

# Ecology report Langley Site 2 The Kangels

**Location : (OSGB36)**

Grid Ref = TL446350

Postcode = CB11 4SL

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.

## Entrance drive



## Plant list.

1. *Vicia cracca* Tufted Vetch
2. *Anthriscus sylvestris* Cow Parsley
3. *Elytrigia repens* Couch Grass
4. *Calystegia sepium* Hedge Bindweed
5. *Cirsium arvense* Creeping Thistle
6. *Urtica dioica* Stinging Nettle
7. *Holcus lanatus* Yorkshire Fog Grass
8. *Rubus fruticosus* agg Bramble
9. *Galium aparine* Common Cleavers
10. *Lamium album* White Dead Nettle
11. *Rumex crispus* Curly leafed Dock
12. *Ranunculus acris* Meadow Buttercup
13. *Lolium perenne* Perennial Ryegrass
14. *Bromus racemosus* Smooth Brome Grass
15. *Poa trivialis* Rough Meadow Grass
16. *Centaurea nigra* Black Knapweed
17. *Tragopogon pratensis* subspecies minor Goat's-beard
18. *Heracleum sphondylium* Hogweed

19. *Phleum pratensis* Large Timothy
20. *Filipendula ulmaria* Meadowsweet
21. *Rumex sanguineus* Wood Dock
22. *Epilobium hirsutum* Great Hairy Willowherb
23. *Trifolium pratense* Red Clover
24. *Convolvulus arvensis* Field Bindweed
25. *Rumex obtusifolius* Broad Leafed Dock

Brick wall on right side of entrance; no bryophytes or higher plants recorded. There were no rare or Nationally Scarce recorded at the entrance.

Hedge right of entrance



1. *Urtica dioica* Common Stinging Nettle
2. *Holcus lanatus* Yorkshire Fog Grass
3. *Fraxinus excelsior* Ash
4. *Hedera helix* Ivy
5. *Ulmus glabra* Wych Elm

6. *Arrhenatherum elatius* False Oat-grass
7. *Galium aparine* Common Cleavers
8. *Rubus fruticosus* agg Bramble
9. *Prunus spinosa* Blackthorn
10. *Rumex obtusifolius* Broad Leafed Dock
11. *Elytrigia repens* Couch Grass
12. *Rubus caesius* Dewberry

Nothing Rare or Nationally Scarce.

### **Kangels Meadow**



### **Compost heap**

Reasonably recent as vegetation on top is from this year's cut. Examined for *Natrix natrix* ssp. *helvetica*, Grass Snake, egg brooding females. This species generally lay their eggs in structures very similar to this in June or July, the female incubating them until they hatch in August or September. The young are completely independent after hatching. The habitat here seems to be ideal and their presence would have indicated a good and dynamic biodiversity in order to support them. None were recorded and there was no evidence either e.g. products of ecdysis etc.





## Plant list

1. *Phleum pratense* Large Timothy Grass
2. *Dactylis glomerata* Cock's-foot Grass
3. *Centaurea nigra* Black Knapweed
4. *Holcus lanatus* Yorkshire Fog Grass
5. *Artemesia vulgaris* Mugwort
6. *Phleum betolonii* Small Timothy Grass
7. *Verbena officinalis* Vervain
8. *Arrhenatherum elatius* False Oat-Grass
9. *Galium mullugo* Hedge Bedstraw
10. *Ranunculus acris* Meadow Buttercup
11. *Heracleum sphondylium* Hogweed
12. *Plantago lanceolata* Ribwort Plantain
13. *Fraxinus excelsior* Ash seedlings
14. *Agrimonia eupatoria* Agrimony
15. *Picris echioides* Bristly Ox-Tongue
16. *Taraxacum officinalis* agg Dandelion
17. *Carex pendula* Pendulous Sedge
18. *Senecio erucifolius* Hoary Ragwort
19. *Prunella vulgaris* Common Self-Heal
20. *Agrostis stolonifera* Creeping Bent Grass
21. *Crepis capillaris* Smooth Hawk'sbeard
22. *Trifolium repens* White Clover
23. *Lotus corniculatus* Bird's-foot Trefoil
24. *Bromus hordeaceus* Soft Brome Grass
25. *Rumex obtusifolius* Broad Leafed Dock
26. *Crateagus monogyna* Hawthorn Seedlings
27. *Ranunculus repens* Creeping Buttercup
28. *Rosa canina* agg Dog Rose Seedlings
29. *Schedonorus arundinaceus* Tall Fescue Grass
30. *Lolium perenne* Perennial Ryegrass

Nothing Rare or Nationally Scarce.

