

SOMERSET RARE PLANTS GROUP

Recording all plants growing wild in Somerset, not just the rarities



Meeting Report

**Saturday 1st June 2024, Grasses Workshop,
Heal Somerset, Witham Friary (VC6)**

**Leaders: Liz Biron, Ellen McDouall and Helena
Crouch**

Report: Sarah Shuttleworth & Helena Crouch

There was an excellent turn-out for this workshop, with 18 attendees, including two guests from Dorset. We were hosted by Heal Somerset, a rewilding project near Witham Friary, with an indoor session in their meeting room in the morning followed by reinforcement of newly acquired knowledge in some of their fields in the afternoon. Participants were welcomed with tea, coffee and home-made cakes. Specimens of grasses collected by the leaders were displayed around the periphery of the room.

Liz began with a critique of a selection of grass identification guides and resources, explaining the relative merits of each. She particularly recommended the following:

Cope, T. & Gray, A. (2009). Grasses of the British Isles (BSBI Handbook 13), BSBI.

Hubbard, C.E. (1984). Grasses, 3rd ed. rev. by J.C.E. Hubbard. Penguin Books.

Poland, J. & Clement, E.J. (2020). The Vegetative Key to the British Flora, 2nd ed. BSBI.

Rose, F. (1989). Colour Identification Guide to the Grasses, Sedges, Rushes and Ferns of the British Isles and north-western Europe. Viking.

Liz then explained why she would not be concentrating on using keys during this workshop, but instead would be using a few particular species to focus on explaining vegetative characters, as these can be used at any time of year.

Ellen and Helena handed out vegetative samples of False Oat-grass (*Arrhenatherum elatius*) for us to start work. We were told to look closely at the variability of hairs on the leaves: some were more or less glabrous whilst others had some noticeable hairs. In particular Liz asked us to study the clove/bulb shaped scales on the roots and bases. The orange roots of this species are also distinctive.



Orange roots and bulb-like scales of False Oat-grass. © Liz Downey

We also used False Oat-grass (*A. elatius*) as well as Soft Brome (*Bromus hordeaceus*) to examine the floral structures of a grass. The inflorescences of grasses vary considerably, from simple spikes to branched panicles. These are composed of spikelets, each of which has two bract-like glumes at the base and may include one, two or several florets. False Oat-grass has two florets per spikelet. Each floret of a

grass consists of a lemma and palea between which are the stigma and stamens. The lower floret of False Oat-grass has a long awn originating from the base of the lemma.



One spikelet of False Oat-grass, showing two papery glumes, supporting two florets. Each floret has a green lemma and flimsy membranous palea, between which are the sexual organs. The lemma of the lower floret bears an awn. © Liz Downey

Next, we examined the features of Rough Meadow-grass (*Poa trivialis*) and Annual Meadow-grass (*P. annua*), noticing the variability of ligule length in Rough Meadow-grass in flowering versus non-flowering shoots, and the transversely wrinkled leaves of Annual Meadow-grass.



Wrinkled leaves of Annual Meadow-grass. © Sarah Shuttleworth

Specimens of Couch (*Elymus repens*) were dished out: we observed the softly hairy leaves and clasping auricles at their base.

Before we knew it, we had exceeded our allotted time in the classroom and we had only covered a handful of species. Clearing up, we migrated outside for lunch on the front lawn of the farmhouse. Discussions on grass identification continued, while we examined the grasses around us and Liz continued to share her expertise.

Once satiated we split into a few smaller groups to carry out mock quadrats on the areas of lawn, which were surprisingly diverse in grass species. We quickly got our eyes in with vegetative characters, finding Yellow Oat-grass (*Trisetum flavescens*) with spreading hairy sheaths, Perennial Rye-grass (*Lolium perenne*) with distinctive red bases to the shoots and clear auricles, and Cock's-foot (*Dactylis glomerata*) with its laterally flattened waxy sheaths. There were some more tricky ones like Timothy (*Phleum pratense*), and we were surprised to find Spreading Meadow-grass (*Poa humilis*), with a fringe of short hairs at the junction of leaf blade and sheath. We also discovered a group of Blackening Waxcaps!

The remaining time in the afternoon was spent walking through a few of the fields across the road from the farmhouse, examining more grass species as we came across them and discussing various aspects of rewilding and grassland management. Crested Dog's-tail (*Cynosurus cristatus*) was not easy to identify vegetatively and is surprisingly similar to Perennial Rye-grass (*Lolium perenne*), but the basal sheaths are yellowish whereas those of Perennial Rye-grass are bright purplish-red. We observed large patches of Meadow Foxtail (*Alopecurus pratensis*) with unequal leaf bases and purplish-brown bases to the sheaths.

We returned to the farm buildings having studied only a small selection of grass species, but many different features and characters. For those of us used to identifying grasses in flower, it had been a revelation to discover the wealth of vegetative clues available, thanks to the expert tuition provided by Liz.