Species Report

FIELD GENTIAN

2019 NEW FOREST PROJECT

EARLY REPORT V1

This project is generously funded by the following funders:

The Halpin Charitable Trust Natural England

the species recovery trust



PROJECT AIMS

- Monitor all sites in the New Forest annually
- Set up permanent monitoring plots in the New Forest
- Commence a research project using *ex situ* plants



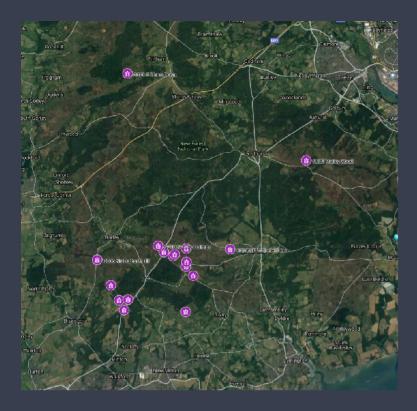
Introduction

The heatwave of 2018 proved catastrophic for all the New Forest populations of Field Gentian, giving us great concern that smaller population could be lost forever. The temporary disappearance of all the populations also raised many questions and gaps in our knowledge, particularly relating to when plants were most likely to germinate, and would seeds persist in the soil for longer than one year.

In 2019 we monitored all the site in the forest, and the fantastic news was that plants were back in all the sites they were recorded in in 2017, meaning they hopefully can survive brief periods of hostile weather. With a potential biennial lifecycle the monitoring results of 2020 will still be of great interest.

Site locations and details can be viewed here:

http://bit.ly/SRTplant



New Forest locations



The 'Gentianator' fixed point quadrat

Research project

As part of our work in the Forest we have set up 10 permanent plots in which we have marked the exact location of all the Gentians. This will enable us to look at whether plants are coming up in the same locations, work out whether they are germinating in the Autumn or Spring and hopefully with the exact locations all marked give us a chance to look for the rarely observed overwintering rosette. This research also involved growing plants from seed in Kew Gardens, to look at seed germination rates and compare spring and autumn sown plants.

Some of the seeds will be grown in sterile soil, but others in topsoil collected from a gentian site in the Forest, to see if this makes any difference.

MORE DETAILS TO FOLLOW.



New Forest Surveys

Plants were re-found at all the previous recent recorded sites in the New Forest, and two new sub-sites were discovered - near to existing populations but sufficiently separated to be considered as new sub-sites.

Number were generally down from 2017, but after so many populations recorded 0 plants in 2018 the re-emergence of populations at all sites was a huge relief.

One site, near Markway Enclosure now only has one plant, and action need to be taken to ensure the survival of this site.



Open conditions favoured by Gentian, with current site conditions below



Sites at risk

GC11 Markway Enclosure SW

SU 24252 02114

Status

In 2019 extended surveys only found 1 single plant at this location. This site has always recored low numbers of plants, but in previous years plants had been found dotted about on areas of short grass in amongst the heath. In recent years dense heather has covered over most of these open patches, and the single remaining plant was found just on the eastern edge of the patch.

Recommendations

Carry out winter heather clearance to reduce the mass of heather and retain a more open structure to this area.



Plants on left in recently cut area



Site surveys in 2016

Sites at risk

GC20 Matley Wood

SU 32965 07807

Status

This site has shown decline in recent years, which we think is due to the development of a dense cover of Bracken. The area is now subject to Bracken management, but in 2019 unfortunately this had been carried out during the flowering period of the plants. Some plants were found in both the cut and uncut areas, but several may have been lost during harvesting operations.

The nature of the harvesting operation and the negation being sucked into the machine and stored in piles means there is no opportunity for plants to drop seed even if they had formed pods.

Recommendations

It is hugely beneficial that this area continues to be managed for the removal of bracken, but ideally we would like to see the cut take place from October 15th onwards, to give the Gentians a chance to drop their seeds.



We are hugely grateful to the following trusts for their generous funding which made this work possible in 2019.

The Halpin Charitable Trust

Natural England

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