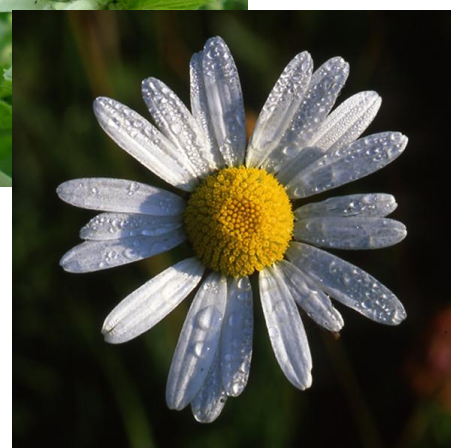
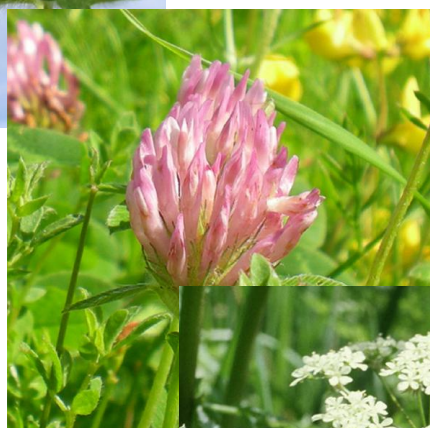


An introduction to Wildflowers – Part 1



Magic
5



the
species
recovery
trust

The Buttercup family (Ranunculaceae)

~35 species in UK
~2,500 species globally

Key characteristics

- Herbs
- 5 delicate mostly yellow petals
- 5 sepals
- Many stamens
- Alternate leaves, often lobed



Bulbous Buttercup



Lesser Spearwort

British wild species

- Meadow Buttercup (*Ranunculus acris*)
- Lesser Celandine (*Ranunculus verna*)
- Wood Anemone (*Anemone nemorosa*)
- Lesser Spearwort (*Ranunculus flammula*)
- Globeflower (*Trollius europaeus*)

🌍 Around the world 🌍

- Larkspurs (*Delphinium*)
- Clematis
- Christmas Rose
- Winter Aconite

Uses

- Ornamental e.g. *Delphinium*, *Aconitum*, *Clematis* and *Anemone*
- Medicine - Goldenseal
- Poison! – Monkshood (*Aconitum*)
- Spice - Nigella

Master your Buttercups with the Magic 5!

BEGINNER

- Creeping Buttercup ☐
- Lesser Celandine ☐
- Marsh-marigold ☐
- Wood Anemone ☐
- Traveller's-joy ☐

HELP!

Creeping Buttercup – terminal lobe slightly separated

INTERMEDIATE

- Bulbous Buttercup ☐
- Lesser Spearwort ☐
- Meadow Buttercup ☐
- Columbine ☐
- Common Meadow-rue ☐

HELP!

Bulbous Buttercup – sepals point backwards

Meadow Buttercup – leaves deeply dissected

ADVANCED

- Water-crowfoots ☐
 - Greater Spearwort ☐
 - Hairy Buttercup ☐
 - Corn Buttercup ☐
 - Goldilocks Buttercup ☐
-

TWITCHER

- Adder's-tongue Spearwort ☐
- Pasqueflower ☐
- Monk's-hood ☐
- Globeflower ☐
- Pheasant's-eye ☐

The Pea family (Fabaceae)

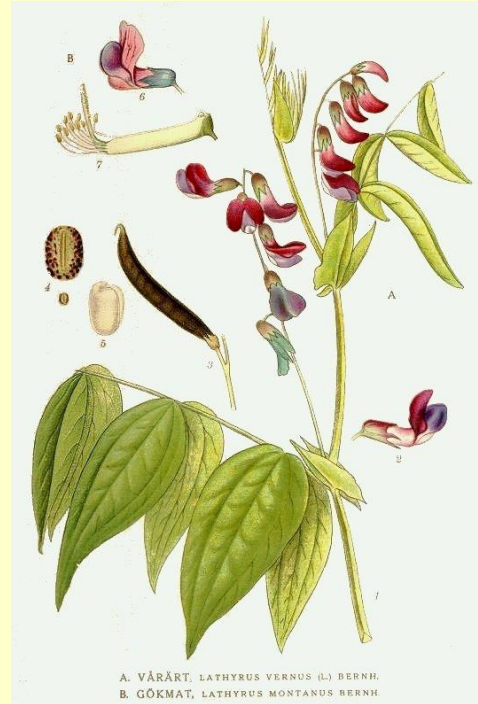
~73 British members
>19,000 species globally
Also known as: Legumes