Reports of;

*Ophrys apifera* Bee Orchid from several sources



*Agrimonia eupatoria*, Agrimony photographed from The Kangers.

*Agrimonia eupatoria* is usually found a similar habitat to that of *Ophrys apifera*. The latter has no statutory protection in England but is the subject of JNCC Designation that is restricted to Northern Ireland. Specifically it is, 'The Wildlife (Northern Ireland) Order 1985 (Schedule 8 – part 1).' This Order has the Geographical constraint: Northern Ireland; plants are protected from intentional picking, removal or destruction and from selling, in whole or part and from being advertised for sale.

### **Cardamine pratensis Cuckoo Flower**

This is one of the more widespread native perennial plants in the Country (see New Atlas of the British and Irish Flora); usually of wet grassy places. A fairly primitive plant it can root from the leaves which lead to clones with morphological differences; so quite variable. One of the food plants of the larvae of *Anthocharis cardamines*, the Orange Tip Butterfly. Further, it shows some resistance to a few chemical pesticides, so can survive quite well in some semi-improved wet grasslands.

### **Pond side boundary**



1. *Chamaecyparis lawsoniana* Lawson's Cypress
2. *Salix cinerea* sensu lato leaves and branches out of reach.
3. *Urtica dioica* Stinging Nettle
4. *Cirsium arvense* Creeping Thistle
5. *Epilobium hirsutum* Great Hairy Willowherb
6. *Arrhenatherum elatius* False Oat-Grass
7. *Dactylis glomerata* Cock's-foot Grass
8. *Anthriscus sylvestris* Cow Parsley
9. *Elytrigia repens* Couch Grass
10. *Stachys sylvatica* Hedge Woundwort
11. *Quercus robur* Pedunculate Oak
12. *Carpinus betulus* Hornbeam
13. *Picris echioides* Bristly Ox-Tongue
14. *Prunus spinosa* Blackthorn
15. *Betula pendula* Silver Birch
16. *Prunus avium* Wild Cherry (type possibly a cultivar)
17. *Buddleja davidii* Butterfly Bush

## 18. *Tilia x europaea* Common Lime Tree

Nothing Rare or Nationally Scarce

**Pond in neighbouring property.**



I do not know the history or previous recordings from this pond. From over the fence it looks quite capable of supporting a good population of Amphibians and the invertebrates necessary to support them. Clearly there will be ecological connectivity between this pond and The Kangels. A lot depends on whether this pond is stocked with fish and the nature of its management. Both these pieces of information are unknown to me.

**Hedge left of entrance**



1. *Ulmus procera* type English Elm
2. *Urtica dioica* Stinging Nettle
3. *Lapsana communis* Nipplewort
4. *Rubus fruticosus* agg Bramble
5. *Elytrigia repens* Couch Grass
6. *Galium aparine* Common Cleavers
7. *Hedera helix* Ivy
8. *Sambucus nigra* Elder



- 9. *Tamus communis* Black Bryony
- 10. *Calystegium sepium* Hedge Bindweed
- 11. *Acer campestre* var *campestre* Field Maple
- 12. *Ulmus x vegeta* best approximation Huntingdon Elm

This hybrid has shown good resistance to DED in the past; they are a good size which is uncommon. If any development takes place these trees should be preserved absolutely.



