ABI Wildlife Consultancy

Biodiversity Audit on behalf of Edinburgh Napier University

Report for August 2010

Survey work.

Work began on 26th July 2010 where the first few days were used to familiarise myself with the layout of the three campuses – Craighouse, Craiglockhart and Merchiston. Campuses were broken down into simple habitat types which will be coded according to Nature Conservancy Council Phase 1 Habitat Survey for the final paper but not in the monthly reports. Initially a botanical survey was conducted over the three campuses due to the seasonal deterioration of existing plants and grasses. Three plant species were reported to the Lothian Botanical Recorder due to their rarity within the Lothian’s. Bats have been found within two campuses and one possible roost site. Bird life has not produced much but this is due to the time of year but one Biodiversity Action Plan (indirect species) has been recorded breeding. Several mammal species live within the campuses while some move in to forage from outside. An invertebrate survey has been conducted examining species that use the tops of vegetation and the analyses of this survey will be conducted over the winter given the complexity of this species group. A fern and butterfly survey have also been carried out. Some fungi have been recorded and this is ongoing given that their season has just begun.

Craighouse

Numbers refer to the amount of different species

Habitat Type Plants Grasses Ferns Birds Mammals

N Wood 41 8 3 8 6

S Wood 26 5 1 5 6

Amenity Grass 31 5 0 12 4

Buildings 41 6 4 13 5

Interesting results when we look at the number of species as this is not what one would expect from these varying habitat types. However, seeing August on its own is out of context when we do not have results from other months for a comparison. An assumed example would be that most birds will breed in the woodland (mainly the edge) but forage for food within the amenity grassland and around buildings hence the higher number recorded within these habitat types? Also the high number of plants recorded around buildings and amenity grassland are in the main first successional plants living in a highly disruptive habitat where intensive management takes place to keep them clear whereas the woodland is the climax of succession with no management taking place.

Craiglockhart

Numbers refer to the amount of different species

Habitat Type Plants Grasses Ferns Birds Mammals

Grassland 41 8 0 3 1

Amenity Grass 50 7 2 7 2

Buildings 23 1 1 2 0

Woodland 26 5 1 4 2

The amenity grassland shows a higher number of plant species and as explained for Craighouse this is due to being intensively managed and plants kept in a constant early successional phase. The buildings show less plant species than Craighouse and this is due to the management around buildings where small stones are used as a border to keep plants down. What has been interesting is that two plants are confirmed as very rare for the Lothian’s – one has not been recorded since 1934 (growing beside some steps) and the other is a first record for the Lothian’s (within the grassland). One other plant found within the amenity grassland has only been recorded 4 times within the Lothian’s which are very interesting results.

Merchiston

Numbers refer to the amount of different species

Habitat Type Plants Grasses Ferns Birds Mammals

Buildings 28 1 0 2 0

It is surprising the amount of species found around this site given that most of it is concrete and I am sure that over the survey period it will reveal more. Though I have not examined the sample of invertebrates from this site I was surprised by the amount I was catching. One plant of interest was found which I have never seen out of the Highlands before where it is common and may pass the recorded on to the Botanical Recorder. Though there were no mammals recorded at this site I am certain that I will find evidence in the future.

Though it was a late start in the season to begin this audit, I feel that much will achieved and benefited by having a cross section of the seasons. There is also much potential to be gained from this audit that will benefit students who may wish to take up research within the university campus, where this survey work will provide a strong base for the future student ecologist.

Abbie Patterson

Ecologist

August 2010