# Wessex Silvicultural Group Visit Report

**Meeting 4: 7 September 2022**

**Study subject: Silviculture for biodiversity**

**Location: Powerstock Common, by kind permission of Dorset Wildlife Trust**

**Background and objectives of the day**

Theme: Re-creation of Wood Pasture: 175 years of Land-use Change at Powerstock Common

The visit considered how vegetational succession interacts with the objectives and management of the site as an SSSI and a recently-designated National Nature Reserve.

We were grateful that the day was expertly led by Andy Poore and Dr. Dr. Jonathan Spencer, an eminent forest ecologist joined us to elevate the discussions.

## Summary of stops and discussion

**Introduction**

In the mid-19th century the current Powerstock Common Nature Reserve was part of a large wooded common with adjacent areas of coppice and unimproved pasture. Poorstock Common had had a long continuity as an unenclosed habitat, including a period during the 13th & 14th C when it was part of the Royal Forest of Poorstock. After enclosure in 1861 the area was subject to only a limited degree of agricultural improvement until in the mid-1960s when a 999 year lease of the site was acquired by the Forestry Commission. This quickly led to a significant portion being felled and cleared for afforestation, largely with Norway spruce. Dorset Wildlife Trust developed an interest in the site in the 1980s and acquired the lease in the late 1990s. A programme of conifer-removal was undertaken between the late 1980s and 2009 and widespread grazing was introduced in 2000.

The resulting habitat structure is very diverse, demonstrating stages of vegetation succession associated with 5 distinct land-use change trajectories within the site. The site is designated for its oak, ash and alder woodland; acid, neutral and calcareous grassland; fen meadow and rush pasture; invertebrates, including marsh fritillary; lower plants; dormouse and a population of great crested newts at the south-western edge of their range. The visit will consider how vegetational succession interacts with the objectives and management of the site as an SSSI and a recently-designated National Nature Reserve.

**Stops**

The following is a brief summary of some main discussion points during the day.

1. Management for diversity in general versus management for specific organisms only, in this case the marsh fritillary butterfly.

2. The use of grazing stock to help manage vegetation succession and the implications for diversity, speed of colonisation and the need for human expertise to ensure high standards of animal welfare.

3. The influence of site conditions and soil on the resulting vegetation succession. The site had a wide range of site conditions including Fuller Earth clay, Gault clay, Frome clay and, the very different, upper greensand.

4. The site was being badly affected by ash dieback and this poses a challenge for future management and species composition….could non-native broadleaves with similar functional traits (such as bark pH) have a role to play?

5. The history of the site and the use of pollarding of some trees had created a pool of large-sized trees that were hotspots of biodiversity.

[Apologies from the note-taker who lost his field notes and then left it too long before writing things up!]