

Water beetle and bug surveys at Flitwick Moor and Felmersham gravel pits

Appendix to water beetle and bug report.

1784 species records since monitoring started in 2014.

Table 1 Species of conservation interest (CCI>7) at Felmersham

Reserve	Site	Conservation status
Felmersham Gravel Pits	<i>Anacaena bipustulata</i>	
Felmersham Gravel Pits	<i>Cercyon convexiusculus</i>	
Felmersham Gravel Pits	<i>Chaetarthria seminulum</i>	Nationally scarce
Felmersham Gravel Pits	<i>Enochrus coarctatus</i>	
Felmersham Gravel Pits	<i>Enochrus melanocephalus</i>	
Felmersham Gravel Pits	<i>Helochares lividus</i>	
Felmersham Gravel Pits	<i>Hydaticus seminiger</i>	Nationally scarce
Felmersham Gravel Pits	<i>Hydaticus transversalis</i>	Nationally scarce
Felmersham Gravel Pits	<i>Hydrochus carinatus</i>	Near threatened
Felmersham Gravel Pits	<i>Hydrochus elongatus</i>	Near threatened
Felmersham Gravel Pits	<i>Limnebius papposus</i>	Near threatened
Felmersham Gravel Pits	<i>Microvelia pygmaea</i>	
Felmersham Gravel Pits	<i>Rhantus grapii</i>	
Felmersham Gravel Pits	<i>Rhantus suturalis</i>	

14 species of conservation interest at Felmersham. Including three nationally scarce and three IUCN near threatened.

Table 2 Species of conservation interest (CCI>7) at Flitwick Moor

Reserve	Site	Conservation status
Flitwick Moor	<i>Enochrus coarctatus</i>	
Flitwick Moor	<i>Helochares lividus</i>	
Flitwick Moor	<i>Hydroglyphus pusillus</i>	
Flitwick Moor	<i>Limnebius papposus</i>	Near threatened
Flitwick Moor	<i>Microvelia pygmaea</i>	
Flitwick Moor	<i>Peltodytes caesus</i>	Nationally scarce
Flitwick Moor	<i>Rhantus suturalis</i>	

7 species of conservation interest at Flitwick. Including one nationally scarce and one IUCN near threatened.

Table 3 CCI scores for waterbodies at Flitwick and Felmersham (all years). Reserve average in bold.

Reserve	Site	max cci	CCI2014
Felmersham	Area D.	8	36.0
Felmersham	Area C. Across bridges	8	32.9
Felmersham	Area D. End by platform	8	31.2
Felmersham	Area A. On spit of land	8	26.6
Felmersham	Area A. Dipping platform	8	25.3
Felmersham	B. Other side road - None	8	24.9
Felmersham	Area B. Under trees	8	24.9
Felmersham	Felmersham Gravel Pits	8	24.2
Felmersham	Feature 2	8	24.1
Felmersham	A. Next to car park - None	8	23.9
Felmersham	D.Far Pit - None	8	23.2
Felmersham	C. Centre lake - None	8	23.1
Felmersham	Feature 3	8	19.8
Felmersham	Feature C5	5	13.1
Felmersham	Feature D4	5	11.7
Felmersham	Feature 1	4	7.5
Felmersham	Lateral Ditch	1	1.0
Flitwick	B Peat digging pond	8	18.3
Flitwick	Flitwick Moor	8	16.0
Flitwick	F Swamp next to Peat digging pond	7	15.1
Flitwick	D. Both sides Path Ponds - None	5	8.6
Flitwick	A Entrance Path Ponds	4	5.2
Flitwick	G. Top right swamp - None	3	5.0
Flitwick	C Far Ponds	4	4.5
Flitwick	E. Central Drain - None	2	2.0
Flitwick	Water Trough (near Feature D)	2	1.2

The CCI score at Felmersham indicates **very high** conservation value due to the presence of several national rarities and high species diversity. CCI score at Flitwick indicates **high** conservation value due to presence of one national rarity.

Felmersham can be considered an important site for freshwater invertebrates, particularly areas D & C. It is suggested that targeted monitoring continues in these areas.

Flitwick cannot be considered an important site for freshwater invertebrates. The scores at the site are low compared to other WT reserves, with generally low species diversity and rarity. The only waterbody of interest is the peat digging pond with a community of **high** conservation value.

Future monitoring will be discussed with the reserves teams, based on these results and site management.