

FRIENDS OF GEDLING COUNTRY PARK

ENVIRONMENT REPORT DECEMBER 2016

This is the first environment report of The Friends of Gedling Country Park to contain substantial details of data recorded by volunteers. This work was ongoing throughout the year and will continue into 2017 and further years. The records are mainly from the first year of data collection and by default they will lay the initial base line for future comparative work and hopefully enable us to build a picture of the park's development over the future years. For ease of understanding and convenience for all, the report is divided in flora/fauna group data and uses local names for species where possible. Similarly, the methodology used is not described in detail but is based on Ecological Census Techniques A Handbook by William J. Sutherland 2<sup>nd</sup> Edition (The full lists of species, methodology and data recorded will be available to all as soon as possible and before the AGM).

**SPECIES OF CONSERVATION CONCERN –**

Species listed as of conservation concern in the 2016 update of the Nottinghamshire's Local Biodiversity Action Plan (LBAP) are labelled as 'SoCC'. This list includes species which are already rare but also commoner species which should be prevented from becoming rarer in the future, and which gives Nottinghamshire its own special character.

**MAMMALS –**

Data on the larger mammals within the park comes mainly from reported sightings and except for Rabbits, Badgers and Stoats no film records have yet been obtained.

Rabbits exist throughout the park with populations residing mainly in woodland edges and grazing the adjacent grassland. Rabbit grazing is an important asset for the environmental diversity of the wild flowers within the park, keeping strong growing and invasive grasses, shrubs and herbs under control. They are also a food source for other mammals and birds. We have recorded two active badger sets within the park and found one dead youngster near the Northern boundary this summer. Stoats have been seen in numbers with a family group observed 'dancing' around the seats near the Spring Lane Car Park notice boards.

Reports of Muntjac Deer (I have heard them 'Barking' in the North-West Willow plantation), Fallow Deer and Roe Deer have been reported as being sighted within the park. We have left cameras running overnight, but have so far, no records of these species. Brown Hare (SoCC) and Fox have been sighted on many occasions walking across the grassland slopes, but so far, no Fox Den or Brown Hare Form has been identified. Grey Squirrels are resident in the park mainly within the border woodlands. No records of Hedgehogs, Weasels, Rats, Mice, Voles, Shrews and Bats (excepting one sound record [Pipistrelle] whilst Moth trapping). Only licensed persons can trap and record most of these species and we are working hard to satisfy these criteria to enable a full mammal record, especially of the Bats, to be obtained for the park.

**BUTTERFLIES –**

A transect of approximately 1.5 Kilometres running from the Eastern Spring Lane entrance to the park, Westward along the 'Butterfly Walk', through the woodland ride, across and down the walk to the central lagoon northern seating, diagonally across the grassland to the zig-zag path half way up the path and right along to the Hawthorn wood below the Spring Lane Car Park.

Weather permitting recording took place weekly from April until September as, per methods for Butterfly Conservation UK.

In total 21 species were identified during the year, plus 1 unidentified 'Blue' and 1 unidentified 'Brown'.

Peak weeks for individual numbers of butterflies occurred in a four-week period in July w/c 4<sup>th</sup> 95, w/c 11<sup>th</sup> 112, w/c 18<sup>th</sup> 147, w/c 25<sup>th</sup> 187.

The first species spotted were Brimstone, Peacock and Small Tortoiseshell in early April. It was also observed that Large and Small Whites were recorded before but not during June with a second brood appearing in July, similarly for Brown Argus and to a lesser degree Peacocks. The last species recorded flying was the Red Admiral at the end of the survey period in September.

Day flying Moths are also 'noted' during the butterfly survey and an interesting result, worthy of further study during 2017, was observed. Most literature reports Narrow-Bordered Five-spot Burnet as flying June-July and the Six-spot Burnet as flying June-August. Our results show the last recorded sighting of the Narrow-Bordered Five-spot Burnet as 13<sup>th</sup> July and first sightings of the Six-spot Burnet on 27<sup>th</sup> July a notable gap between species flying.

