

Stratiomyidae from agricultural ditches in Leicestershire

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Pond Conservation is involved in an ongoing project to research the value of agricultural ditches for birds, funded by DEFRA. In particular we are looking at the emergent insect populations from sections of ditches that have been dammed to retain water longer and comparing them to control sections. Altogether 32 ditches within SK70 in Leicestershire, were sampled using ten emergence traps in each ditch with a total of nine visits to each trap at fortnightly intervals from April to August.

Half the ditches were bordering arable fields and half pastoral fields; otherwise the ditches were similar in having a hedge on one side, although differing in width, depth and aspect. The large number of samples collected were sorted into size classes in order to estimate biomass although some family level identification was carried out (38 Diptera families recorded). Diptera were numerically dominant over the purely aquatic taxa (Stoneflies, Caddis, Mayflies, Odonates), with Nematocera being dominant over Brachycera (etc).

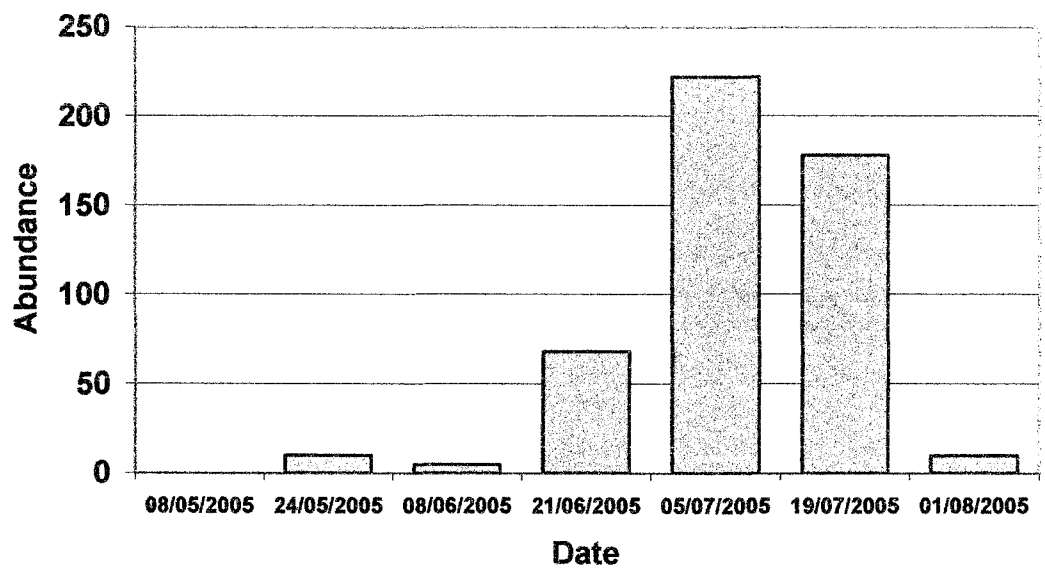
Soldierflies were extracted and identified to species, and the results are tabulated below.

Species	Status	Total
<i>Beris chalybata</i>		16
<i>Beris geniculata</i>		10
<i>Beris vallata</i>		425
<i>Chloromyia formosa</i>		5
<i>Chorisops tibialis</i>		3
<i>Microchrysa flavicornis</i>		3
<i>Microchrysa polita</i>		1
<i>Oplodontha viridula</i>	Local	1
<i>Oxycera morrisii</i>	Notable b.	1
<i>Oxycera rara</i>	Local	1
<i>Oxycera terminata</i>	RDB2	3
<i>Pachygaster leachii</i>	Local	16
Total		485

Stratiomyid emergence was spread between the end of May and beginning of August with the peak in July (see graph below).

These ditches appear to offer habitat for both the aquatic and terrestrial Stratiomyidae with some 'woodland' species turning up albeit in low numbers. The presence of *Oxycera terminata* is particularly interesting as it is believed to a first record for Leicestershire, although Drake (1991) gives Rockingham Forest in Northamptonshire (18 km. away) as one of only three known populations. However this site is not reported in the RDB for Insects (1988).

The number of dipteran families recorded overall as well as the Stratiomyidae species found suggest that agricultural drainage ditches may offer an interesting habitat to explore further.



Total number of Stratiomyidae caught in emergence traps by visit

References

- Drake (1991) Provisional Atlas of the Larger Brachycera (Diptera) of Britain and Ireland.
NERC
- JNCC (1988) British Red Data Books 2 Insects.