Bottom	50	2 x 1		15	3 x 1	3	11	0.5 x 0.5	0.25	P
27	b	SU2093205126	White Moor Bottom	40	4 x 1		207	20 x 4	80	100	4 x 1	4	P
30		SU2097205551	Harvest Slade Bottom	40	2 x 1	2	0	0	0				T

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33		SU2147207197	Backley Plain	15	0.5 x 0.5	0.25	0	0	0				P
39	a	SU2162401080	Holmsley Ridge	250	20 x 3		3	1 x 1	1	45	10 small clumps		POND
39	b	SU2158301074	Holmsley Ridge	10	2 x 1		10	0	0	213	4 x 3		POND
39	c	SU 21397 01069	Holmsley Ridge							13	0.2 x 0.2	0.04	
40		SU2191502122	Pigsty Hill, Burley	11	3 x 1	3	20	1 x 1	1	409	34 x 0.5	17	P
44		SU2310201047	Station Road, Holmsley	51	10 x 10	100	9	10 x 10	100	92	2 small clumps		P
44	b	SU 23100 01035	Station Road, Holmsley							14	small clump		
45	a	SU 24944 02264	Duckhole West							60			
45	c	SU 24957 02276	Duckhole West							32	0.5 x 0.5	0.25	
45	d	SU 24992 02263	Duckhole West							120			
45	f	SU 24985 02367	Duckhole West							0			
46		SU25680259	Duckhole Bog	11	1 x 1	1	121	1 x 1	1	420	3 x 2	6	T
46	d	SU 25333 02352	Duckhole Bog							11			
47		SU2531001955	Duckhole Bog	650	50 x 5	250	420	25 x 4	100	595	6 clumps		T
47	b	SU2508002007	Duckhole Bog West										
56		SU2471310365	SW of Lucas Castle	100	4 x 2	8	0	0	0				T
57		SU2221509656	Slufters Pond, Bratley Plain	180	10 x 3	30	60	10 x 3	30	2	0.2 x 0.2	0.04	M
58	a	SU2736719023	Plaitford Common	60	3 x 4		0	0	0				M
58	b	SU2735319020	Plaitford Common	320	5 x 7		0	0	0	401	25 x 1	25	M
58	c	SU2730318960	Plaitford Common	25	3 x 1		0	0	0	3	3 x 0.2	0.6	M
59	a	SU2762118999	Plaitford Common	250	5 x 5		1000	45 x 5	225	1092	80 x 15		M
59	b	SU2761719011	Plaitford Common	200	3 x 3		0	0	0				M
59	c	SU2762419031	Plaitford Common	60	2 x 2		0	0	0				M
59	d	SU2751819060	Plaitford Common	430	10 x 5		0	0	0	427	20 x 2	40	M

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62	a	SU2831118971	West Wellow Common	45	5 x 2		16	2 X 2	4	494	40 x 10	40	M
62	b	SU2831118994	West Wellow Common	75			0	0	0	63	6 small clumps		M
62	c	SU2834419073	West Wellow Common	9	20 x 20		0	0	0	80	30 x 0.5	30	WH
62	d	SU 28303 18967	West Wellow Common							44			
62	e	SU28310 18849	West Wellow Common							394	9 x 2		
66		SU3041409380	Fair Cross, Lyndhurst	2	0.1 x 0.1	0.01	9	0.1 x 0.1	0.01	21	0.7 x 0.4	0.28	P
70		SU3304808485	Matley Heath	225	25 x 2	50	150	25 x 2	50	70	25 x 2	50	P
71		SU3306308335	Matley Heath	1200	35 x 5	70	129	35 x 5	175	62	35 x 5	175	P
73	a	SU3354408466	Matley Heath	3000	300 x 4		1740	300 x 4	1200	815	300 x 4	1200	P
73	b	SU3350708169	Matley Heath	See 73a	See 73a			See 73a		2000	many stretches		P
74		SU3378307832	Matley Heath	90	15 x 2	30	39	17 X 2	34	70	17 X 2	34	P
75		SU3424208157	Fulliford Bog	450	12 x 10	120	68	12 x 10	230	226	12 x 10	230	T
76		SU3498305780	Shatterford, Denny Lodge	45	1 x 1	1	6	1 x 1	1	25	1 x 1	1	T
77		SU3515208024	Longdown Inclosure, nr	30	1 x 0.5	0.5	0	0	0				P
78		SU3526007286	Black Down	325	20 x 3	60	201	15 x 1	15	0			P
79		SU3465808084	North of Fulliford Passage				230	12 x 8	96	150	12 x 8	96	T
80		SU3608708202	Peel Hill	200	2 x 2	4	230	5 x 4	20	90	5 x 4	20	P
82		SU3636008067	Longdown Inclosure, nr	8	1 x 1	1	50	2 x 1	2	80	2 x 1	2	P
83	a	SU3636008067	Ipley Inclosure	135	160 x 5		72	6 x 1	6	550	6 x 1	6	P
83	b	SU3719607696	Ipley Inclosure	See 83a	See 83a			See 83a		1100	160 x 0.5	80	P

