Diary of Management of Shakespeare's Meadow

Autumn 2006

Discussion of creation of a meadow of Shakespeare's flowers surrounding the Living Willow Theatre.

The modern agricultural coarse grassland with its paucity of wildflowers did not seem a fitting habitat for the Living Willow Theatre. Shakespeare mentions many wild flowers in his plays. These could be established here in a meadow situation reflecting Shakespeare's experiences.

Spring/early summer 2007

After consultation by UB with Professor Mark Williamson (on advice from a soil scientist at University of York) advised to take off 6 inches of topsoil to remove high nutrient levels. Need for soil with low nutrient levels to encourage the growth of wild flowers and reduce the vigour/competition of grasses. After stripping, the underlying soil should provide these conditions

July 2007

Professor Mark Williamson, Emeritus Professor of Zoology at University of York visited the site and confirmed the above action.

Decision to take two soil samples:

- 1. Topsoil (top 6 inches)
- 2. Exposed soil beneath

This would give a comparison of nutrient levels; provide a case for the current low plant biodiversity and help the decision to establish a wild flower meadow on a soil low in nutrients.

Philip took the decision to follow this action.

July, August, September 2007

The theatrical performances continued in the theatre culminating on Apple Day, 9th September.

During these months negotiations started with Flora Locale. This grant giving Trust initiated a programme to boost wild flower meadows in the UK. They wanted to put farmers/landowners who owned flower rich hay meadows in contact with farmers who were keen to improve the biodiversity of their impoverished meadows. To effect this they recommended the donation of green hay from flower rich meadows to be spread upon impoverished meadows during hay making time.

The recommended procedure:

- 1. Cut hay in impoverished meadow
- 2. Scarify meadow with a chain harrow in two directions to create bare patches
- 3. Spread on green hay from donor field
- 4. Roll the field
- Graze with preferably cattle but otherwise sheep to trample in the seed (Cattle better because heavier) Recommended rate of 0.4 livestock units/ha/year.

The success of this procedure depends upon the nutrients in the soil being low enough to promote the growth of wild flowers rather than grasses.

Flora Locale put Philip Bowen in touch with Pip Lee-Tappin of Llanafon Fawr who has a flower rich hay meadow thought to have the correct ecological conditions for donation to Penlanole. Donation of green hay (baled or unbaled) was thought to be possible but there were problems.

Ivy Berkshire from Flora Locale visited Penlanole with a view to putting Philip Bowen and Pip Lee-Tappin in touch.

Seed collection with a brush seed collector was also discussed. Liz Lewis-Reddy who works for Powys County Council Roadside Verges Project visited Penlanole to discuss using this machine to extract wild flower meadow seed for sowing at Penlanole

Unfortunately the very wet season of haymaking did not promote either the exchange of green hay or a collection of brushed seed.

The source of wild flower seed has yet to be decided.

The analysis of soil samples was agreed with:
Andrew Scott
Laboratory Manager
Environmental Division
Eurofins Laboratories
Woodthorne
Wergs Road
Wolverhampton
WV6 8TQ
Tel; 01902 693104

1st October 2007

The area of the wild flower meadow was reduced to a very small patch due to the planned expansion of the Living Willow Theatre. Whether this small area will be viable will remain to be seen.

However the topsoil will be taken off the original area decided upon and seed sown over the whole of this area.

What about a Shakespeare's Bower of Living Willow in the adjacent rushy area to reduce the rushes and increase the area for a wild flower meadow? This bower could be a seated area for reflection overlooking the meadow full of flowers.

Action Take off topsoil from whole area.

25th February 2008

Rob with his JCB removed 6 inches of topsoil from an area around the Living Willow Theatre between the theatre and the car park. The area is approximately 125 sq.m

The edges of this area need grading/sloping to allow the two types of grassland to fuse together

26th February 2008 Ordering seed

Seed was ordered from Emorsgate Seeds, Limes Farm, Tilney All Saints, King's Lynn, Norfolk PE34 4RT on the basis of the following calculations: Area = 125sq.m

Sowing rate =5g/sq.m. 625g seed required

EM2 Standard General Purpose Meadow Mixture was selected. This consists of 20% flower species and 80% grass species. It was decided to increase the ratio of flower seeds to grass seeds

Flower seed Grass seed

20g 80g

Ratio = 1g:4g

40g 60g i.e. 40% flower seed and 60% grass seed

Ratio = 2g:3g

1g:1.5g

<u>625g</u> = 125g

 $125 \times 2 = 250g$ flower seed - EM2(F) Standard General Purpose Wild Flowers $125 \times 3 = 375g$ grass seed - EG1 General Purpose Meadow Grass Mixture

300g EM2(F) seed @ £13 per 100g = £39.00 400g EG1 seed @ £3 per 100g = £12.00 Total cost = £51.00