

# Flowering Plants and Ferns of Keele University

David W. Emley

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Keele is perhaps more interesting for its trees than for its flowering plants, however there are a few unusual species amongst them.

The deciduous woodland, consisting mainly of Oak and Sycamore, has a poor ground flora which makes for a fine display of Bluebells in the spring. It also has Yellow Archangel, a plant associated with ancient woodland as well as the lovely Wood Sorrel.

The former sewage-works site, just south of Lake 5, was once home to a small colony of Harebell and Betony. The area between that site and the entrance to Lymes Road used to be very good for plants. Indeed, there was a colony of Common Spotted Orchids and a few Northern Marsh Orchids. These appear to have gone - it is too overgrown now. The small gully that leads into Lake 7 is lined with Bluebells but also Ramsons or Wild Garlic; its main site at Keele.

Keele has a good bramble flora and is the type locality for *Rubus sneydii*, named by Eric Edees; a national expert on brambles who lived nearby.

One plant, *Rhododendron ponticum*, is causing problems in the deciduous woodland where it is very invasive and is unfortunately the host of *Phytophthora ramorum*. This virus can seriously affect oaks, larches and many other trees. Because of this Keele has to remove all its Larch and most of its Rhododendron. This will, of course, open up the woodland to let the native ground flora grow up.

Many of the plants on the list that follows are adventives. That is, they appear for a short time, usually on newly-cleared or disturbed ground then, as the vegetation matures, they get crowded out and disappear. Areas like the Walled Garden and gateways in to neighbouring fields where there is a lot of disturbance are good places to look for these plants, as are sites where a building has been demolished or a new one built. For example, Field Pennycress, Bristly Ox-tongue and Corn Spurrey were all found on the site of the old Nursery. Also, flowerbeds can sometimes hold surprising species that have been brought in with compost and topsoil! The recently developed area of Home Farm/Phase 3 is throwing up a number of unusual plants as well as a lot of common ones.

A couple of plants that were originally adventives have now become well-established. One is Slender Speedwell which is found on the mown grassy areas all over campus, but which was originally discovered in the 1960s on the Westlands estate. It has obviously been spread by contract mowing machines! The other plant is an umbellifer that is more at home on the coast – Alexanders. It was originally found growing by the Terrace/Walled Garden but has since been found near Keele Hall. It

is an ancient food plant and may have been grown in the walled garden in the 19th century/early 20th century and has now "escaped" into the wild.

A fresh survey was begun in 2012 and the results are tabulated below. Species that have been recorded in the past but which have not been refound are indicated with an asterisk \*.

Currently (September 2023) all of the *Rhododendron ponticum* has been removed from the estate. This will have a profound effect on the landscape as it will open up the woodland to native species. It will be interesting to monitor the changes!

Upper Springpool is the area between Lake 5 and Keele Hall		Home Farm/Observatory	Phase 3	Clock House Drive	Terrace Woodlands	Walled Garden	Upper Springpool	Lower Springpool	Main Campus	Medical School & pool	Church Plantation
Lower Springpool is the area between Lake 5 and Lymes Road											
Main campus is the area from Keele Hall to the Sports fields											
<b>Equisetaceae</b>											
<i>Equisetum arvense</i>	Common Horsetail *										
<b>Dennstaedtiaceae</b>											
<i>Pteridium aquilinum</i>	Bracken			x		x	x		x		
<b>Aspleniaceae</b>											
<i>Asplenium scolopendrium</i>	Hart's-tongue Fern		x			x	x	x			
<i>Asplenium trichomanes</i>	Maidenhair Spleenwort	x									
<b>Woodsiaceae</b>											
<i>Athyrium felix-femina</i>	Lady Fern					x	x			x	
<b>Dryopteridaceae</b>											
<i>Dryopteris dilatata</i>	Broad Buckler-fern	x	x	x		x	x		x	x	
<i>Dryopteris filix-mas</i>	Male Fern	x		x	x	x	x		x	x	
<i>Polystichum aculeatum</i>	Hard Shield Fern					x					
<b>Nymphaeaceae</b>											
<i>Nuphar lutea</i>	Yellow Water-lily		x				x				
<b>Papaveraceae</b>											
<i>Papaver dubium</i>	Long-headed Poppy	x									
<i>Papaver rhoeas</i>	Common Poppy	x									
<i>Papaver somniferum</i>	Opium Poppy	x									
<i>Clematis vitalba</i>	Traveller's Joy							x			

