## **Biodiversity Audit**

Bryan Edwards
Dorset Environmental Record Centre

## **Dorset Important Species List**

**1** = species on the UK Biodiversity Action Plan Priority Species list or the Section 41 list (NERC Act 2006) or on Schedules 1, 5 and 8 of the Wildlife & Countryside Act 1981 (& amendments).

**2** = species with the IUCN Threat Categories; **Critically Endangered**, **Endangered** or **Vulnerable**, or listed as **Near Threatened** or **Data Deficient**, or for **Birds** on the latest **Red** and **Amber** lists of Birds of Conservation Concern.

**3** = species classed as **Nationally Rare** (found in 1-15 10-km squares nationally) or **Nationally Scarce** (found in 16-100 10-km squares nationally).

**4** = species significant in a regional or county context. These can be species that are declining or rare within the County, or those for which Dorset supports a significant population within the region or nationally.



**Purbeck Mason Wasp** 



Portland Sea-lavender



Splendid Waxcap

Group	Sub-group	UK total	Dorset total	% of UK	Dorset Important Species	% DIS
Fungi	Basidiomycetes	c. 5,500	1448		69	3%
	Basidiomycetes - Rusts & Smuts	c. 250	178		10	4%
	Ascomycetes	c. 7,000	722		9	1%
	Lichens	c. 1,900	748	39%	297	40%
	Lichenicolous fungi	c. 520	91		7	12%
Ol amendada a					_	700/
Charaphytes	L'accepta O Harris and	005	9	050/	/	78%
Bryophytes	Liverworts & Hornworts	305	108	35%	37	34%
	Mosses	780	353	45%	88	25%
Vascular Plants		2,200	1077	49%	340	31%
Coleoptera		4,100	2575		603	23%
Diptera		7,000	2629	37%	350	16%
Diptera - Syrphidae	Hoverflies	285	227	79%	55	24%
Hemiptera		1,830	708	39%	94	13%
Hymenoptera (aculeates)	Ants	69	46	65%	17	34%
	Wasps	238	203	85%	95	46%
	Bees	265	223	84%	114	51%
Lepidoptera	Butterflies	66	59	89%	24	42%
	Moths	2500	1815	73%	312	17%
Odonata		49	35	74%	7	14%
Orthoptera & Allies		36	30		14	36%
Trichoptera		198	112	56%	2	2%
Ephmeroptera		51	34	66%	2	6%
Arachnida		660	482	66%	182	37%
Mollusca	(Terrestrial & freshwater)		168		17	10%
Crustacea	( constant of notification)				2	
Annelida					1	
Birds			427		126	29%
Mammals			54		28	52%
Fish	(freshwater)		29		8	27%
	,					
Reptiles			7		6	85%
Amphibians			6		6	100%
			14603		2929	20%

2,929 Species (1,107 on 2012 list) **424** Section 41 species WCA species 120 IUCN Threatened (CR, EN, & VU) 396 186 **IUCN Near Threatened** Global / European Red Listed **43** Nationally Rare species 102 1,289 Nationally Scarce species 432 Not seen since 1990



Podoscypha multizonata



**Early Gentian** 



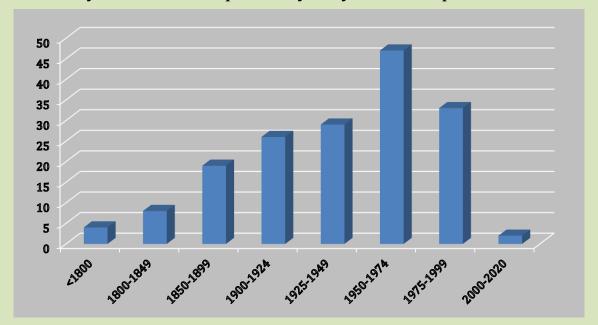
**Duke of Burgundy** 

#### What have we lost? – extinct species

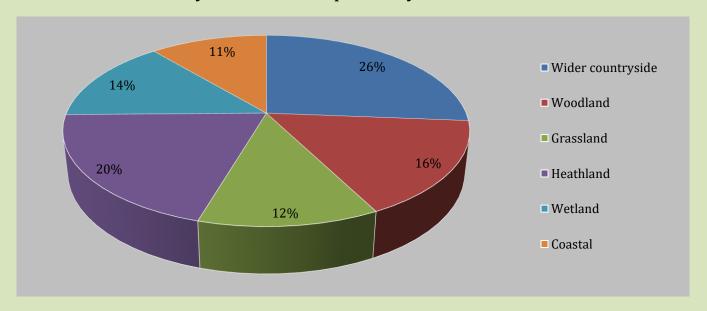
Group	Dorset total	Presumed extinct <sup>2</sup>	% extinct	
Vascular plants	1077	40	4%	
Charophytes	9	3		
Bryophytes	461	24	7%	
Lichens	804	24	3%	
Birds	$144^{1}$	9	6%	
Mammals	44	2	4%	
Amphibians	6	1		
Hoverflies	227	11	5%	
Butterflies	52 <sup>1</sup>	6	13%	
Dragonflies	321	2		
Grasshoppers	30	1		
Ants	47	2	4%	
Wasp	202	11	5%	
Bees	223	25	11%	
Molluscs	168	5	5%	
	3527	166	5%	

Species that are known to be extinct or have a very high probability of being extinct having not been recorded since 1990. This analysis **excludes** those groups where information is much more patchy due to lack of recording or lack of recorders, e.g. beetles, flies, fungi and spiders

