CRAB TREE PLATT SNCI MEADOW RESTORATION

Summary

Location: The unimproved meadow is located at grid reference TQ 160 240. It is in the Northern Block of the Knepp Estate and situated south of Brown's Barn within the West Sussex SNCI (site reference H30).

County: West Sussex

Start Date: September 2011?

End Date: -

Method of Restoration: Clearing secondary woodland development,

Area of meadow: 0.6ha

Current Plant Community: MG6/ impoverished MG4..?

Seed source: Local provenance if used

Grazing animals: Longhorn cattle, Tamworth pigs, Fallow deer and Exmoor ponies

Target plant community: MG4?

Cost: possible funding?

Partners: All Wildland partners + volunteer groups

About the site:

The area comprises part of the Northern part of the larger Knepp Castle Estate. The soil is wet sticky clay, characteristic of the low weald, and the area is low intensity grazed.

The old meadow now functions as a woodland glade, being surrounded on all sides by old and new woodland, but is at risk of becoming secondary woodland as succession continues. A quick survey carried out in the summer of 2011 (David Bangs) identified 32 herbs and grasses including frequent Betony, Devil's-bit Scabious and other old meadow species Agrimony, Crosswort, Lesser knapweed, Red fescue, Bird's-foot Trefoil and Meadow vetchling. Without meadow management and some restoration secondary woodland will develop and woodland herbs and grasses will eventually outcompete and replace the species rich meadow.

Young oak, blackthorn, bramble, apple trees and some bracken are shading out the old grassland. A pheasant pen encloses the eastern edge of the meadow and the gamekeeper puts herbicide down under the pen fence line.

Background

Over the last fifty years around 98% of meadows in the UK have been lost, largely as a result of intensive agriculture. Meadows are ecologically rich grassland habitats supporting up to 120 species of wildflowers and other plants as well as invertebrates, bats, mammals and birds. They also provide vital habitat for the nationally declining population of bees (YDMT).

There are scarce remnants of hay meadows in the Sussex area, restoration and maintenance of this site is considered beneficial for the potential contributions to biodiversity and historical continuity.

The wider aim of the Wildland Project is to allow naturalistic processes to drive change, in this context hay meadow restoration is not suitable as essentially is an artificial farmed habitat. Such management should not be approached in the Southern Block — where the project is focused. Similar areas may be maintained as a species rich grassland or glade through low-intervention, short term methods such as scrub clearance.

Objectives

The main objective is the restoration of a species rich grassland or glade that is likely to be maintained as predominantly open habitat in the short – to medium term by periodic grazing pressures. The longer term aim is to allow naturalistic grazing to drive change rather than continued intervention (such as meadow cutting).

Short term interventions are acceptable to restore species and remove scrub in order to initiate restorative actions. It may be beneficial to erect temporary fencing to exclude animals until around August to allow establishment of meadow species.

As well as practical work Knepp aims to raise awareness of the importance species rich grassland through tours, publicity of the project and events and activities for schools. A team of volunteers from the local community will be used to carry out practical work such as scrub clearance and seed sowing.

Monitoring will determine successes of the project and research will be shared with conservation organisations and local farmers.

Works

- Removal of scrub and unwanted trees
- New road has been created at the southern end of the site to stop traffic flow through the meadow
- Seed sowing
- Temporary fencing until August

Recommendations of management

- Removal of young oaks and invasive blackthorn, apple and low bramble scrub

- Shift fence to the east to release old meadow boundary
- Allow periodic grazing to manage regrowth

There is the potential for reseeding with local provenance species rich seed or with green hay from an existing site with target species mix, though it is perhaps more in keeping with the estates wider re-wilding objectives to allow natural regeneration following clearance of woody and scrub species.

Monitoring

Botanical – quadrat surveys of vegetation

Nutrient/soils

Birds, bats and other relevant species

How is data being used?

Further surveys to be carried out in 2015, quadrats and butterfly surveys to be carried out annually with data supplied to UKBMS.

Programme of monitoring to be carried out by volunteers, practical ad hoc volunteers to be organised for scrub clearance/cutting and comprehensive, regular monitoring of vegetation and ecological changes by scientific expert.

For more information

(YDMT) www.ydmt.org/hay-time