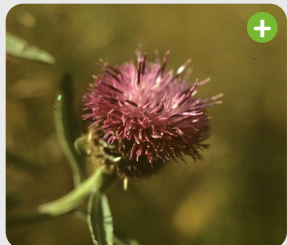


Purple / pink flowers

Common Knapweed
Centaurea nigra



Flowering
J F M A M J J A S O N D

Flower head resembles a thistle but plant is entirely without spines

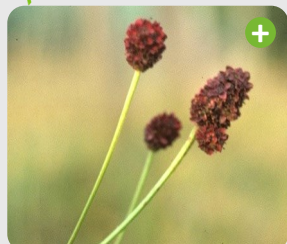
Field Scabious
Knautia arvensis



Flowering
J F M A M J J A S O N D

Narrow hairy leaves in pairs. Blue-lilac flowers forming a flattish pincushion-like head

Great Burnet
Sanguisorba officinalis



Flowering
J F M A M J J A S O N D

Flower heads are slightly oblong balls of tiny dark reddish-purple flowers.

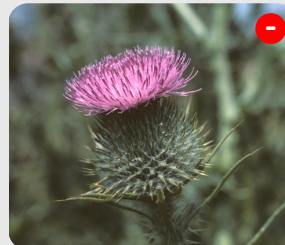
Creeping Thistle
Cirsium arvense



Flowering
J F M A M J J A S O N D

Many flower heads of pale lilac colour. Spiny leaves but smooth stem

Spear Thistle
Cirsium vulgare



Flowering
J F M A M J J A S O N D

Large spiny thistle head with reddish-purple flowers. Stem 'winged' with spines.

Betony
Betonica officinalis



Flowering
J F M A M J J A S O N D

Brilliantly red-purple flowers which form an oblong cluster. Square stem and opposite leaves

Ragged Robin
Silene flos-cuculi



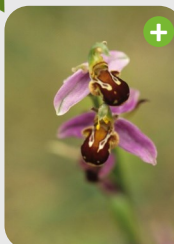
Flowering
J F M A M J J A S O N D

'Ragged' five-petalled flowers which form loose clusters.. Found in wet pastures and mires

Orchids

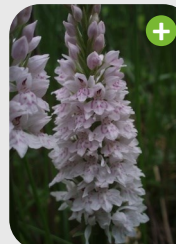
Some of the commoner species are shown below :

Bee Orchid



Flowering
J F M A M J J A S O N D

Common Spotted-orchid



Green winged-orchid



Highly characteristic and immediately-recognisable orchid flower, which in our native species is small and normally grouped in a fairly dense head of many flowers. Most appear in May and June.



Magnificent Meadows

A key to identify some of the important flowers of our meadows

Developed by EcoRecord on behalf of The Wildlife Trust for Birmingham and the Black Country



Yellow flowers



Yellow Rattle
Rhinanthus minor



Flowering
J F M A M J J A S O N D

Two lipped bright yellow flower. In June the capsules swell and begin to rattle with the seed within.



Ragwort
Senecio jacobaea



Flowering
J F M A M J J A S O N D

Flat-topped cluster of yellow, daisy-like flower heads



Creeping Buttercup
Ranunculus repens



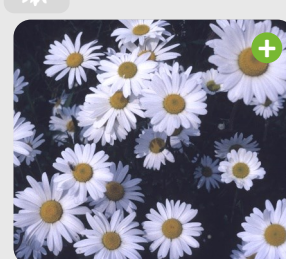
Flowering
J F M A M J J A S O N D

Yellow flowers. Rosettes of three-lobed leaves spread by producing runners on soil surface.

White/pale flowers



Ox-eye Daisy
Leucanthemum vulgare

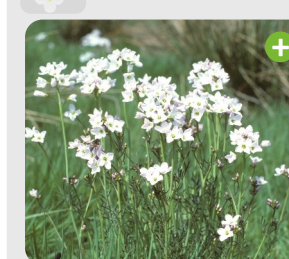


Flowering
J F M A M J J A S O N D

Flower head is the familiar daisy flower but 1-2 inches (2½-5cm) across.



Cuckooflower
Cardamine pratensis

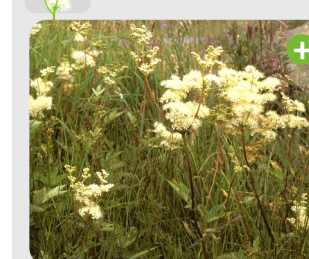


Flowering
J F M A M J J A S O N D

Pale lilac to deep pink flowers with four petals, produced in clusters. Found in damp meadows



Meadowsweet
Filipendula ulmaria



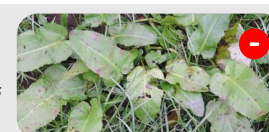
Flowering
J F M A M J J A S O N D

Creamy foamy irregularly-lobed head of small flowers. Plant smells like 'Vick' balm.

