

## 7.7 MOTH SURVEY

### Introduction

- 7.7.1 A moth survey was undertaken during June and August 2013. The survey method agreed with CCW and NCC involved two visits in spring and summer, covering the main flight period for moths. The first survey was delayed by several weeks to make allowance for the unusually cold spring weather.

### Survey method

- 7.7.2 The main survey method involved light-trapping, using a 125W mercury vapour lamp powered by a portable electric generator. The trap was located in the northern part of the post-industrial area, which is near to the centre of the site, relatively sheltered, and close to a good range of scrub, grassland and ruderal habitats. The light-trapping was supplemented by direct capture, using hand nets and torches to search the scrubby margins of the brown-field part of the site. The survey was undertaken by two experienced surveyors. All of the moths were identified alive and released.
- 7.7.3 The times and weather conditions during the surveys and are summarised in Table 7.7.1 below.

**Table 7.7.1 Moth survey dates, times and conditions**

Date	Time	Weather
10/6/2013	10:10pm to 12:40am	Overcast with light but variable breeze, 14.5°C at start 11.5°C at finish. Survey followed 8 days of warm, dry weather. Light rain started within 1 hour of concluding the survey.
19/8/2013	8:45 to 11:20pm	Dry and calm, with approx 50% patchy light cloud, 17°C at start, 12.5°C at finish. Survey followed two warm dry days.

### Survey findings

- 7.7.4 The species recorded during each of the surveys are summarised below in Table 7.7.2. The table also shows the approximate numbers seen in brackets. However, these should only be regarded as a very rough guide because moths were not counted more than once if there may have been a chance of double-counting the same individual.

**Table 7.7.2. Moth survey observations**

Species	Date	Number (approx.)
<i>Adela reaumurella</i>	10/6/2013	1
<i>Agapeta hamanna</i>	10/6/2013	1
<i>Crambus pascuella</i>	10/6/2013	1
Hemp Agrimony Plume Moth <i>Adaina microdactyla</i>	19/8/2013	2
Orange Swift <i>Hepialus sylvina</i>	19/8/2013	2
Common Swift <i>Hepialus lupulinus</i>	10/6/2013	1
Pebble Hook-tip <i>Drepana falcataria falcataria</i>	19/8/2013	1
Blood-vein <i>Timandra comae</i>	19/8/2013	1
Small Fan-footed Wave <i>Idaea biselata</i>	19/8/2013	1
Red Twin-spot Carpet <i>Xanthorhoe spadicearia</i>	19/8/2013	1

Species	Date	Number (approx.)
Dark-barred Twin-spot Carpet <i>Xanthorhoe ferrugata</i>	19/8/2013	1
Garden Carpet <i>Xanthorhoe fluctuata</i>	10/6/2013	1
Small Phoenix <i>Ecliptopera silceta</i>	19/8/2013	1
Common Marbled Carpet <i>Chloroclysta truncata</i>	10/6/2013	3
Lime-speck Pug <i>Eupithecia centaureata</i>	10/6+ 19/8/2013	1 + 1
Small White Wave <i>Asthena albulata</i>	10/6/2013	1
Latticed Heath <i>Chiasma clathrata clathrata</i>	19/8/2013	4
Brimstone Moth <i>Opisthographis luteolata</i>	10/6+ 19/8/2013	1 + 2
Peppered Moth <i>Biston betularia</i>	10/6/2013	1
Mottled Beauty <i>Alcis repandata repandata</i>	19/8/2013	1
Engrailed <i>Ectropis bistortata</i>	19/8/2013	1
Common White Wave <i>Cabera pusaria</i>	10/6/2013	4
Common Wave <i>Cabera exanthemata</i>	10/6+ 19/8/2013	1 + 1
Pale Prominent <i>Pterostoma palpina</i>	10/6+ 19/8/2013	1 + 2
Ruby Tiger <i>Phragmatobia fuliginosa</i>	19/8/2013	2
Heart and Dart <i>Agrotis exclamationis</i>	19/8/2013	1
Shuttle-shaped Dart <i>Agrotis puta puta</i>	19/8/2013	3
Flame Shoulder <i>Ochropleura plecta</i>	10/6+ 19/8/2013	6 + 5
Large Yellow Underwing <i>Noctua pronuba</i>	19/8/2013	4
Lesser Broad-bordered Yellow Underwing <i>Noctua janthe</i>	19/8/2013	3
Setaceous Hebrew Character <i>Xestia c-nigrum</i>	10/6+ 19/8/2013	2 + 1
Square-spot Rustic <i>Xestia xanthographa</i>	19/8/2013	3
Bright-line Brown-eye <i>Lacanobia oleracea</i>	10/6/2013	1
Old Lady <i>Mormo maura</i>	19/8/2013	1
Straw Underwing <i>Thalpophila matura</i>	19/8/2013	1
Angle-shades <i>Phlogophora meticulosa</i>	10/6/2013	2
Marbled Minor <i>Oligia strigilis</i>	10/6/2013	1
Common Rustic <i>Mesapamea secalis</i>	19/8/2013	4
Flounced Rustic <i>Luperina testacea</i>	19/8/2013	1
Silver Y <i>Autographa gamma</i>	19/8/2013	3
Spectacle <i>Abrostola tripartita</i>	10/6/2013	1
Straw Dot <i>Rivula sericealis</i>	10/6+ 19/8/2013	4 + 7

## Discussion

- 7.7.5 A moderate number of moths were captured. All of the species found are common and widespread species which are typically found in scrub, ruderal habitats and gardens. The most significant species was the Old Lady moth, which is a localised species within Newport.
- 7.7.6 The surveys were undertaken during suitable conditions, although the first was probably affected by a breeze blowing up from the river, and the relatively cold weather early in the year. It is likely that the unusually wet summer in 2012 and prolonged cold weather through spring 2013 made this a poor year for moths. Another factor likely to have influenced the local moth population at Herbert Road is the clearance of scrub and tall vegetation that took place over the winter of 2012, as this would have destroyed overwintering moth pupae in the areas affected. Despite these limitations, the study has given a reasonable overview of the local moth population, indicating that the area supports a moderate diversity of common and widespread moths. The site is considered to have Local nature conservation value for moths, particularly because of its context within urban Newport.