Analysis of extinct species by 25 year times periods

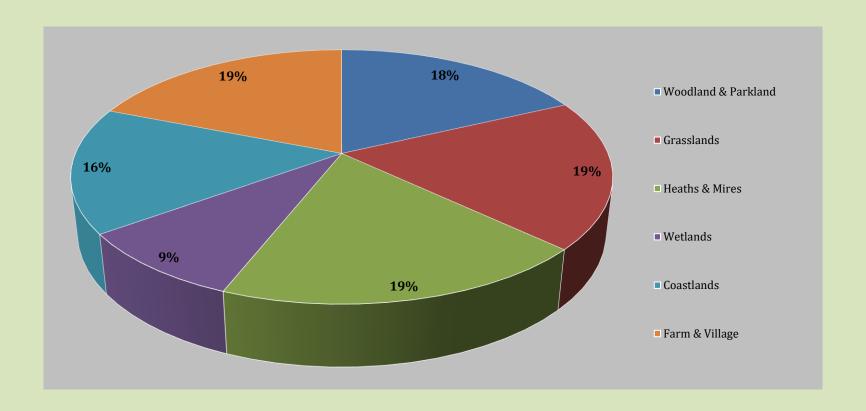


Analysis of extinct species by broad habitat

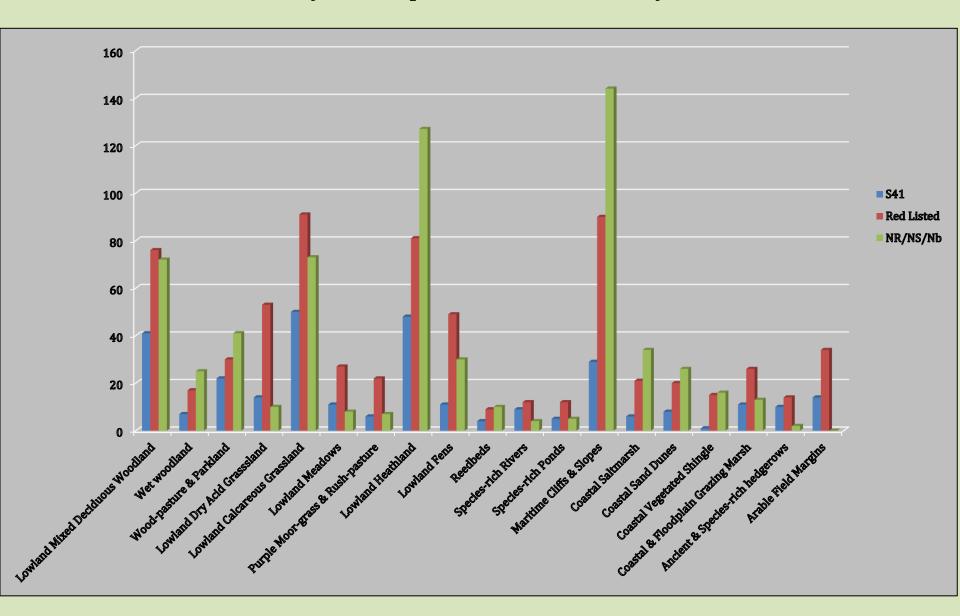


#### **Section 41 species of Principal Conservation Importance**

943 S41 species in UK
424 (45%) species recorded from Dorset
350 recorded since 1990
74 (18%) extinct or not recorded since 1990
(this compares with 31% in Surrey)



#### **Summary of DIS species found in Priority Habitats**



#### What are the priorities for Nature Recovery?

Much more analysis is needed of the 2,929 species to assess trends and threats.

- ➤ National conservation priorities, e.g. S41, WCA, EPS
- ➤ Species on European or Global Red Lists
- ➤ Endemic or near-endemic species: e.g.

Portland Sea Lavender Dorset Sea-lavender Portland Hawkweed English Centaury Ron's Diving Beetle

- ➤ Species for which Dorset has regionally or nationally important populations
- ➤ Species restricted to just 1 or 2 sites in the county



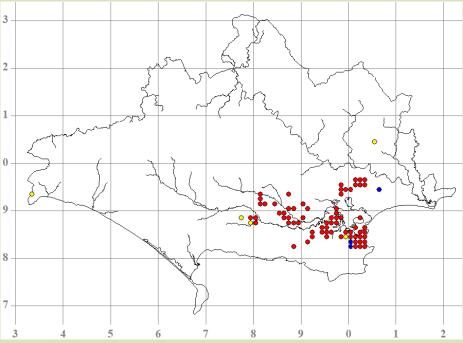




Hazel Gloves Heath Potter Wasp

Marsh Clubmoss

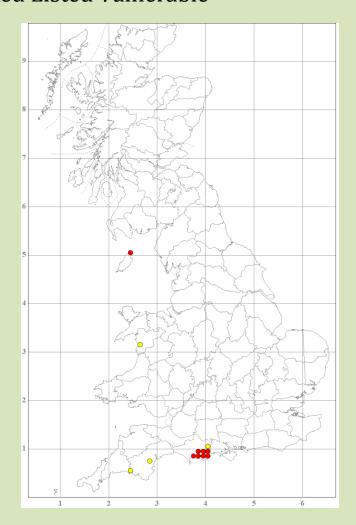




## **Bombylius minor** Heath Beefly

Section 41 list UK Priority Species

#### Red Listed Vulnerable







### **Grassland fungi**

20 species of grassland fungi found in Dorset have recently been added to the **Global Fungal Red List**.

None of these species have yet been assessed in Britain and only 1 is on the S41 list.

Many of these species are relatively widespread in western Britain, but have declined significantly throughout Europe. We are just becoming aware that fungal-rich grasslands may be one of Britain's most important 'habitats'. There are several very good examples in West Dorset.



# Andrena marginata Small Scabious Mining Bee

Not currently Red Listed or on the S41list

This specialist bee has declined in Dorset and is now restricted to one main site and therefore very vulnerable to extinction. It is the only host of the nest-parasite bee *Nomada argentata*.