Green flowers



Broad-leaved Dock
Rumex obtusifolius



Flowering
J F M A M J J A S O N D

Large, broad bluntly-pointed leaves. Flowering stems bear thousands of small greenish flowers.

Symbols or Denote a positive or negative indicator species. **More information overleaf**

Positive Indicators

The following species are desirable and it is a positive outcome of monitoring if they appear and/or if they are tending to increase:



Common Knapweed - A rather stiff, erect, perennial herb, usually 1-2 ft (30-60 cm) tall. This is a constant species in the lowland hay meadow and is also found in many grassy places.

Leaves & Stems: lower leaves irregularly lobed along both margins; lower are regularly toothed. Stems and leaves are downy.

Flower: The flower head, rather less than an inch (3 cm) across, resembles that of a thistle, but plant is entirely without spines. Flower head made up of many individual flowers enclosed by numerous sepal-like 'bracts', their upper parts brown or black and with long fine teeth.

Not to be Confused with: **Greater Knapweed** - much less common & always has enlarged marginal florets



Field Scabious - An attractive perennial plant of unimproved, fairly base-rich dry grasslands, it is typically 1-3 ft (30-90 cm) tall in flower.

Leaves & Stems: leaves hairy, narrow and borne in pairs with toothed margin and are mostly lobed down both edges. Stems stiffly hairy and erect.

Flower: four-petalled flowers, pale bluish-lilac, the stamens with pink anthers. Individually they are small, but they are borne in flattish pincushion-like heads (1.5 inches) across. The marginal flowers are distinctly enlarged.

Not to be Confused with: **cultivated scabiouses** - most rarely naturalise and have larger flower heads

Small Scabious - rarer, small and slender, found on limestone with bluer-lilac flowers

Devil's-bit Scabious - later-flowering, found in damp, rather acid grassland and mires. Smaller round often deep-lilac purple flower heads of four petalled flowers.



Betony - a scentless relative of the mints, one or at most two foot (30-60 cm) tall. Found in old grasslands and by waysides.

Leaves & Stems: simple opposite leaves and square stems, borne mainly at ground level. Leaves mostly shortly stalked, very neatly toothed and blunt-tipped.

Flower: brilliantly red-purple in colour and forms an oblong cluster. Individual flower is about 1/2 to 3/4 inch (12-18 cm) long. Has a very obviously different top and bottom and the petals are joined at the base to form a tube.

Not to be Confused with: Other members of the family which you might come across are distinctly scented - e.g. **Hedge Woundwort** - or quite a different colour of flower e.g. **Selfheal** or **Bugle** - which are both blue.



Ragged Robin - A cheerful perennial, typically 1-2 ft (30-60 cm) tall often quite short-lived, occurring in wet pastures and mires, often associated with rushes

Leaves & Stems: hollow stems. Leaves in pairs, pointed, toothless and narrow below into an indistinct petiole with a few coarse hairs either side.

Flower: occur in loose clusters; they are quite large, about an inch (3 cm) across. The five petals are each bizarrely cleft into four unequal lobes.

Not to be Confused with: similar to but easily distinguished from **Red Campion** by the 'ragged' flowers and the wetter habitat.



Great Burnet - a hairless perennial, 1 1/2 - 3 ft (45-90 cm) tall. Normally restricted to old meadows

Leaves & Stems: leaves are large, divided into 3-7 pairs of stalked, very evenly toothed leaflets in two rows. The leaflets are typically 1-2 inches (2-5 cm) long and oval. There are also little leaf-like outgrowths at the bases of the main stalk of the leaf called stipules.

Flower: flower heads start to appear in June & are tight, slightly oblong balls of tiny dark reddish-purple



Orchids - The orchid family is united by possessing the highly characteristic and immediately-recognisable orchid flower, although in our native species the flower is usually small and grouped in a fairly dense head of many flowers.

The life history of orchids is complex, and the plant cannot reach maturity unless the minute dust-like seed are infected by a soil-inhabiting fungus.

Species present in B&BC: **Bee Orchid**, **Common Spotted-orchid**, **Southern Marsh-orchid**, **Hybrid Marsh-orchid**, **Common Twayblade**,



Yellow Rattle - It is an annual; the seeds germinate in mid-spring and its roots attach themselves parasitically to those of surrounding plants, usually the most abundant ones, allowing less vigorous plants to survive.

