

Langley Village Hall project Site 1 The Old Playing Field.

Ecology report.

Grid reference: TL 4485, 3532

I will dispense with the site description and the site history as this should be well known to the Village, although the latter is usually very important when it comes to explaining the ecology. It seemed appropriate to split the site into six areas plus the protected road verge.

Geology: The entire area is within the mass of the Lowestoft Formation, formerly Glacial Boulder Clay. This deposit, probably laid down during the Anglian Glacial period, c. 450,000 years B.P., lies above the Lewes Nodular Chalk formerly the lower part of the Upper Chalk.

Plant lists.

1. Arable field.



Brassica napus subspecies *oleifera*, Oil Seed Rape was grown in the 2013 -2014 season. The rape was not harvested on 23rd July 2014 so it was not possible to survey the field on that date. The survey was completed on 29th July 2014. On the latter date the field had been harvested and cultivated.

2. Entrance by the gate.



1. *Schedonorus arundinaceus* Tall Fescue
2. *Epilobium ciliatum* American Willowherb
3. *Lolium perenne* Perennial Ryegrass
4. *Elytrigia repens* Couch Grass
5. *Cirsium arvense* Creeping Thistle
6. *Picris echioides* Bristly Ox-Tongue
7. *Prunella vulgaris* Common Self-Heal
8. *Plantago major* Greater Plantain
9. *Urtica dioica* Stinging Nettles
10. *Rumex obtusifolius* Broad Leafed Dock
11. *Bromus hordeaceus* Soft Brome Grass
12. *Alopecurus myosuroides* Blackgrass
13. *Poa pratensis* Smooth Meadow Grass
14. *Holcus lanatus* Yorkshire Fog Grass
15. *Phleum pratense* Large Timothy Grass
16. *Arrhenatherum elatius* False Oat-Grass
17. *Plantago lanceolata* Ribwort Plantain
18. *Rubus fruticosus* agg. Bramble
19. *Tusilgo farfara* Coltsfoot
20. *Convolvulus arvensis* Field Bindweed
21. *Centaurea nigra* Black Knapweed

All the plants in the above list are very common in the U.K. and in this part of Essex; nothing of any conservation value.

3. Field side of the roadside hedge



1. *Cirsium arvense* Creeping Thistle
2. *Arrhenatherum elatius* False Oat-grass
3. *Elytrigia repens* Couch Grass

4. *Picris echioides* Bristly Ox-tongue
5. *Rosa canina* agg Dog Rose
6. *Rubus fruticosus* agg Bramble
7. *Heracleum sphondylium* Hogweed
8. *Acer campestre* var *campestre* Field Maple
9. *Populus x canadensis* 'serotina' Black Italian Poplar 9 large mature trees plus stumps. These are enormous trees at full maturity; if left they will expand their diameter to 150% of current dimensions and become incredibly tall. The small fibrous roots will reach 20 or 30 metres into the arable field just beneath the cultivated layer. The part of the root system essential for keeping the structure stable, imagine the moment on a tree that tall in an gale. Care must be taken with the footings of any houses built on this site; very easy to destabilise one of these trees as there is significant ditch on the road side. Although not native, they are a natural hybrid between *Populus nigra* and *Populus deltoides*, which was first identified in France in the early part of the Eighteenth Century, they do support a good number of native invertebrates.



9 x *Populus x canadensis*; all trees about half grown.

10. *Cornus sanguinea* Dogwood
11. *Prunus spinosa* Blackthorn
12. *Hedera helix* Ivy
13. *Prunus avium* type Wild Cherry 'possibly cultivar?'
14. *Tamus communis* Black Bryony
15. *Ulmus glabra* Wych Elm
16. *Mercurialis perennis* Dog's Mercury
17. *Anthriscus sylvestris* Cow Parsley
18. *Galium aparine* Common Cleavers
19. *Brachypodium sylvaticum* False Wood Brome Grass
20. *Geranium dissectum* Cut-Leaved Crane's-bill
21. *Dactylis glomerata* Cock's-foot Grass
22. *Corylus avellana* Hazel

There are some nice species that make up this hedge and the flora beneath. The native woody species may well support a host of invertebrate species over the spring and summer months

4. Open section hedge absent dry overgrown ditch.



1. *Rubus fruticosus* agg Bramble
2. *Cirsium vulgare* Spear Thistle
3. *Urtica dioica* Stinging Nettle
4. *Arrhenatherum elatius* False Oat-grass
5. *Heracleum sphondylium* Hogweed
6. *Elytrigia repens* Couch Grass

Nothing rare or uncommon.

