**BIODIVERSITY PROJECTS OFFICER’S REPORT**

**Garden Butterfly Survey**

* Butterfly Conservation is asking for butterfly sightings during autumn and early winter this year.
* They want to know how late in the year butterflies can regularly be observed so they can build a picture of how important gardens are for butterflies and what we can do to help.
* Butterflies had a good start to the season with some warm and dry weather in the spring but by late summer the weather had turned wet and cold.
* The positive start meant many butterflies emerged earlier than normal and could fit in an extra generation which may have resulted in a bumper emergence of species such as speckled wood, red admiral and comma.
* Many butterflies will remain active into November, if the weather is mild, and will be visiting gardens in their search for nectar so they can build up reserves in order to hibernate or migrate.
* Report any garden butterfly sightings at:

<http://www.gardenbutterflysurvey.org/>

**‘Extinct’ Plant found in the Peak District**

* 62 leek-coloured hawkweed plants, forming two groups, have been found in the Peak District National Park.
* Previously thought to have become globally extinct the plants were found by Dr Tim Rich whilst he was collecting seeds for Kew’s Millennium Seed Bank.
* Leek-coloured hawkweed has yellow flowers, which are similar to dandelions, and leaves which look like those of a leek. This perennial plant only grows in rocky limestone habitats.
* Seed of the leek-coloured hawkeed has now been collected as part of the Kew Gardens’ Millennium Seedbank Partnership.

**Diverse Landscapes are more Productive and adapt better to Climate Change**

* Research by the University of Zurich has shown that ecosystems with high biodiversity are more productive and stable towards annual fluctuations in environmental conditions than those with a low diversity of species.
* They also adapt better to climate-driven environmental changes.
* The research validates the importance of having a rich biodiversity and how it has a vital role in the functioning of extensive landscapes that are made up of different ecosystems such as woodland, meadows or urban areas.

**Warmer Springs Linked to Earlier Budburst**

* Research by the Met Office and the Woodland Trust has shown that budburst in the UK is significantly related to the average temperature in March for nine out of eleven species.
* The study, which looked at the timing of budburst between 2000 and 2016, found that a 1°C lower or higher March temperature led to a corresponding later or earlier budburst. For example budburst in alder in the south-east was affected by three days.
* The research, which concurs with similar studies, can help with future tree management.

**Otters Learn by Watching**

* Research by the University of Exeter has shown that smooth-coated otters can learn how to solve puzzles baited with food by watching other otters.
* The research also revealed that young otters were more likely to copy others than adults.
* The order in which the young solved the puzzles followed the strength of their social bonds which shows that the young copied siblings with which they spent most time.
* The puzzles included plastic tubs with clip-on lids, pull-off lids or screw-top lids and were baited with treats such as fish heads or peanuts.
* However, not all otters learn by example. Asian short-clawed otters, for instance made no attempt to copy other otters in order to receive a reward.
* Researchers are hoping that their work will help with reintroduction projects for many of the otter species which are classified as threatened, vulnerable or endangered.

**Local Nature Reserve (LNRs) and Open Spaces**

A range of projects have taken place at the LNRs and open spaces:

* The Aquadrome, Chorleywood House Estate and Leavesden Country Park were all rewarded their Green Flag Awards in July.
* Applications for the 2018 awards need to be submitted by the end of January. Leavesden Country Park and Chorleywood House Estate will have full site visits by Green Flag judges whilst the Aquadrome will be subject to a mystery shopper visit.
* There are eight categories upon which parks and open spaces are assessed. The site must, for example, be welcoming, safe and secure, clean and well maintained, sustainably managed, have community involvement and be well managed.
* For more information go to:

[www.keepbritaintidy.org/GreenFlag](http://www.keepbritaintidy.org/GreenFlag)

* The cattle that were grazing Croxley Common Moor have now left the site. The cattle were Herefords crossed with Charolais and were incredibly placid and docile.
* The Friends of Croxley Common Moor picked up where the cattle left off with their first scrub bashing session in September. The Friends will continue to meet at 10am on the second Sunday of each month (except November) until March. They will be removing scrub so that it does not encroach on the valuable grassland.
* The next scrub bashing task will be Sunday 19 November at 10am followed by the Christmas session at 10am on Sunday 10 December. There will be mince pies and mulled wine for all so please come along to join the group.
* For more information about the work of the Friends and the upcoming events at Croxley Common Moor visit:

[www.croxleycommonmoor.org.uk](http://www.croxleycommonmoor.org.uk)

* After a late arrival the cattle have now also left Chorleywood House Estate. Around 20 young cattle grazed the field behind The Readings in order to help increase the diversity and abundance of wild flowers in the area.
* TRDC has been working with the Countryside Management Service (CMS) to put together a new management plan for Chorleywood House Estate. The new plan will start in April 2018 and will include projects such as improving signage, updating the interpretation boards, increasing the amount of information on the heritage of the site and improving the grazing infrastructure.
* Dexter cattle have been grazing at The Withey Beds since June and they left in October. This is the second year that they have been at the site and you can already see an improvement in the quality of the grassland.
* Various family activities have been organised by the Council’s Park Ranger. Activities have included welly walks, bug hunts and bat walks. For information on all of the upcoming events go to:

<http://www.threerivers.gov.uk/egcl-page/events-community-groups-and-volunteering>