

The regular use of mowing to manage habitat for perennial knawel *Scleranthus perennis prostratus* in the Brecklands of north Suffolk, England

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SUMMARY

The endemic subspecies of perennial knawel *Scleranthus perennis prostratus* is a declining plant found only in the Breckland area of eastern England. At a site in north Suffolk in the early 1980s the plant was found to be thriving. Regular mowing and consistent small-scale ground disturbance at this site has proved perhaps the ideal management regime for the species.

BACKGROUND

In the UK the endemic subspecies of perennial knawel *Scleranthus perennis* ssp. *prostratus* is found only in the Breckland area of East Anglia, eastern England. The Brecklands, one of the driest regions of Britain, cover 940 sq. km within the counties of Norfolk and Suffolk. Perennial knawel is classified as 'endangered' and is given special protection under the Wildlife and Countryside Act 1981.

Perennial knawel is a small woody herb flowering between June and September. It is a biennial or short-lived perennial of very short grassy heaths, compacted tracks and abandoned arable land, and is generally found on well-drained acidic (pH 4.9-6.8) and sandy soil. It is a poor competitor, and requires open soil for seedling establishment.

Perennial knawel has never been a widespread and within its restricted range it has suffered a marked decline over the last 50 years for several reasons including: the increased use of herbicides and fertilisers; the destruction of field-margin refuges; the abandonment of marginal arable land and heathland; afforestation of former sites and potential sites for colonisation; deterioration of former and potential sites due to inappropriate grazing; and loss of sites to building developments. It is now restricted to the southern part of Breckland, in north Suffolk, and has been extirpated from Norfolk (where recently reintroduced to one site – Leonard 2006).

This case study summarises the management regime at one site that supports a large population of perennial knawel.

ACTION

In 1983, perennial knawel *Scleranthus perennis prostratus* was found at a site in north Suffolk where approximately 1,500 individual plants were recorded. Perennial knawel appeared to have thrived at this locality because the grassland sward had been kept very short as it was closely mown every 10 to 14 days.

Ongoing management: Following its discovery, this regular mowing regime has been continued. The mowing is also advantageous as it also creates patches of disturbed ground, thus providing ideal conditions for perennial knawel to set seed and germinate. There has been no livestock grazing and no additional planting or seeding of perennial knawel at this location.

CONSEQUENCES

Ongoing monitoring: Monitoring of this perennial knawel population is undertaken on an irregular basis. In 1993 a complete survey of the site recorded 3,944 individuals. From 2003 to 2005, surrounding areas were also surveyed and several more sites containing perennial knawel were found. In 2005, there

were over 10,000 thousand individuals recorded.

Conclusions: Regular mowing and consistent small-scale ground disturbance at this site has proved perhaps the ideal management regime, with perennial knawel thriving here since its discovery in 1983. This site is considered the best site specifically managed for perennial knawel ssp. *prostratus* in the Brecklands and indeed the whole of the UK.

REFERENCES

Leonard Y. (2006) Reintroduction of perennial knawel *Scleranthus perennis prostratus* to Thetford National Nature Reserve, Norfolk, England. *Conservation Evidence*, 3, 9-10.

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