5. Dry ditch and hedge at right angles to road



1. *Acer campestre* var *campestre* Field Maple
2. *Urtica dioica* Stinging Nettle
3. *Rubus fruticosus* agg Bramble
4. *Galium aparine* Common Cleavers

5. *Heracleum sphondylium* Hogweed
6. *Fraxinus excelsior* Ash (planted)
7. *Prunus spinosa* Blackthorn
8. *Rosa canina* agg Dog Rose
9. *Cirsium vulgare* Spear Thistle
10. *Cornus sanguinea* Dogwood
11. *Elytrigia repens* Couch Grass
12. *Cirsium arvense* Creeping Thistle
13. *Sambucus nigra* Elder
14. *Epilobium hirsutum* Great Hairy Willowherb
15. *Arrhenatherum elatius* False Oat-grass
16. *Ballota nigra* Black Horehound

All plants very common.

6. Front roadside verge and ditch



1. *Senecio jacobea* Common Ragwort
2. *Plantago lanceolata* Ribwort Plantain
3. *Lapsana communis* Nipplewort
4. *Arrhenatherum elatius* False Oat-grass
5. *Rumex sanguineus* Wood Dock
6. *Rubus fruticosus* agg Bramble
7. *Ranunculus repens* Creeping Buttercup
8. *Glechoma hederacea* Ground Ivy
9. *Lamium album* White Dead Nettle
10. *Atriplex patula* Common Orache
11. *Epilobium parviflora* Small Flowered Willowherb
12. *Epilobium hirsutum* Great Hairy Willowherb
13. *Brachypodium sylvaticum* False Wood Brome grass
14. *Bromus hordeaceus* Soft Brome grass

15. *Achillea millifolium* Yarrow
16. *Poa trivialis* Rough Meadow Grass
17. *Cirsium arvense* Creeping Thistle
18. *Stachys sylvatica* Hedge Woundwort
19. *Cirsium vulgare* Spear Thistle
20. *Centaurea nigra* Black Knapweed
21. *Potentilla reptans* Creeping Cinquefoil
22. *Rubus caesius* Dewberry
23. *Fraxinus excelsior* Ash (seedling)
24. *Mercurialis perennis* Dog's Mercury
25. *Lathyrus pratensis* Yellow Vetchling
26. *Ulmus procera* type English Elm type
27. *Polygonum aviculare* agg Knotgrass
28. *Pimpinella major* Greater Burnet, this is possibly the most interesting plant on this verge. It is a member of the Carrot/ Parsley family and common in the Midlands but absent from much of East Anglia. I suspect in this part of Essex it is reasonably frequent.
29. *Poa annua* Annual Meadow grass
30. *Lolium perenne* Perennial Ryegrass
31. *Heracleum sphondylium* Hogweed
32. *Sonchus asper* Prickly Sow-Thistle
33. *Taraxacum officinale* agg Dandelion
34. *Anthriscus sylvestris* agg Cow Parsley
35. *Alopecurus myosuroides* Black grass
36. *Geranium robertianum* Herb Robert

With the exception of the Greater Burnet, all the plants growing along this verge are very common.

7. Protected road verge 600 metres

1. *Valeriana officinalis* Common Valarian
2. *Melampyrum cristatum* Crested Cow-Wheat



Crested Cow-Wheat in flower on the protected road verge 600 metres to the North East of Site 1.

I am sure the village of Langley are very familiar with this protected verge. Although it is 600 metres away to the North East of Site 1, the *Melampyrum cristatum* is so rare that it warrants a mention here. It is an annual plant and a hemi-parasite, (it photosynthesises with green leaves, but gets its water and minerals by invading the roots of other plants). I cannot see how building houses on site 1 could be damaging to this Red Data Book species.

Conclusion.

It is self evident that the vast majority of this site is a productive arable field, well managed with little in the way of biodiversity. The ditch, hedge, and verge along the roadside produced little of any interest as far as conservation is concerned. The roots of the large, half grown *Populus x canadensis* 'serotina', Black Italian Poplars will stretch into the arable area to some distance. Bat species may well fly up and down this hedge and trees but are unlikely to venture far into the arable field; their echo-location is limited over featureless terrain. There is little to attract Reptile species and there are no water bodies on the site, and the ditch is not suitable for breeding Amphibians. There are no suitable breeding sites for *Tyto alba*, Barn Owls and the arable habitat restricts successful hunting. Development on this site is unlikely to have any effect on the protected road verge 600 metres distant.

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