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<b>Main campus is the area from Keele Hall to the Sports fields</b>											
<b>Ranunculaceae</b>											
<i>Ranunculus acris</i>	Meadow Buttercup	x	x	x			x	x		x	
<i>Ranunculus ficaria</i>	Lesser Celandine	x		x	x	x	x	x			x
<i>Ranunculus lingua</i>	Greater Spearwort		x								
<i>Ranunculus repens</i>	Creeping Buttercup	x	x	x	x	x	x	x	x	x	x
<i>Anemone nemorosa</i>	Wood Anemone			x			x				
<b>Saxifragaceae</b>											
<i>Chrysoplenium oppositifolium</i>	Opposite-leaved Golden Saxifrage						x	x			
<b>Fabaceae</b>											
<i>Lathyrus pratensis</i>	Meadow Vetchling	x	x	x		x	x				
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	x	x	x			x				
<i>Lotus uliginosus</i>	Greater Bird's-foot Trefoil	x	x	x			x				
<i>Melilotus albus</i>	White Melilot								x		
<i>Melilotus officinalis</i>	Ribbed Melilot	x									
<i>Medicago lupulina</i>	Black Medick	x					x				
<i>Trifolium campestre</i>	Hop Trefoil	x							x	x	x
<i>Trifolium dubium</i>	Lesser Trefoil	x	x		x	x			x	x	x
<i>Trifolium micranthum</i>	Slender Trefoil				x						
<i>Trifolium pratense</i>	Red Clover	x	x	x			x	x	x		
<i>Trifolium repens</i>	White Clover	x	x	x	x	x	x	x	x	x	x
<i>Vicia craca</i>	Tufted Vetch		x								
<i>Vicia hirsuta</i>	Hairy Tare	x	x								
<i>Vicia sativa</i>	Common Vetch	x	x	x		x					
<i>Vicia sepium</i>	Bush Vetch	x	x								
<i>Vicia tetrasperma</i>	Smooth Tare	x									
<b>Rosaceae</b>											
<i>Alchemilla vulgaris</i> agg.	Lady's Mantle	x								x	
<i>Filipendula ulmaria</i>	Meadowsweet *										
<i>Fragaria vesca</i>	Wild Strawberry	x					x				
<i>Geum rivale</i>	Water Avens		x								
<i>Geum urbanum</i>	Wood Avens	x		x	x		x	x		x	x
<i>Potentilla anserina</i>	Silverweed *										
<i>Potentilla erecta</i>	T tormentil			x							



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<b>Lower Springpool is the area between Lake 5 and Lymes Road</b>											x
<b>Main campus is the area from Keele Hall to the Sports fields</b>											
<i>Geranium pyrenaicum</i>	Hedgerow Crane's-bill	x									
<i>Erodium cicutarium</i>	Common Stork's-bill										x
<b>Onagraceae</b>											
<i>Chamerion angustifolium</i>	Rosebay	x	x	x	x	x	x		x	x	x
<i>Circaeа leutetiana</i>	Enchanter's Nightshade			x	x		x	x	x		
<i>Epilobium adenocaulon</i>	American Willowherb	x			x	x			x	x	
<i>Epilobium hirsutum</i>	Great Willowherb	x	x	x		x	x	x	x		x
<i>Epilobium montanum</i>	Broad-leaved Willowherb	x	x		x	x	x		x		x
<i>Epilobium parviflorum</i>	Hoary Willowherb	x	x			x					
<i>Epilobium roseum</i>	Pale Willowherb *										
<i>Oenothera biennis</i>	Evening primrose	x									
<b>Malvaceae</b>											
<i>Malva moschata</i>	Musk Mallow		x			x					
<b>Resedaceae</b>											
<i>Reseda luteola</i>	Weld	x							x		
<b>Brassicaceae</b>											
<i>Alliaria petiolata</i>	Jack-by-the-hedge	x		x	x		x	x	x		
<i>Arabidopsis thaliana</i>	Thale Cress	x		x	x	x	x		x		
<i>Brassica nigra</i>	Black Mustard	x							x		
<i>Capsella bursa-pastoris</i>	Shepherd's Purse	x		x	x	x			x		
<i>Cardamine amara</i>	Large Bitter-cress						x	x			
<i>Cardamine flexuosa</i>	Wavy Bittercress							x			
<i>Cardamine hirsuta</i>	Hairy Bittercress	x		x	x		x	x	x	x	x
<i>Cardamine pratense</i>	Lady's Smock			x							
<i>Coronopus didymus</i>	Lesser Swinecress	x									
<i>Coronopus squamatus</i>	Swinecress								x		
<i>Hirschfeldia incana</i>	Hoary Mustard	x									
<i>Raphanus raphanistrum</i>	Wild Radish	x									
<i>Sinapis alba</i>	White Mustard					x					
<i>Sinapis arvensis</i>	Charlock								x		
<i>Sisymbrium officinale</i>	Hedge Mustard	x		x	x	x			x		
<i>Thlaspi arvense</i>	Field Penny-cress								x		