We would like more detailed surveys of these species during 2017 and desperately require volunteers for the work. It's easy to see and identify the two-moth species, they only fly on warm sunny days so all the work involves is a casual stroll across the grasslands for approximately 1 hour on a summer day noting sightings and reporting back to us via email. You will also be helping in the conservation of UK's wildlife and all volunteers are acknowledged for their work in the yearly more detailed report.

Two other species the Dingy Skipper and the Green Hairstreak (both SoCC) were recorded on the park's Southern boundary, this area requires further study during 2017 and we intend to set up another butterfly transect along the park's Southern boundary. This is also important as the Gedling Access Road construction will commence late summer 2017 – again volunteers are required for this project!

#### **MOTHS-**

A series of moth light trapping evenings were held during the year. Due to the time and difficulty involved with the, to me, bewildering array of the 1,627 micro moths of the UK and the necessity of collecting and dissecting under the microscope to enable some to be identified, we have decided to record only the Macro Moth species but we do include any easily identified Micro species.

We only commenced recording in July when we obtained a professional Robinson Trap and generator.

To date we have recorded over sixty species including seven SoCC listed.

During 2017 we will be inviting 'Friends' to moth nights between mid-May and early July when the larger more flamboyant Hawk Moths will be in flight (5 species recorded 2016). Also in 2017 we intend to run a trapping session monthly from outside our newly acquired Container Centre. Again, anyone interested in volunteering for identification or assisting will be welcome.

#### **DRAGONFLIES AND DAMSELFLIES –**

Recording commenced in Mid-summer of these species and to date nine species of Dragonflies (2xSoCC) and three of Damselflies have been recorded. It is extremely difficult to identify these insects on the wing and at least two more species of Dragonfly have been recorded flying over the lagoons. Of the Dragonflies five species have been recorded copulating and six species ovipositing. Of the Damselflies, all three species have been recorded copulating and two ovipositing. There are obviously diverse and healthy populations of these insects within the park and due to their importance as indicator species work has been planned for a research project monitoring the macro aquatic invertebrates in the park water bodies. This project will also involve water quality testing as well as physical, biological and geographic attributes of these water bodies and will provide a strong base for future comparative work.

#### **GRASSLAND VEGETATION SURVEY-**

A vegetation survey of ten areas within the park was carried out during 2016. The methodology was in line with that used by The National Trust when carrying out SSSI assessments with Natural England. The monitoring carried out provides data on both positive and negative indicator species, this data can be used to inform for present and future habitat management plans, helping to assess where best to target voluntary activity, conservation grazing or mechanical cutting etc. Some areas where wild flowers have established themselves quite early in succession means

that grasses have, to some degree, been prevented from dominating those areas; however, there are also several areas which are almost entirely dominated by grasses and therefore a decision on habitat management needs to be considered. This work will be repeated annually and used to indicate the success or otherwise of the park's Grassland Management Plans and enable us to implement changes if required.

During 2016 stock was introduced to some areas within the park to environmentally graze off the invasive rank grasses, this will assist with an improvement of wildflower growth within these meadows. More details on the grassland areas of the park will be considered within the full report to be published later.

#### **TREES-**

To date, very few formal surveys of the park's tree population has been carried out. Starting Winter 2016 identification, numbers count and satellite positioning of the park's tree population will commence. This will enable decision to be made as to thinning, replanting, coppicing and any required treatment of the trees. During the last two seasons, approximately 1,000 trees have been planted around the park's boundaries to act as shields from future development. This policy will continue during 2017 with 1,400 trees (order to be confirmed) due to be planted, especially along the Southern boundary to protect from noise and pollution from the new Gedling Access Road (planned start 2017)

#### **BIRDS-**

We have been receiving records of bird life within the park from numerous helpers and to date over 100 species have been identified with thirty- three being SoCC. At present, we are working on the records to see if any indications of improvement or loss has occurred over the years since the public opening of the park. Certainly, we have had no reports of the Cuckoo during 2016 but the Short-eared Owls are back (suspected to be roosting within the Solar Farm) and this year resulted in an excellent Green woodpecker breeding season with many reports of sightings of adults and young. Also, it is generally agreed, though without definite proof, that there was an increase in the Skylark population during 2016 and at least one pair of Lapwings nested and produced chicks within the Solar Farm

We need to record any breeding populations observed within the park and any assistance with this will be greatly appreciated.