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90		SU376054	Buck Hill	22	10 x 2	20	0	0	0				T
91		SU 37067 06015	Ferny Crofts NEW							180	2 x 3	6	
91	b	SU 37083 05999	Ferny Crofts NEW							130	4 x 2	8	
92	a	SU3791605313	Gurnetfields Furzebrake	80	5 x 5		25	5 x 5	25	87	5 x 5	25	T
92	b	SU 37694 05484	Gurnet BSBI							132	3 strips		
92	c	SU 38041 05293	Gurnetfields Furzebrake							43	5 x 2	10	
92	d	SU 38112 05170	Gurnetfields Furzebrake							255	6 x 6	36	
92	e	SU 37919 05306	Gurnetfields Furzebrake							56	7 x 2	14	
93		SU 38263 05091	Starpole Pond, W of	1			7			1			T
97	a	SU3617604448	Pig Bush	120	30 x 5		15	1x1	1	42	1 x 1	1	T
97	b	SU3620004490	Pig Bush	40	1 x 1		0	0	0	10	0.2 x 0.2	0.04	T
97	c	SU 36226 04545	Pig Bush new							3	0.3 x 0.3	0.09	
98		SU2812301137	Trenley Lawn, Brockenhurst	10	0.2 x 0.2	0.04	0	0	0				T
102		SZ357998	Bagshot Moor	5	0.3 x 0.3	0.09	0	0	0				P
104		SU3642601113	Hatchet Pond, S of	18	0.3 x 0.3	0.09	0	0	0	0			POND
107		SU3892805185	N of Foxhunting Inclosure	1			0	0	0	0			T
116		SU41240285	Beaulieu Heath East	9	0.3 x 0.1	0.3	9	0.3 x 0.1	0.03	0			T
118		SU1947902074	Brown Loaf	10			15	1 x 1	1	1			M
120		SU25040198	Duckhole Bog				0	0	0				M
121		SU2032813696	Gaze Hill				400	30 x 4	120				P
122		SU2013917977	Hale Purlieu				220	3 x 3	9	400	2 x 2	4	M
123	a	SU 28712 16017	Furzley Common				920	10 x 5	50	43			M
123	b	SU 28682 16108	Furzley Common							386	16 x 1		
123	c	SU 28667 16152	Furzley Common							118	2 x 2		
123	d	SU 28667 16220	Furzley Common							0			
123	e	SU 28580 15568	Furzley Common							507	6 x 4		

The Species Recovery Trust is a charity set up to tackle the loss of some of the rarest species in the UK.

There are over nine hundred native species in the UK that are classed as under threat, with several hundreds more currently widespread but known to be in significant decline. The countryside is now bereft of many species that were a familiar sight a mere generation ago.

A small number of these species are on the absolute brink of existence, poised to become extinct in our lifetimes; our goal is to stop them vanishing.

Our aim is to remove 50 species from the edge of extinction in the UK by the year 2050. In addition we are reconnecting people with wildlife and the natural world through training programmes and awareness raising.









the species recovery trust

www.speciesrecoverytrust.org.uk

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