Key characteristics

- Irregular flowers – single upper petal, two wing petals at sides, two lower petals forming a boat-shaped keel
- Fruit: pea pod
- Pinnate or trifoliate leaves, sometimes spines as in gorse.
- Often climb on tendrils



Sweet Pea



Key British species

- Common Gorse (*Ulex europaeus*)
- Red Clover (*Trifolium pratense*)
- Tufted Vetch (*Vicia cracca*)
- Common Bird's-foot-trefoil (*Lotus corniculatus*)
- Common Restharrow (*Ononis repens*)

🌐 Around the world 🌐

- Acacia
- Common Laburnum
- Garden Pea
- Green Bean
- Peanut

Uses

- Livestock fodder e.g. Clover, Lupin
- Human food – essential source of protein (legumes, pulses)
- Timber - Some Acacia species used for timber.
- Medicinal - Dried leaves of *Cassia* are the purgative known as Senna.
- Fertiliser - Nitrogen-fixing bacteria in the root nodules of pea species convert nitrogen from the air to nitrates that are usable by other plants.

Master your Peas with the Magic 5!

BEGINNER

- | | |
|----------------------------|--------------------------|
| Red Clover | <input type="checkbox"/> |
| White Clover | <input type="checkbox"/> |
| Tufted Vetch | <input type="checkbox"/> |
| Common Bird's-foot-trefoil | <input type="checkbox"/> |
| Meadow Vetchling | <input type="checkbox"/> |

HELP!

Red-Clover – hairy underside to leaves, **White Clover** shiny

INTERMEDIATE

- | | |
|-----------------|--------------------------|
| Restharrow | <input type="checkbox"/> |
| Horseshoe Vetch | <input type="checkbox"/> |
| Hairy Tare | <input type="checkbox"/> |
| Dwarf Gorse | <input type="checkbox"/> |
| Black Medick | <input type="checkbox"/> |

ADVANCED

- | | |
|-------------------|--------------------------|
| Lesser Trefoil | <input type="checkbox"/> |
| Suffocated Clover | <input type="checkbox"/> |
| Kidney Vetch | <input type="checkbox"/> |
| Ribbed Melilot | <input type="checkbox"/> |
| Sickle Medick | <input type="checkbox"/> |

HELP!

Trefoils. **Hop Trefoil** - hairy, hop-like bended down flowers. **Lesser Trefoil** - hairless, flower heads more open

TWITCHER

- | | |
|---------------------|--------------------------|
| Yellow Vetchling | <input type="checkbox"/> |
| Suffocated Clover | <input type="checkbox"/> |
| Subterranean Clover | <input type="checkbox"/> |
| Purple Milk-vetch | <input type="checkbox"/> |
| Bithynian Vetch | <input type="checkbox"/> |

The Carrot family (Apiaceae)

~54 species in the UK

~3500 species globally

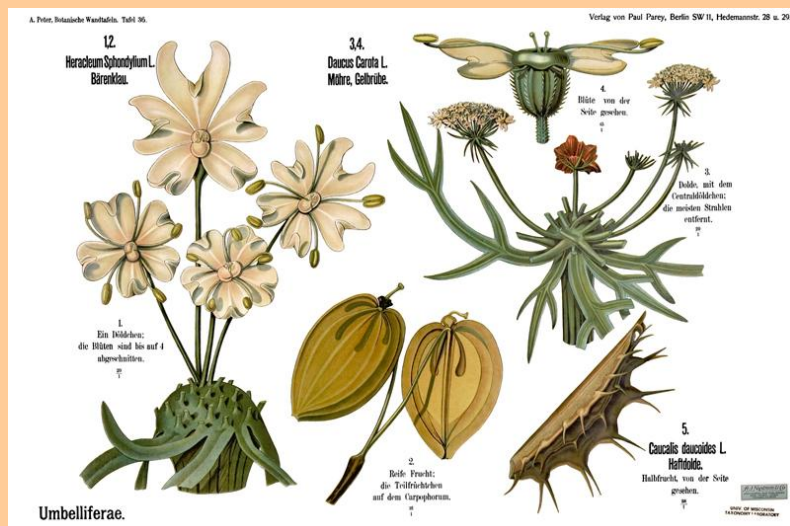
Also known as: Umbellifers

Key characteristics

- Alternate leaves
- Small yellow, white or cream flowers with 5 separate petals
- Umbels – flowers elevated on stalks all originating from one point at the top of the main stem
- Usually hollow stems
- Varied and interesting seedpods



Cow Parsley



British wild species

- Cow Parsley (*Anthriscus sylvestris*)
- Wild Carrot (*Daucus carota*)
- Hemlock Water-dropwort (*Oenanthe crocata*)
- Pignut (*Conopodium majus*)
- Hemlock (*Conium maculatum*)

