

Hay Bridge Nature Reserve – Natural History Group

Hay Bridge and Hulleter SSSI Raised Peat Bog Monitoring Project.



Summer 2016 View of Hay Bridge section looking South East from the static photo point.

An active raised peat bog is a waterlogged area where decomposition of dead vegetation is slowed down due to anaerobic conditions. This leads to an accumulation of peat which eventually elevates the bog surface above regional ground water levels, forming a dome. The surface of an active raised bog is typically waterlogged, acidic and deficient in plant nutrients, therefore, only a few plant and animal species can survive in this environment and these are in danger of being lost as the few remaining peat bogs in the UK are drying out.

The peat in the Rusland valley had been accumulating for at least 3000 years until drainage ditches were cut for agricultural purposes and peat extraction took place. In 2014 work was undertaken by English Nature to restore the Hay Bridge section of the Rusland Moss SSSI so that it becomes an active peat bog once again. Plans are underway to do similar work on the Hulleter section later in the year.

The purpose of this monitoring project

- To systematically record key species* of vegetation and animals that are dependent on the raised bog for cover, breeding and feeding etc.
- To use the data to establish whether the raised bog is recovering, as expected, after work to restore the bog is completed by English Nature
- To maintain a historical database of change that may be of interest to future generations of wildlife enthusiasts that visit Hay Bridge.

*Recording all species seen in the bog would require many more volunteers than we have at our disposal and generate too much data. We propose to gather just enough information about key species to make comparisons from year to year.

Progress to date:

Note: This is designed to be a **long-term** project as the changes to the flora and fauna are not expected to be rapid; unless other influences (such as climate change) dictate otherwise.

Animal surveys: Since August 2015 our small group have undertaken regular animal surveys (minimum of two per month). This is achieved by making timed recordings from static observation points and a walking transect along footpaths bordering Hay Bridge and Hulleter mosses.

Vegetation surveys: These are undertaken annually in late August/early September, and we are due to undertake our 3rd annual survey in August 2017. This is achieved by using 6 fixed 2m quadrats.

Fixed Point photographs: Digital photographs of the raised bog are taken twice per year (mid-summer and mid-winter) from fixed points to enable direct visual comparison from season to season, year to year.

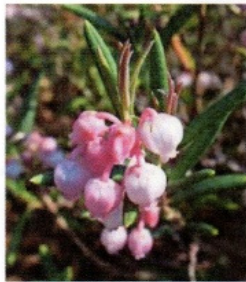
Data Storage: All data from the surveys are entered into a database which is accessible to those people responsible for managing the reserve. **Each year a summary of the data is produced in booklet form which is kept in the Study Centre for members to see. There is also an information board about the raised bog in the study centre.**

HAY BRIDGE NATURAL HISTORY GROUP

RAISED BOG MONITORING PROJECT

HARD-COPY DATA SUMMARY FOLDER FOR THE YEAR

2015 (August to December only)



Bog Rosemary



Large Heath Butterfly



Curlew



Pied Fly Catcher (female)



Bog Asphodel



Black Darter (male)

HAY BRIDGE NATURAL HISTORY GROUP

RAISED BOG MONITORING PROJECT

HARD-COPY DATA SUMMARY FOLDER FOR THE YEAR

2016



Round leaved sundew



Adder



Common Darter (Male)



Stonechat (male)



Raft Spider



Otter

Hay Bridge Vegetation survey 2015/16

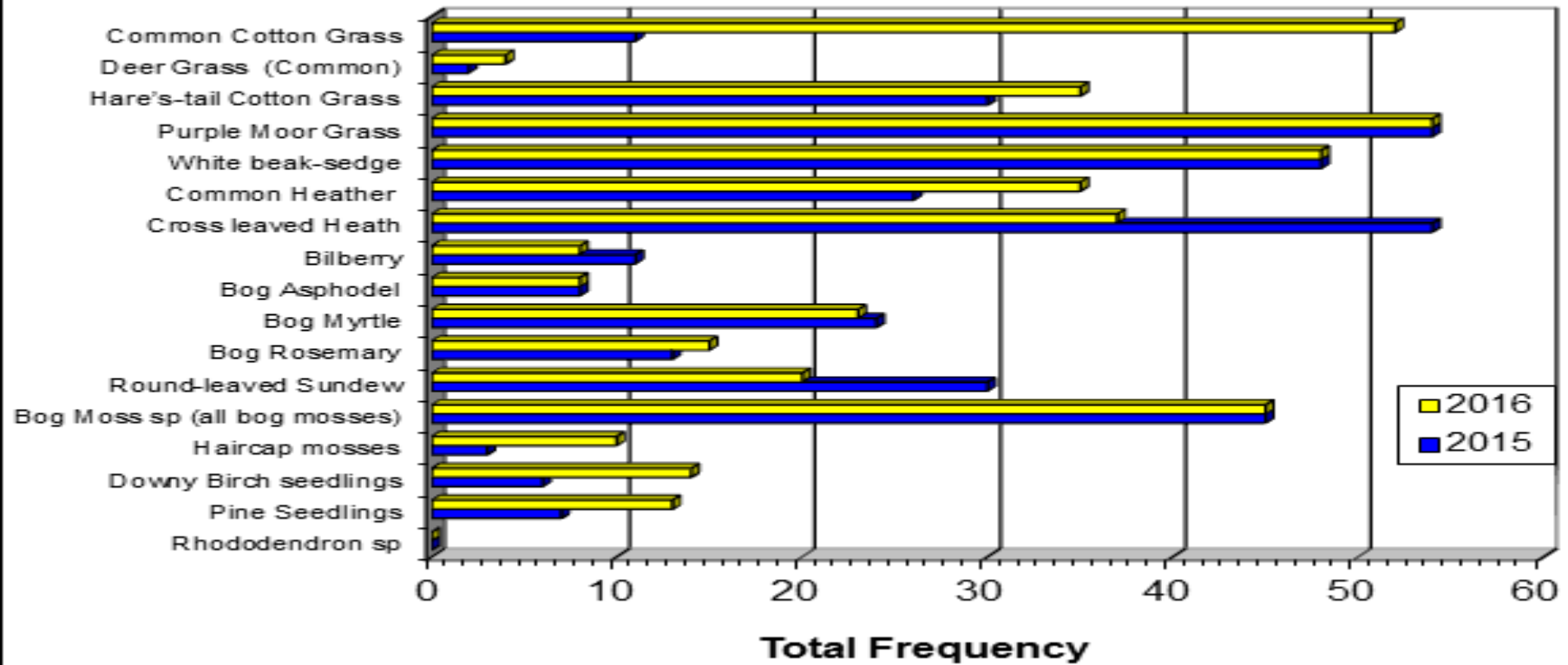


Fig 1. Accumulated total frequency for each of the species comparing 2016 data with 2015 data.(Max pos = 54)
 Each 2m quadrat is divided into 9 sub sections. 6 Quadrats in all, placed within Hay Bridge Moss (SSSI Unit 6)

Anyone interested in joining the group should contact Bernie Young on 01229 587391 or email bernieyoung@gmail.com. (Previous experience of wildlife surveys useful but not essential).