The Reason & Method

behind my paintings

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Hold nature in your hand and take a look at the intricate beauty within. Treasure our wildflowers.

It's so easy to just walk by...

JACKIE ISARD

My special thanks must go to:

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Meadow (The Wildflife Trust of South and West Wales)

The Reason

The following statement shocked me:

There were once natural wildflower meadows in every parish – today only 2% of the meadows that existed in the 1930's remain. Nearly 7.5 million acres of wildflower meadow have been lost so far and they are still being destroyed. Of those that do survive, around 75% occur in small fragments and remain vulnerable to destruction."

- Save our Magnificent Meadows

There are over 1,370 species of insects who use our wildflowers as larval food plants and feed from them. These include pollinating bees, butterflies, moths and hoverflies. The Marsh Fritillary butterfly larva feeds almost exclusively on Devil's-bit scabious, so this butterfly will survive or become extinct depending on the prospects of its food plant. Without these important species our pollinators would not survive. Along my journey I have learned about the England Red List of Vascular Plants. Among the listings are an astonishing number of wildflower species which are in decline or extremely vulnerable to extinction. *It really opened my eyes!*

The decision to paint wildflowers started with the discovery of the organisation *Plantlife*. As I learned about their work, I developed a great interest in native wildflower and pollinator decline. I began to realise I had left nature behind during my working career as a graphic designer and needed to revisit it as a botanical artist. As a botanical artist I can express the beauty of nature with my paintbrush and by doing this, I hope viewers will recognise the importance of these plants and insects that are so essential to biodiversity.

For my exhibition theme I have selected wet meadow wildflowers because they are under threat due to intensive farming methods and the draining of floodplains. I composed all of my paintings to express each plants life cycle and their importance to pollinating insects.

I always wonder why each painting I make seems so complex and challenging. Every little botanical detail in nature is so unique and intricately designed. Revealing this beauty on paper in accurate detail is extremely uplifting and rewarding. It is possible that I may be painting a species which isn't long for this world. I hope not!

The Wildlife Trusts, HRH Prince Charles' Coronation Meadows Project, Plantlife Conservation Charity, Save Our Magnificent Meadows, Floodplain Meadows Partnership and many organisations help to improve our wildlife habitats today. Thankfully, there are organisations and charities out there who work hard to protect what we have left as well as campaign to introduce new wildlife strategies which will protect biodiversity.

'Where wildflowers lead, nature follows'
Plantlife

The Journey

A few years ago in 2016 I began to develop a passion for British native wildflowers. This made me realise just how important meadows are to the environment and our pollinators. My research journey took me to many nature reserves, meadows, verges and



fields to view wildflowers in their native habitats. I felt it important to view species in their actual habitats to learn about them and to ensure my paintings were accurate. I was in awe of the beauty surrounding me and it took me a long time to decide which types of wildflower I would choose. As you can imagine, it was very hard to narrow it down to only six plants!

I was very drawn to the first wildflower I encountered whilst on a dog walk in our back fields. This was *Cardamine pratensis* (Cuckooflower). I would say whole heartedly that this was the plant that inspired me to choose wet meadow wildflowers.

I have been particularly inspired by the beautiful illustrations of native British wildflowers by Stella Ross-Craig. I have tried to ensure my paintings are accurate as well as telling the story of each plant and decided to use a scientific approach for each composition, recording each plant through the seasons. I selected six wet meadow wildflowers and started to research each one thoroughly.

Most of my chosen species are larval food plants and very important for the survival of particular pollinators. The others, as with many wildflowers, need bees, butterflies, hoverflies and other insects to ensure procreation of their species.

Method: Botany learning and study

My knowledge of wildflowers and botany was very basic before I started this project. My first endeavour was to visit lots of meadows and nature reserves to learn more about wildflowers and their natural habitats. This journey began at Bannerdown Common and the Scottish Highlands whilst on holiday. After this I visited various places in the South West UK, Wales, Gloucestershire, Wiltshire and Worcestershire. A great deal of research ensued and I began to acquire a lot of books too!

Before I began to draw each plant for my exhibition, I needed to understand the botany and lifecycle of each one. A great deal of time was spent hunting for my six chosen species in order to study them in their natural habitats through the seasons. I noted their botany, recorded colours, dissected parts and studied smaller details under a microscope. All this information was recorded into my botany notebook (see images on the next pages).

I learned about herbarium archives and throughout the seasons I began to collect and press pieces of my chosen species to add to my notebook.