🌍 Around the world 🌍

- Garden Angelica
- Coriander
- Cumin
- Dill

Uses

- Food - Root crops e.g. carrot and parsnip; Stems e.g. celery; Leaves e.g. parsley, coriander and dill; Fruits or seeds e.g. caraway, cumin and fennel
- Medicinal - Gastrointestinal complaints, Cardiovascular ailments, Stimulants, Sedatives, Ginseng
- Poison
- Ornamental E.g. Hogweeds and *Astrantia*

WARNING – MANY MEMBERS OF THIS FAMILY ARE TOXIC AND ALL SHOULD BE TREATED WITH CAUTION!!!

Master your Carrots with the Magic 5!

BEGINNER

Hogweed	<input type="checkbox"/>
Cow Parsley	<input type="checkbox"/>
Wild Carrot	<input type="checkbox"/>
Hemlock Water-dropwort	<input type="checkbox"/>
Sea Holly	<input type="checkbox"/>

INTERMEDIATE

Pignut	<input type="checkbox"/>
Angelica	<input type="checkbox"/>
Wild Parsnip	<input type="checkbox"/>
Hemlock	<input type="checkbox"/>
Alexanders	<input type="checkbox"/>

ADVANCED

Sanicle	<input type="checkbox"/>
Burnet Saxifrage	<input type="checkbox"/>
Stone Parsley	<input type="checkbox"/>
Whorled Caraway	<input type="checkbox"/>
Confidently tell apart Cow Parsley, Upright Hedge-parsley, Rough Chervil	<input type="checkbox"/>

HELP!

Sanicle – tiny white ball like inflorescences. **Burnet Saxifrage** – leaves made of separate lobes. **Stone Parsley** – petrol smell. **Whorled Caraway** – whorls of needle-like leaves.

1 **Cow Parsley** – unspotted, hollow stem, flowers in May

2 **Rough Chervil** – stem ridges and spotted, follows Cow parsley, flowering June-July

3 **Upright Hedge-parsley** – solid slender rough stem, burred fruits, flowers July-August

TWITCHER

Shepherd's-needle	<input type="checkbox"/>
Hartwort	<input type="checkbox"/>
Spiguel	<input type="checkbox"/>
Narrow-leaved Water-dropwort	<input type="checkbox"/>
Marsh Pennywort	<input type="checkbox"/>

The Daisy family (Asteraceae)

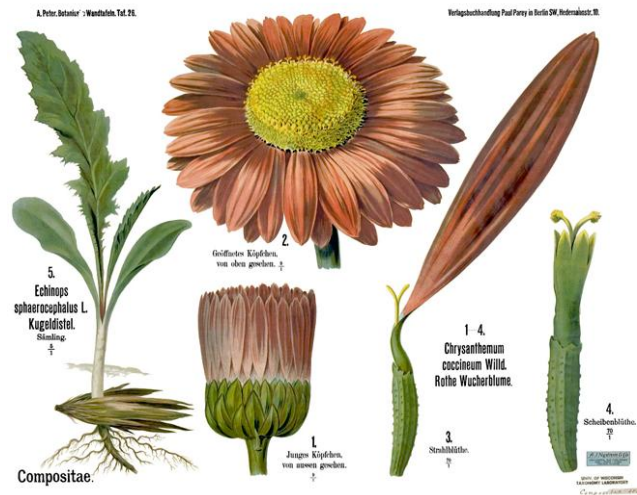
~120 species in the UK
~25,000 species globally
Also known as: Sunflower family

Key characteristics

- Flowerheads made up of many tiny flowers (florets) often divided into rays and discs, e.g. in Daisy, disc florets are yellow, ray florets are white.
- Often have seeds with pappus that are wind-distributed.



Oxeye Daisy



Key British species

- Dandelion (*Taraxacum officinale*)
- Daisy (*Bellis perennis*)
- Black Knapweed (*Centaurea nigra*)
- Common Ragwort (*Senecio jacobaea*)
- Spear Thistle (*Cirsium vulgare*)

🌍 Around the world 🌍

- Jerusalem artichoke
- Lettuce
- Chrysanthemum

Uses

- Liqueur - *Artemisia absinthium* is the source of the essential oil used to flavour absinthe.
- Food - Jerusalem and globe artichokes, tarragon, chicory, lettuce
- Folk medicine - Chamomile tea – to aid sleep, Calendula – for abdominal cramps and constipation, Echinacea – to stave off a cold
- Malaria treatment - *Artemisin*

Master your Daisies with the Magic 5!