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<i>Impatiens glandulifera</i>	Himalayan Balsam		x	x	x	x	x	x			
<b>Primulaceae</b>											
<i>Anagallis arvensis</i>	Scarlet Pimpernel	x							x		
<i>Lysimachia nemorum</i>	Yellow Pimpernel						x	x			
<b>Rubiaceae</b>											
<i>Galium album</i>	Hedge Bedstraw	x									
<i>Galium aparine</i>	Cleavers	x	x	x		x	x	x	x		
<i>Galium palustre</i>	Marsh Bedstraw						x				
<i>Galium saxatile</i>	Heath Bedstraw			x							
<i>Lonicera periclymenum</i>	Honeysuckle			x							
<i>Sambucus nigra</i>	Elder	x		x	x		x	x		x	
<b>Gentianaceae</b>											
<i>Centaurium erythraea</i>	Common Centaury *										
<b>Boraginaceae</b>											
<i>Myosotis arvensis</i>	Field Forget-me-not	x									
<i>Myosotis scorpioides</i>	Water Forget-me-not			x							
<i>Myosotis sylvatica</i>	Wood Forget-me-not	x							x		
<i>Pentaglottis sempervirens</i>	Green Alkanet	x									
<i>Anchusa arvensis</i>	Bugloss	x									
<i>Borago officinalis</i>	Borage	x									
<i>Phacelia sp.</i>	Phacelia					x					
<b>Convolvulaceae</b>											
<i>Calystegia sepium</i>	Hedge Bindweed	x					x			x	
<b>Solanaceae</b>											
<i>Solanum dulcamara</i>	Bittersweet						x				
<i>Datura stramonium</i>	Thorn Apple	x									
<b>Veronicaceae</b>											
<i>Digitalis purpurea</i>	Foxglove	x		x		x	x	x	x	x	x
<i>Veronica arvensis</i>	Wall Speedwell	x						x			





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<b>Adoxaceae</b>																					
<i>Adoxa moschatellina</i>	Moschatel								x												
<b>Valerianaceae</b>																					
<i>Valerianella locusta</i>	Common Cornsalad						x														
<b>Dispacaceae</b>																					
<i>Dipsacus fullonum</i>	Teasel						x														
<i>Knautia arvensis</i>	Field Scabious	*					x														
<i>Succisa pratensis</i>	Devil's-bit Scabious				x																
<i>Hedera helix</i>	Ivy	x		x	x	x	x	x		x	x										
<b>Apiaceae</b>																					
<i>Aegopodium podagraria</i>	Ground Elder					x		x			x										
<i>Aethus cynapium</i>	Fool's Parsley	x																			
<i>Angelica sylvestris</i>	Angelica							x													
<i>Anthriscus sylvestris</i>	Cow Parsley	x	x	x																	
<i>Apium nodiflorum</i>	Fool's Water-cress *																				
<i>Conium maculatum</i>	Hemlock								x												
<i>Conopodium majus</i>	Pignut	x		x					x												
<i>Daucus carota</i>	Carrot	x					x														
<i>Heracleum sphondylium</i>	Hogweed	x		x	x	x	x	x			x										
<i>Pimpinella saxifraga</i>	Burnet-saxifrage		x																		
<i>Smyrnium olusatrum</i>	Alexanders				x				x												
<b>Acoraceae</b>																					
<i>Acorus calamus</i>	Sweet-flag							x													
<b>Araceae</b>																					
<i>Arum maculatum</i>	Lords and Ladies *																				
<i>Lysichiton americanum</i>	Skunk Cabbage							x													
<b>Lemnaceae</b>																					
<i>Lemna minor</i>	Common Duckweed		x					x													