For each composition I discussed my drawings with botanist Liz Leech, who helped me to ensure that I had accurately drawn every feature of each plant correctly. I cannot thank her enough for all her encouragement and teaching.

My botany notebook pages



Cardamine pratensis



Silene flos-cuculi

My botany notebook pages continued

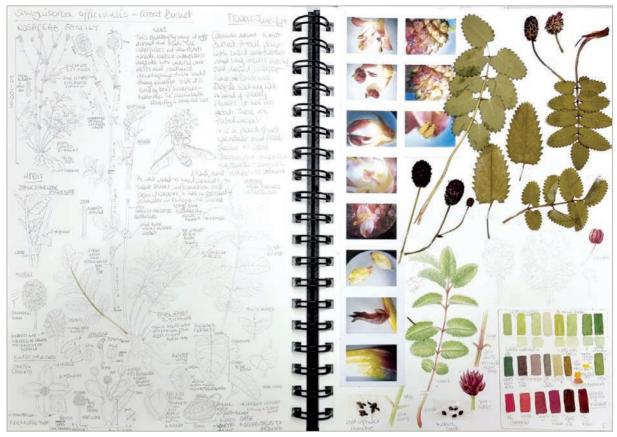


Geum rivale



Succisa pratensis

My botany notebook pages continued



Sanguisorba officinalis



Lotus pedunculatus

Working with live plants



Cardamine pratensis



Silene flos-cuculi



Geum rivale



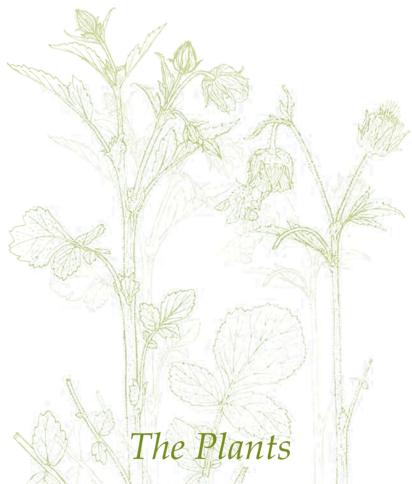
Succisa pratensis



Sanguisorba officinalis



Lotus peduculatus



The following pages give more information about the plants I have chosen for my exhibition.



1 Cardamine pratensis

Genus: Cardamine Family: Brassicaceae Flowering time: May-Jun Height: up to 60cm

Cardamine pratensis (common name Cuckooflower) is a plant of riversides, farm ditches and damp meadows. It is named Cuckooflower as it comes into flower around the time the Cuckoo arrives in May. It is also know as Lady's smock or Milkmaid. The name *Cardamine* means of the bittercress family and *pratensis* means 'of meadows'.

Folklore:

In folklore people believed that picking it would attract adders and the person picking it would be bitten before the year was out.

Medicinal qualities:

The English botanist Nicholas Culpeper, in his 'Complete Herbal' of 1653, advised about Lady's smock "...they are excellently good for the scurvy, they provoke urine, and break the stone, and excellently warm a cold and weak stomach, restoring lost appetite, and help digestion."

Related pollinator:

Cardamine pratensis is the main larval food plant for the Orange Tip butterfly (Anthocharis cardamines). Orange Tip butterfly larvae will devour the whole plant including the seed pods. However, this plant is viviparous, shooting out new plants from bulbils on its basal leaves. It will even reproduce in this way from leaves that have broken off the plant.

2 Silene flos-cuculi

Genus: *Silene*Family: Caryophyllaceae
Flowering time: May-Aug
Height: 30-70cm

Silene flos-cuculi, previously known as Lychnis flos-cuculi, (common name Ragged Robin) is a plant of riversides and wet meadows. This plant has many nicknames such as Meadow Spink, Crow Flower, Shaggy Jacks, Thunder Flower and Cuckooflower. The latin name 'Silene' comes from the Greek woodland god Silenus often depicted as drunk and Flos-cuculi means 'Cuckooflower' which is appropriate as, like Cardamine pratensis, it flowers around the time the Cuckoo bird starts to sing.

Folklore:

Plants with the name Robin are often linked to goblins and evil in folklore. It was considered unlucky to pick the flowers and take them into the house.

Medicinal qualities:

David Allen and Gabrielle Hatfield in their Medicinal Plants in Folk Tradition (2004) note a solitary record, from Cardiganshire, of an ointment made from Ragged Robin used to treat snakebites. The root contains saponins which humans once used as a soap.