- 13. *Cirsium arvense* Creeping Thistle
- 14. *Heracleum sphondylium* Hogweed
- 15. *Prunus spinosa*

## Pond





The pond is currently shrinking; I suspect that during the wet winter of 2013-2014 it was much larger. A pond this size is quite capable of supporting a population of 100 *Triturus* or *Lissotriton* Newts but none were recorded during the two visits made to the site. Clearly the pond has been visited by *Gallinula chloropus*, Moorhen possibly the same that have bred in the much larger pond over the Northern boundary.



Bird footprints size and shape of *Gallinula chloropus* Moorhen

There were a few common invertebrates in the water of the pond but no aquatic plants and no marginal around the edge. I suspect that this pond may well be temporary in some dry years which would exclude the successful breeding of Amphibians. The dark and shady nature of the immediate surroundings also limits the biodiversity potential.





With some minor management to allow more light to enter the environment around this pond, the

## Invertebrates



Male, *Libuella depressa*, the Broad Bodied Chaser, 'The Kangels' 16<sup>th</sup> July 2014, both the male and female have a broad, flattened abdomen which is brown with yellow patches down the sides. In the male the abdomen develops a blue pruinosity that covers the brown colour. There is a good chance that this individual emerged from the pond to the North of the site. The small pond on site is possibly temporary which would prevent species of Dragonfly, whose larvae are obligatorily aquatic, emerging successfully as adults.

Invertebrates

## Amphibians

With a large pond over the Northern boundary and a small pond on site

## Newts

A short note on Great crested and Smooth Newts.





The Pond House, Whittlesford. The pond had a very small population of *Triturus cristatus* and *Lissotriton vulgaris* recorded from this pond before the house was built in 1996. This very large house was built less than 6 metres from the pond. It has a mostly formal garden but the newts still have good terrestrial habitat for foraging after breeding between August and the first air frost and several hibernacula. Subsequently, with good management and knowledgeable owners, (thanks to guidance offered by Natural England et al.), the population has thrived and is now well over 200. A figure which used to qualify a site for SSSI status.

No Amphibians were recorded on the site despite a thorough search of all the likely places.



Numerous wood piles were dismantled and examined for Great Crested or Smooth newts but none were recorded. With a permanent pond and well managed terrestrial habitat and safe frost free structures in which to hibernate there is no reason why this site should not support these species in the future whether there are houses on it or not..



## Reptiles

The most likely reptile to record on this site would be *Natrix natrix* ssp. *helvetica*, Grass Snake, none were recorded. *Zootoca vivipera*, the Common Lizard requires basking areas and a loose sward for ease of movement. It is not inconceivable that this species exists on the site; the invertebrate population, low flying flies and other insects, present on this property would seem more than adequate. Recording needs to be done in May or September with the placing of artificial refugia.

There seem to be no recent records for *Anguis fragilis*, Slow Worm or *Vipera berus*, Adder in this village or this small corner of Essex.

## Barn Owls *Tyto alba*

This increasingly uncommon species favours this sort of grassland habitat for hunting but there are no structures on the site that are suitable for breeding; the grassland is also limited in size.

## Bats Chiroptera,

Whilst this survey was conducted during daylight hours, the native vegetation in the long hedges and rough grassland is sure to produce a night flying invertebrate population that is attractive to several species of Bat. There are a few places in the wooded area, e.g. cracks in the bark of trees or hollowed braches, which could provide good roosting sites, so a proper bat survey would need to be carried out between May and the end of July to assess this aspect of the ecology further.

## Conclusion

There are no plants recorded by this survey, either in the dryer calcareous grassland on the East side or in the damp grassland depression by the entrance on the West side, that are Rare or Nationally Scarce. There were no Amphibians or Reptiles recorded but the habitat that exists could very well suit both. In any event it is perfectly possible to construct some house on this site without damaging the biodiversity severely. Particular care must be taken near the two ponds and the damp hollow. Disturbing the land around the latter may well encourage some uncommon plant species to germinate from the seed bank.

A. R. Arbon MBE,  
Consultant Ecologist,  
1, Wren Park,  
Whittlesford,  
Cambridge.  
CB22 4LY