

# ASHTON'S FLASH, NORTHWICH

An invertebrate survey for the Tanyptera Project  
and Butterfly Conservation Cheshire and Wirral  
Branch

2021



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Appendix 1 Species data in separate spreadsheet file.



## **1. PROJECT SPECIFICATION**

The Tanyptera Project commissioned Nigel Jones to undertake an invertebrate survey of Ashton's Flash. The survey focussed on aculeate Hymenoptera and Diptera, with Coleoptera and Araneae from pitfall traps and casual recording of other insects.

## **2. Ashton's Flash**

The survey area fell almost wholly within Ordnance Survey 1km grid squares SJ6674. Ashton's Flash is an area of reclaimed industrial lime beds, giving rise to a highly alkaline environment. Reclamation of the site was completed around 2000. Saline conditions prevail across parts of the site, enabling the establishment of coastal plants. Shallow water bodies with an extensive summer drawdown zone provide significant areas of exposed wet silts.

## **3. METHOD**

Five survey days were undertaken, between April – August:

17 April 2021 – cool with clear sunny conditions throughout;

12 May 2021 – cool - warm with frequent sunny intervals ;

08 June 2021 – warm sunny conditions throughout.

13 July 2021 – very warm with sunny conditions throughout;

12 August 2021 – warm with sunny conditions throughout;

On each of the 2021 survey days the following techniques were employed:

- Searching for and aerial netting of insects on flowers, leaves and tree foliage;
- Sweep-netting over and through ground vegetation, over flower heads, over sparsely vegetated ground and over tree foliage, targeting wetland, grassland and exposed wet silts;
- Pan-trapping: Up to fifty pans were set out at various stations on open banks, in wetland situations and on exposed silts;
- Pitfall traps were set at four stations (Fig. 1).

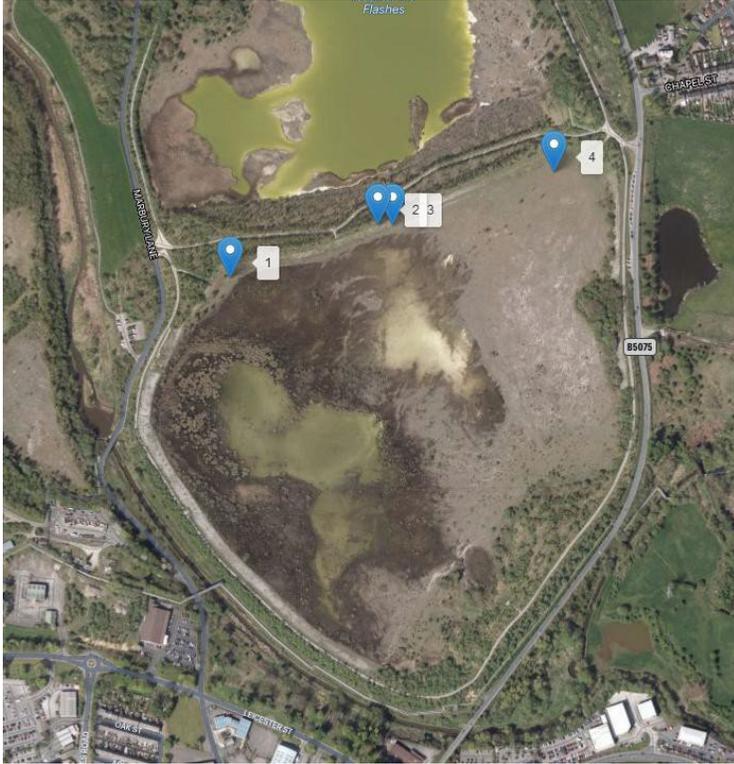


Figure 1: Locations of pitfall trap stations 1 - 4

#### 4. RESULTS

587 records of 304 species were recorded, including 248 Diptera species and 56 aculeate Hymenoptera. In addition 50 species of Coleoptera and 23 species of spider, collected from pitfall traps, were recorded by Clive Washington (beetles) and Richard Gallon (spiders).

All the data has been submitted to iRecord, apart from the spider (Araneae) data which has been submitted directly to the Spider Recording Scheme.

#### Species with conservation statuses

Thirteen species with designated conservation statuses were recorded. Table 1 summarises the species.

