

## The story of the Shakespeare Meadow around the Willow Globe Theatre

The newly constructed Willow Globe Theatre looked magnificent but the surrounding dull agricultural grassland with its lack of wild flowers did not seem a suitable backdrop for a theatre which would host performances of Shakespeare's plays.

In Elizabethan times the hay meadows would have been full of colourful wild flowers and wild grasses. This was the situation up to the Second World War. Since this time hay meadows abundant with wild flowers have been ploughed up, reseeded with species of coarse agricultural grasses and clover, then liberally sprayed with herbicide and artificial fertiliser. Herbicide kills the wild flowers. Artificial fertilisers raise the levels of nutrients in the soil. Wild flowers require nutrient poor conditions to flourish. Soils rich in nutrients encourage the growth of grasses which out-compete the wild flowers. Over the last 60 years, England and Wales have lost 96% of wild flower meadows to these intensive agricultural practices.

UB suggested to Philip and Sue that it would be interesting to establish a wild flower meadow around the Willow Globe Theatre similar to the meadows Shakespeare would have seen all around him. They warmed to the idea and the process was started.

### The start

Paths for access for people, actors and management were mapped out and then the areas which could be developed as wild flower meadow.

### Method of establishment

Past fertiliser applications in the Shakespeare Meadow had raised the nutrient levels in the soil and these would not decline for decades. Wild flowers require nutrient poor conditions to flourish; soils rich in nutrients will encourage the growth of grasses which will suppress the growth of wild flowers. The first priority was to find a way of lowering the nutrient levels in the soil. It was decided that the best method was to take off 6 inches of topsoil with its vegetation. This was done using a JCB. Before doing this we took soil samples of the topsoil and after its removal, we took samples from the soil below. These were sent to Eurofins Laboratory for analysis and showed that the nutrient levels in the newly exposed soil were lower than in the topsoil – the result we had hoped for. The new soil surface was raked and the larger stones removed.

### Sourcing the wild flower species

A search for the flowers mentioned by Shakespeare in his plays was undertaken and a list of species native to the UK was compiled, limited to those species which would grow at Penlanole e.g. maritime species were not included. Later this list was extended to include all native wild flowers which would have been growing in Elizabethan hay meadows.

Sourcing the seed and choosing the species was the next stage. Sourcing local seed proved impossible for a variety of reasons so it was decided to approach Emorsgate Seeds who are a company retailing native wild flower and grass seed. We chose their General Purpose Meadow Mixture but decided to increase the ratio of flower seeds to grass seeds. (Details here???? If yes I can provide these details or see notes below).

We followed Emorsgate's guidelines on the weight of seed to sow per square metre. Volunteers were invited to sprinkle the seed and then to gently trample on the area to ensure the seed was pressed into the soil surface. The seed sowing took place in March 2008, a month after the topsoil had been removed.

The area was criss-crossed with buzz-tape to keep off the birds and watered by sprays during dry periods. Germination was good but flowering was sparse.

In October 2008 some Yellow Rattle seed was sown on bare patches of soil between the grasses. Yellow Rattle is a partial parasite on grasses and reduces their vigour, favouring the growth of the wild flowers.

As back up we decided to germinate some wild flower species in seed trays and plant out the subsequent plug plants. Seed of twenty four species was purchased from Emorsgate Seeds and volunteers grew these over the winter of 2008/2009 in a cold greenhouse/polytunnel or outside. In spring 2009 the plants were planted in the meadow. The two methods of establishing plants in the meadow from seed and plug plants have been successful.

### Annual Maintenance

Traditionally hay meadows are cut in late summer – after mid July onwards. Over centuries farmers have decided that the correct time to cut is when they can hear the seeds in the fruits of the Yellow Rattle rattling! This is still a good indicator. Hay meadows should be cut when the flowers and grasses have finished flowering and produced seed – cutting will spread the seed which will continue the next year's crop.

In 2008 the growth of flowers was so slight we did not do a cut. Subsequently the meadow has been strimmed in September - after Apple Day so that visitors can see the last of the wild flowers before the seeds are scattered. After cutting the dead plant material is left for a few days to drop its seed and is then raked off.

### Continuing Maintenance

An annual survey of the presence and absence of plant species is carried out from May to September to monitor the progress of the meadow. In such a small area there may be swings in abundance of particular species so that some may need control by “weeding out” and others may need support by reseeding or planting plugs.

Species from the new meadow area have colonised other parts of the surrounding meadow and the strimming of paths has been sensitive to this.

During late May, June and early July the Shakespeare Meadow is ablaze with colour. Our organic tribute to the bard!

**By Ursula Bowen copyright August 2012**