

Survey results for 2012

Throughout 2012 we commissioned a varied programme of surveys to continue to build up our knowledge of the species and habitats present on our landholdings. It was a busy year for surveying with a number of surveys commissioned as follows;

Dragonfly and Butterfly surveys on 5 sites, moth surveys on 4 sites, amphibian surveys on 4 sites and detailed habitat surveys on 20 sites.

Moths

2012 saw moth surveys completed on three of our operational sites. Surveys were carried out on our sewage treatment works at Guisborough and Stokesley and on one of our covered reservoirs at Hemlington. The surveys have involved evening visits with moth traps in use between dusk and 2am with each site having being visited on five separate sessions between March and October.

In total, 314 moth species were discovered on our landholdings of which 40 are considered to be of conservation interest, with 31 being considered of national significance. Guisborough sewage treatment works turned out to be our best with 230 species, which is to be expected as it is our most ecologically diverse site in terms of habitats on site.

One of the more scarcer species recorded at Guisborough was the Scarce Silver-lines, which uses various oak trees as its larval foodplant.



Scarce Silver-lines at Guisborough STW

Photo courtesy of Robert Woods



Butterbur moth from Guisborough STW. This is a very local moth, its distribution being limited by the larval foodplant of Butterbur (which is found on site).

Photo courtesy of Robert Woods

At Hemlington an interesting sighting was a single Horse Chestnut Leaf-miner, which has only recently colonised the northern region after having dispersed originally from Macedonia throughout Europe.

For more findings take a look at the report on our website, which also contains some recommendations for improving the habitat on our sites for the benefit of moth species.

Dragonfly and Butterfly

2012 saw the eleventh yearly survey of Dragonfly and Butterfly surveys, with five of our operational sites being surveyed by our appointed Entomologist.

Results were affected this year due to the wet summer however out of the five sites Mosswood treatment works had the best results with a total of 5 species of dragonfly and 14 species of butterfly including the Purple Hairstreak butterfly (which is primarily found in woodland containing oak trees, oak being the foodplant of the larva).

Habitat Surveys

As part of our continued effort to ensure that habitat surveys of important sites are no more than ten years old we focussed on a high number of sites in 2012, throughout our operating area from Yarm sewage treatment works in the South to Catcleugh Reservoir in the North. The information from these surveys will assist in the management of these sites and has also helped us to identify sites with biodiversity action plan habitats.

Some of the highlights from this year's survey have been the discovery of grasslands of high conservation value and notable plant species around some of our reservoir boundaries.



Results from the Colt Crag Reservoir survey show that it is likely to be one of our most significant sites in Northumberland from a nature conservation perspective. Some of the examples of limestone grassland on site are considered of SSSI (Site of Special Scientific Interest) quality and the site also contains adder's tongue fern and a population of the nationally rare cleft bog moss.

Adders-tongue fern at Colt Crag Reservoir – an ancient grassland indicator



At Longnewton reservoir, near Darlington, the survey has shown that the site is very good for wildlife as it has a variety of different habitats ranging from species-rich open plant communities to long grass, scattered trees and open water. Some of the grassland communities on site also meet the criteria for a Local Wildlife Site and it also holds the largest population of dyer's greenweed in the area, growing away from the coast.

Dyer's greenweed growing at Longnewton Reservoir.

Small Mammal Surveys

Surveys for small mammals were completed at Guisborough treatment works, Scaling Dam Reservoir and Washington treatment works.

Our survey at Guisborough showed there to be a healthy population of wood mice using the site, with field vole and common shrews also being caught. This is good news for the local owl population, with Tawny owl being recorded during the survey period which will be able to make use of the woodland, scrub and grassland growing on site to catch their prey.

Surveys at Scaling Dam were badly affected by the wet weather, however wood mouse and field vole were discovered during three days of surveying. Further surveys in 2013 will help to improve the understanding of small mammals on site, because it is known that small mammal populations can vary widely in different years.