Species	Status	Notes
<b>DIPTERA</b>		
<i>Lasiambia baliola</i>	pNear Threatened	Thought to be associated with old trees. Very few post 1960 records.
<i>Medetera saxatilis</i>	Data Deficient	Now known to be a widespread species across England and Wales.
<i>Trichina opaca</i>	Nationally Scarce	Inhabits rather shaded and moist biotopes. Very few post 1987 records.
<i>Cnemacantha muscaria</i>	pNationally Scarce	Considered as associated with wetland and riversides. In the present author's experience this is a widespread

		species in various habitats.
<i>Coenosia atra</i>	pNationally Scarce	Records include marshy areas on heaths, rush <i>Juncus</i> and sedge <i>Carex</i> fens, dune slacks and brownfield sites.
<i>Lispe nana</i>	pNationally Scarce	Around pools, ditches and in marshes, in brackish coastal situations (including dune slacks, coastal levels and possibly salt marshes) but occasionally also inland.
<i>Lispocephala brachialis</i>	pNear Threatened	Biology unknown, but the larvae is aquatic. Very few post 1960 records.
<i>Spilogona scutulata</i>	pNear Threatened	Estuarine sites including salt marshes and coastal dunes, often at wet mud; inland records are from the vicinity of gravel pits, and marshy areas.
<i>Pherbellia dorsata</i>	Notable (1991)	Widespread and local species of wetlands.
<i>Psacadina zernyi</i>	RDB 2 (1991)	Regarded as scarce in pingo fens in East Anglia and from mineral marshes elsewhere in Eastern England. Scattered records in western England.
<i>Cheilosia psilophthalma</i>	Data Deficient	Scattered records across the UK. Feeds within the rosette of Mouse-ear Hawkweed <i>Pilosella officinarum</i> .
<i>Campiglossa malaris</i>	Notable (1991)	Now a widespread across southern Britain.
<i>Solieria vacua</i>	No status	A scarce Tachinid fly. Just six post 1980 records held by the National Recording Scheme.
<b>HYMENOPTERA</b>		
<i>Pemphredon morio</i>	Notable (1991)	A scarce species that nests in old wood, including fence posts and dead timber.
<b>ARANEAE</b>		
<i>Cheiracanthium virescens</i>	Nationally Scarce	A scarce species in southern Britain

Table 1 – species with conservation designations recorded at Ashton’s Flash.

**Notation:** RDB 2 – Red Data Book 2; NS – Nationally Scarce; pNS – provisionally Nationally Scarce; Notable - Nationally Notable (designations from Falk (1991), Drake (2018), Falk & Crossley (2005), Falk & Pont (2017), Ball & Morris (2014), Falk, Ismay & Chandler (2016).

**New Cheshire species:** Nine species were recorded for the first time in Cheshire (Vice County 58); The flies *Platypalpus albicornis*, *Diaphorus nigricans*, *Cheilosia psilophthalma*, *Cryptonevra flavitarsis*, *Lasiambia baliola*, *Solieria vacua* and *Lispe nana*, the Chalcid wasp *Brachymeria tibialis* and the bee *Osmia spinulosa*.

*Osmia spinulosa*, Spined Mason Bee is a particularly significant record. This bee is known from southern England with the Cheshire record marking its most north westerly known locality. The bee nests in empty snail shells, and there is a strong population present at Ashton’s Flash with at least 30 specimens (male and female) seen during May, June and July.

## 5. DISCUSSION

The data from the 2021 survey was added to historic data (mainly from the period 1999 – 2019) and run through Natural England’s online Pantheon database (Webb *et al.*, 2018). 602 species were analysed. The analysis indicated that the site hosts a significant insect assemblage associated with a rich flower resource.

A small fauna of species associated with saline conditions was identified. Although not identified as a significant assemblage, Ashton's Flash being an inland site, the assemblage is interesting. Four species represent this small assemblage: *Dolichopus nubilus*, *Nemotelus uliginosus*, *Lispe nana* and *Limnophora scutulata*.

## 6. HABITAT MANAGEMENT

In order to maintain the considerable invertebrate interest of the site, management actions should include:

Continued control of scrub on the south facing bank to maintain a good floral resource;

Grazing of marshes to help maintain floral and structural diversity;

Retain standing deadwood for the benefit of a range of hole nesting aculeate Hymenoptera.

### Acknowledgements

Thanks go to Gary Hedges of the Tanyptera Project for commissioning this survey and for arranging access across the site. Rupert Adams provided invaluable assistance by collecting in and sorting samples from pitfall traps – a not inconsiderable task. Clive Washington kindly determined Coleoptera species collected during the survey. Richard Gallon identified spiders collected from pitfall traps. David James (Cheshire West and Chester Council) for permitted access for this survey.

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