BEGINNER

- | | |
|----------------|--------------------------|
| Daisy | <input type="checkbox"/> |
| Common Ragwort | <input type="checkbox"/> |
| Oxeye Daisy | <input type="checkbox"/> |
| Dandelion | <input type="checkbox"/> |
| Yarrow | <input type="checkbox"/> |
-

INTERMEDIATE

- | | |
|----------------|--------------------------|
| Groundsel | <input type="checkbox"/> |
| Colt's-foot | <input type="checkbox"/> |
| Nipplewort | <input type="checkbox"/> |
| Pineappleweed | <input type="checkbox"/> |
| Black Knapweed | <input type="checkbox"/> |
-

ADVANCED

- | | |
|---------------------|--------------------------|
| Common Cat's-ear | <input type="checkbox"/> |
| Rough Hawkbit | <input type="checkbox"/> |
| Smooth Hawk's-beard | <input type="checkbox"/> |
| Prickly Sow-thistle | <input type="checkbox"/> |
| Scentless Mayweed | <input type="checkbox"/> |

HELP!

Common Cat's-ear - black scales on stem. **Rough Hawkbit** – very hairy, forked hairs.

Smooth Hawk's-beard - glossy leaves with lyre-shaped sides, flower stems branched.

Prickly Sow-thistle – base of leaf clasps round in itself. **Scentless Mayweed** - no scent when crushed.

TWITCHER

- | | |
|--------------------|--------------------------|
| Cornflower | <input type="checkbox"/> |
| Red-tipped Cudweed | <input type="checkbox"/> |
| Saw-wort | <input type="checkbox"/> |
| Fen Ragwort | <input type="checkbox"/> |
| Chamomile | <input type="checkbox"/> |

The Dead-nettle family (Lamiaceae)

~50 species in UK
~6,800 species globally
Also known as: Mint family

Key characteristics

- Bilaterally symmetrical flowers with petals fused into upper and lower lips
- Often bitterly-aromatic
- Square stem
- Opposite leaves



Yellow Archangel



Key British species

- Water Mint (*Mentha aquatica*)
- Wild Thyme (*Thymus polytrichus*)
- Woundwort (*Stachys spp*)
- Ground Ivy (*Glechoma hederacea*)
- Bugle (*Ajuga reptans*)

🌐 Around the world 🌐

- Common Teak – India and Indo-China
- Sweet Basil
- Catnip

Uses

- Timber e.g. teak and Malay Beechwood
- Herbs e.g. Sage, Mint, Oregano, Thyme, Lavender, Rosemary, Basil

Master your Dead-nettles with the Magic 5!

BEGINNER (ish!)

- Yellow Archangel ☐
 - Selfheal ☐
 - White Dead-nettle ☐
 - Red Dead-nettle ☐
 - Water Mint ☐
-

INTERMEDIATE

- Common Hemp-nettle ☐
 - Betony ☐
 - Lesser Skullcap ☐
 - Bugle ☐
 - Gypsywort ☐
-

ADVANCED

- Hedge Woundwort ☐
- Basil Thyme ☐
- Marjoram ☐
- Black Horehound ☐
- Wood Sage ☐

HELP!

Hedge Woundwort has stalked leaves, in Marsh Woundwort they are stalkless and lanceolate. **Basil Thyme** – small leaves in spread out pairs, curve in calyx. **Marjoram** – flowers in dense terminal heads. **Black Horehound** - unpleasantly aromatic. **Wood Sage** – leaves crinkly, little smell, greenish-yellow small flowers.

TWITCHER

- Meadow Clary ☐
- Pennyroyal ☐
- Red Hemp-nettle ☐
- Downy Woundwort ☐
- Ground-pine ☐

Magic 5 aims gently to introduce people to the magical and diverse world of the UK flora, simplifying, but at the same time inspiring a growing knowledge of our wild plant heritage.

There are over 5,000 species of flowering plants, ferns, bryophytes and lichens in the UK, which can be fairly intimidating. This course breaks down that flora into several bite-size chunks, and while it won't teach you every species, it will highlight important groups and allow you confidently to identify some commonly encountered flowering plant families based on several key features.

Other courses will introduce similar bite size chunks of the remaining four parts of the plant kingdom –opening people's eyes and imagination to the exciting, diverse yet often overlooked world of lichens, bryophytes, ferns and grasses whilst giving an overview of the whole of the UK flora.

1. Lichens
2. Bryophytes
3. Ferns
4. Grasses
5. Flowers

The Species Recovery Trust

is a charity dedicated to saving some of the rarest species in the UK, and educating and enthusing the public about wildlife around them.

More details of our work, our training courses and how you can support us can be found at;

www.speciesrecoverytrust.org.uk