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<b>Potamogetonaceae</b>											
<i>Potamogeton natans</i>	Broad-leaved Pondweed		x							x	
<b>Orchidaceae</b>											
<i>Epipactis helleborine</i>	Broad-leaved Helleborine							x			
<i>Dactylorhiza fuchsii</i>	Common Spotted Orchid *										
<i>Ophrys apifera</i>	Bee Orchid								x		
<b>Iridaceae</b>											
<i>Iris pseudacorus</i>	Yellow Flag		x								
<b>Alliaceae</b>											
<i>Allium ursinum</i>	Ramsons							x			
<b>Asparagaceae</b>											
<i>Hyacinthoides non-scripta</i>	Bluebell	x		x	x		x	x	x	x	
<b>Typhaceae</b>											
<i>Sparganium erectum</i>	Branched Bur-reed							x			
<i>Typha angustifolia</i>	Lesser Bulrush		x								
<i>Typha latifolia</i>	Bulrush		x				x			x	
<b>Juncaceae</b>											
<i>Juncus articulatus</i>	Jointed Rush		x								
<i>Juncus bufonius</i>	Toad Rush		x		x	x			x		
<i>Juncus conglomeratus</i>	Compact Rush		x	x							
<i>Juncus effusus</i>	Soft Rush	x	x	x			x				
<i>Juncus inflexus</i>	Hard Rush		x								
<i>Luzula campestris</i>	Field Wood-rush		x	x	x				x		
<b>Cyperaceae</b>											
<i>Eleocharis palustris</i>	Common Spike-rush		x								
<i>Carex acutiformis</i>	Lesser Pond-sedge		x								
<i>Carex flacca</i>	Glaucous Sedge		x	x							
<i>Carex nigra</i>	Common Sedge *										
<i>Carex pendula</i>	Pendulous Sedge						x			x	
<i>Carex remota</i>	Remote Sedge						x				

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<i>Carex strigosa</i>	Thin-spiked Wood-sedge						x				
<b>Poaceae</b>											
<i>Agropyron repens</i>	Common Couch	x									
<i>Agrostis stolonifera</i>	Creeping Bent	x									
<i>Alopecurus myosuroides</i>	Black-grass	x									
<i>Alopecurus geniculatus</i>	Marsh Foxtail		x								
<i>Alopecurus pratensis</i>	Meadow Foxtail	x	x	x			x				
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass	x	x	x							
<i>Arrenatherum elatius</i>	False Oat-grass	x	x	x			x		x	x	
<i>Avena sativa</i>	Wild Oat						x				
<i>Bromus hordaceus</i>	Soft Brome	x									
<i>Bromus sterilis</i>	Barren Brome	x									
<i>Cynosurus cristatus</i>	Crested Dogtail	x	x	x							
<i>Dactylis glomerata</i>	Cocksfoot	x	x	x		x	x				x
<i>Deschampsia cespitosa</i>	Tufted Hair-grass		x	x			x			x	
<i>Festuca gigantea</i>	Giant Fescue						x				
<i>Festuca rubra</i>	Red Fescue	x		x		x					
<i>Glyceria declinata</i>	Small Sweet-grass	x									
<i>Glyceria maxima</i>	Reed Sweet-grass *										
<i>Holcus lanatus</i>	Yorkshire Fog	x	x	x	x	x	x	x			
<i>Hordeum marinum</i>	Wall Barley	x									
<i>Lolium multiflorum</i>	Italian Rye-grass								x		
<i>Lolium perenne</i>	Perennial Rye-grass	x		x	x	x	x		x	x	x
<i>Melica uniflora</i>	Wood Millet	x		x			x	x		x	
<i>Phleum pratense</i>	Timothy	x	x								
<i>Poa annua</i>	Annual Meadow-grass	x		x	x	x	x		x	x	x
<i>Poa pratensis</i>	Smooth Meadow-grass	x		x			x				
<i>Poa trivialis</i>	Rough Meadow-grass			x			x				

## Some Keele Flowers



Meadow Cranesbill



Ragged Robin



Yellow Flag



Common Poppy



Red Campion



Jack-by-the-Hedge



Herb Robert



Devil's-bit Scabious