Leaves & Stems: The plant is almost hairless, up to 2 ft (60 cm) tall but usually much shorter. The stem is usually erect, branched or unbranched, with pairs of sharply-toothed, unstalked leaves.

Flower: bright yellow flattened two-lipped flower



Oxeye Daisy - a fairly short-lived perennial daisy. can be very abundant, especially in the early years after hay meadow creation.

Leaves & Stems: Before the plant flowers the leaves form a loose rosette of glossy, coarsely-toothed, spoon-shaped basal leaves at ground level. Typically it produces a single unbranched, erect, slightly hairy stem 1-2 ft (30-60 cm) tall. The stem bears a spiral of small, glossy, coarsely-toothed or shallowly lobed leaves

Flower: The flower head, borne from May onwards, is the familiar daisy flower, but 1-2 inches (2 1/2 - 5 cm) across.

Not to be Confused with: **Scentless Mayweed** - another large daisy but has finely divided leaves.

Closely related cultivated species, e.g. **Shasta Daisy**, but this is a longer-lived perennial forming clumps of stems and the flower heads are larger, rarely less than 2 inches (5 cm.) across.



Cuckooflower - A perennial of damper or even wet meadows, it starts to bloom in April, hence its name

Flower: larger than in other members of the genus, with petals 1/4 - 1/2 inch (6-18 mm) long. They are succeeded by elongated fruits

Not to be Confused with: Other members of the genus are mostly weedy plants with much smaller flowers and minutely hairy leaves e.g. **Large Bittercress**, a plant of wet woodlands



Meadowsweet - Found mainly in damp meadows or at stream sides or in woodland margins, this is a patch-forming hairless perennial.

Leaves & Stems: Usually it has many upright stems, 2-4 ft (60-120 cm) tall at flowering. The leaves are divided into two rows of doubly-toothed leaflets, with large and small leaflets inter-mixed.

Negative Indicators

The following species are likely to be present on your site and represent those species which may tend to increase if soils, other conditions or management are not ideal.



Creeping Buttercup - There are several Buttercups, all with the familiar yellow flowers and the divided leaves, but only the Creeping Buttercup is really undesirable, being characteristic of disturbed or trampled places on rich soils. The leaf has a distinct stem-like portion between its three main lobes.

Not to be Confused with: **Meadow Buttercup** - a desirable species, is a taller, much branched plant in which the leaves are quite finely divided and lack the stalk in the middle.

Another similar species is **Bulbous Buttercup** which lacks the runners and has backwards pointed sepals in the flowers and grows in dry meadows.



Ragwort* - A vigorous plant, thought of as a biennial but sometimes taking several years before flowering, when it becomes up to 4 ft (120 cm) tall

Leaves & Stems: spirally-arranged leaves, with bases clasping the stem, are deeply cut into two rows of narrow, toothed lobes

Flower: cluster of cheerful, yellow, daisy-like flower heads, each 1/2 to 1 inch (1.5-2.5 cm) across.

Not to be Confused with: **Oxford Ragwort** - common in bare waste places and is shorter and more diffuse in flower

Marsh Ragwort - larger flowered and found in wet pastures. Terminal lobe of the leaf much larger than the rest



Creeping Thistle* - a perennial with long, vigorous underground stems which can form extensive and very prickly patches in grassland if ignored. Associated with disturbance, over-fertile soils and, in pastures, with over- or under-grazing. The leaves are usually hairless and quite glossy above, (downy beneath) with a wavy and strongly spined margin.



Spear Thistle* - a biennial rather than a perennial, i.e. it dies after flowering, so that in theory it is easier to suppress than Creeping Thistle.

Not to be Confused with: **Marsh Thistle** - desirable species, occurs in wet grassland. It is a biennial, like Spear Thistle, with narrower, deeply lobed leaves which are even more spiny, often with purple spines.



Broad-leaved Dock* - found in disturbed, fertile soil, often growing with nettles. It's a tenacious perennial weed with deep, woody tap roots. The leaves are heart-shaped at the base and the base of the leaf stalk has a transparent sheath.

Four of the species (asterisked above) are classified as nationally 'Injurious Weeds of Agriculture', which agricultural landowners under some circumstances can be compelled to control! More information: <http://www.naturalengland.org.uk/ourwork/regulation/wildlife/enforcement/injuriousweeds.aspx#advice>

This ID sheet is intended as a guide only. You will also find it useful to have an illustrated Flora to refer to for more information.