#### **AMPHIBIANS and REPTILES-**

No definite records of sightings of any of the six recorded reptiles has been reported this year, although a report of what was thought to be a common lizard being eaten by a Carrion Crow has been mentioned. Both the Common Toad and the Common Frog have bred well this year and young of both species are being found all over. The Smooth or Common Newt has bred well in the southern boundary waterbodies both in and out of the park. A very large Terrapin has been reported seen near the lower lagoons, this is a problem as this introduced species can be extremely destructive to native wildlife and needs to be found and removed from the park.

#### **BEES-**

Our six occupied beehives introduced in the winter 2015/6 successfully survived through to Spring 2016 when due to atrocious conditions we lost three of the colonies. We have managed to restock these hives.

During the year, we provided demonstrations for schools and the public on the beekeeping and we plan to continue this activity during 2017. Gedling Borough Council has kindly created a dry standing area for people to view the beehives, thus you no longer need to stand in a swamp to view. A top-loading (third-world type) beehive has been introduced to the Apiary this year to enable demonstrations and compare efficiencies of various beekeeping methods. A decision has been made not to crop any honey stores this year to enable our colonies a better start to next year, when hopefully we can expand the whole project. Thanks must be made to Quintas Energy and Anesco for

providing us with the apiary site and free access to work the bees. We are working hard to increase other bee species within the park and this will increase during 2017.

#### **WORKING WOODLAND-**

It has always been the aim of the Friends to involve the younger generation to become actively involved in the park and with this in mind, we have set in motion for an area of Alder woodland to be created into an adventure/learning area for all. Initially this woodland was of very little ecological value (1 birds nest, no Bats and very few tree species), however since clearing and some replanting, we have recorded an increase in butterflies (numbers and species) and this winter has seen an increase in birdlife throughout the wood. Glades and walkways have been created and log seats will be installed to enable picnics or meetings to be held. Bird boxes (Magpie Brewery has kindly donated funds to create over 100 bird boxes), feeders and hides will be created this winter. Craft skills such as willow weaving and wood whittling will hopefully be introduced during 2017. A woodland walk is planned to extend through to the North-eastern corner of the park with bird hides in the wood and at the lagoon.

#### **LAGOONS and WATERWAYS-**

These are important habitats within the park and plans are being created to improve these areas for wildlife and people's enjoyment. Unfortunately, all the waters are infected with the highly undesirable, infectious and reportable New Zealand Pigmy Weed this can be spread easily by dogs, machinery and people and will readily infect any other waterways. We are required to control this weed and eradicate as much as possible and this is planned for action this winter. No work will be carried out on the lower lagoons until after the Gedling Access Road completion. Plans are afoot to expand the central lagoon to create a larger lake with bird hides and a Sand Martin Bank, this is a major project and will require much funding, but we are planning and costing the project during 2017 in case an opportunity for funding arises

Many thanks to all volunteers during the last year, you are invaluable and this work to conserve and to improve Gedling Country Park cannot take place without you. A volunteer's credit list will be included in the full results report later.

To all the park visitors please respect your environment and try to understand the needs of other users. Please try to keep dogs away from the stock, out of the waterways and remove dog waste to the bins provided.

We are always requiring volunteers, training, if required, will be provided. You will have some fun, meet new friends, learn a multitude of skills, and help in the conservation of the environment. Contact through our website (<http://www.gedlingcountrypark.org.uk/contact-us.html>).