Related Pollinator:

Ragged Robin is a good source of nectar for long tongued butterflies such as the Common Blue butterfly (*Polyommatus icarus*). I have chosen to illustrate *Polyommatus icarus* (Common Blue) butterfly for this plant.

Geum rivale

Genus: Geum Family: Rosaceae

Flowering time: May-Sep Height: up to 50cm

Geum rivale (common name Water Avens) is a plant of riversides and wet meadows. It is common in northern Britain and beginning to appear more in the south. Also known as Nodding Avens, Drooping Avens, Cure-all, Water Flower and Indian Chocolate. Geum comes from the Greek word 'geno', which means 'to give off a pleasant fragrance' and rivale means 'growing by a brook or water'.

Folklore:

Water Avens was found to kill or slow the growth of bacteria, viruses, protozoans and fungi. It is said that it was used against the plague in the Middle Ages.

Medicinal qualities:

The root is anti-inflammatory, antiseptic, aromatic, astringent, reduces fever, assists digestion and can stop bleeding. It can be applied externally for various skin problems. The root is rich in tannin.

Related pollinator:

Geum rivale provides a rich food source for solitary bees and early bees, who sip its nectar and pollinate the flowers. The seeds have hooks which catch onto passing animal fur. It is the larval foodplant of the Geum Sawfly (Claremontia waldheimii). I have chosen to illustrate Bombus pascuorum (Common Carder bee) for this plant as the Geum Sawfly is only 5.5mm long!

4 Succisa pratensis

Genus: Succisa Family: Caprifoliaceae Flowering time: Jul-Oct Height: up to 100cm

Succisa pratensis (common name Devil's-bit Scabious) is found growing in moist to moderately free-draining habitats such as wet meadows. Also known as Bobby Bright Buttons or Blue Bonnets. The name 'scabious' is derived from scabies which this plant was said to help cure. The name Succisa means 'to break from the bottom' and pratensis 'of meadows'.

Folklore:

This plant has short and stubby roots. In the past it was believed that the devil grew angry about this plants medicinal properties and tried to get rid of it by biting the roots off. The short vertical rhizome has an abscission layer which allows the end to break off in the Autumn.

Medicinal qualities:

Nicholas Culpener (1650) wrote: "Succisa, Morsus diobolo, Devil's Bit. Inwardly taken it easeth the fits of mother, and breaks wind, taketh away the swellings in the mouth, and slimy phlegm that sticks to the jaws.....this herb is bruised and applied to them."

Related pollinator:

It is the main larval food plant for the very rare Marsh Fritillary butterfly (Euphydryas aurinia) and the Narrow Bordered Bee Hawk-moth (Hemaris tityus). I have chosen to illustrate the *Euphydryas aurinia* (Marsh Fritillary) butterfly for this plant.

Sanguisorba officinalis

Genus: Sanguisorba
Family: Rosaceae
Flowering time: July-Aug

Height: 50cm- 100cm

Sanguisorba officinalis (common name Great Burnet) is a member of the Rosaceae family. It is a tall perennial with many odd pinnate basal leaves. In the field it resembles lollipops as the oval shaped inflorescences rise high on stems above the basal leaves. Another common name is Burnet Bloodwort.

Medicinal qualities:

Great Burnet was formerly used to heal wounds, hence its name 'sanguisorba'. 'Sanguis' meaning blood and 'sorbeo', to drink or absorb. The leaves and roots are used in the treatment of fevers, bleeding, inflammation, peptic ulcers, haematuria, menorrhagia, bloody stool, dysentery, diarrhoea, haemorrhoids, burns, scalds, sores and skin diseases. Lyte (1578) mentioned this plants ability to slow bleeding even if 'the herbe alone being but onely holden in a mans hand'.

Related pollinator:

Great Burnet is pollinated by bees, hoverflies and flies. I have chosen to illustrate *Eupeodes latifasciatus* (Meadow Field Syrph) hoverfly for this plant as I have seen it on Great Burnet and it is a hoverfly which frequents wet meadows.

Great Burnet is also the host plant for the Dusky Large Blue (*Phengaris nausithous*) and Scarce Large Blue (*Phengaris teleius*) butterflies. They lay their eggs around the buds and the caterpillars eat the florets and developing seeds. The mature caterpillars migrate into nearby ant nests and develop there by eating ant larvae until they emerge as butterflies.

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Lotus pedunculatus

Genus: *Lotus*Family: Fabaceae
Flowering time: Jun-Aug
Height: 50-75cm

Lotus pedunculatus, formerly Lotus uliginosus, (common name Greater Bird's-foot Trefoil) is a plant of damp grassland, marshes and wet meadows. It spreads mostly by stolons underground and less by seed. Unlike related species the stem is hollow and the bottom sepals curl back at their tips. Other names include Big Trefoil or Marsh Bird's-foot Trefoil (Lotus uliginosus). This plant is of the Fabaceae family, that include legumes, peas and beans. Uliginosus means 'of marshes or bogs' and Pendunculatus means 'with a peduncle'.

Folklore:

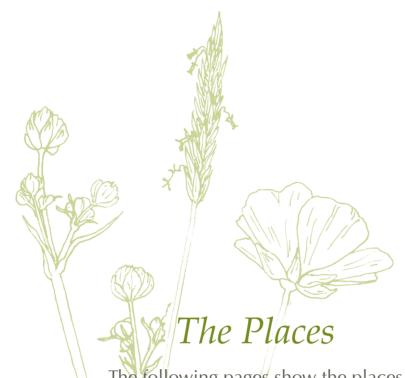
In folklore sadly there is very little that relates to Greater Bird's-foot Trefoil but Bird's-foot Trefoil (*Lotus corniculatus*) was often associated with evil because of its claw-like seed pods, that were said to resemble devil's fingers or crow's feet.

Medicinal qualities:

None. It is, however, a fodder/animal feed plant and a field legume that has nitrogen fixing nodules on its roots.

Related pollinator:

It is the larval food plant of the Wood White Butterfly (*Leptidea sinapis*) which lays its eggs on the underside of the leaves. This plant also attracts breeding butterflies such as the Common Blue (*Polyommatus icarus*). I have chosen to illustrate *Leptidea sinapis* (Wood White) butterfly for this plant.



The following pages show the places which have inspired me to learn and select subjects for my final exhibition paintings.

I have been working on this project for a period of five years.

Bannerdown Common

Bannerdown Common, Batheaston near Bath

First inspiration & initial learning

The place where I first started to learn about wild orchids and other wildflowers.

Bottom photos: Pyramidal Orchid (Anacamptis pyramidalis), Bird's-foot Trefoil (Lotus corniculatus), Yellow Rattle (Rhinanthus minor), Heath Spotted Orchid (Dactylorhiza maculata), Wild Marjoram (Origanum vulgare)



Crickley Hill Country Park Crickley Hill Country Park, Gloucestershire

More Inspiration and learning

At this point I was trying to decide which meadow natives to paint. I was contemplating Sainfoin (Onobrychis viciifolia), Field Scabious (Knautia arvensis) and Harebell (Campanula rotundifolia) and found them all here.







Almondsbury community field Almondsbury, North Bristol

Habitat: Cuckooflower (*Cardamine pratensis*)

I walked my dog here for 3 years before noticing this field was growing into a young meadow!

Photos: Cuckooflower (*Cardamine pratensis*), Selfheal (*Prunella vulgaris*), Tufted Vetch (*Vicia cracca*)







Scottish Highlands

The Scottish Highlands

Habitat: Ragged Robin (Silene flos-cuculi)

A holiday which enthused me to look out for more wildflowers wherever we went.

Left to right: Ragged Robin (*Silene flos-cuculi*), Early Purple Orchid (*Orchis mascula*), Common Cotton Grass (*Eriophorum angustifolium*), Lousewort (*Pedicularis sylvatica*)









Eades Meadow

Eades Meadow, Worcestershire

Habitat: Devil's-bit Scabious

The first time I ever saw a Bee orchid!

Photos: Bee Orchid (*Ophrys apifera*), Devil's-bit Scabious (*Succisa pratensis*)







Alveston to Old Down walk

Alveston to Old Down walk, North Bristol

Habitat: Cuckooflower (*Cardamine pratensis*)

The first time I ever saw a Green Winged Orchid (Anacamptis morio)! A hybrid version of Devil's-bit Scabious confused me!

Photos: Cuckooflower and Orange Tip butterfly (*Cardamine pratensis and Anthocharis cardamines*), Devil's-bit Scabious subsp., Green Winged Orchid (*Anacamptis morio*)









North Meadow Cricklade

North Meadow Road, Cricklade, Wiltshire

Habitat: Snake's Head Fritillary (*Fritillaria meleagris*)

Here I was on the hunt for Snake's Head Fritillary until I discovered it was not confirmed as a British native plant.







Pen y Waun

LLechfaen, Brecon, Wales

The tiniest meadow I have ever visited and the hardest to find. I was on the hunt for Devil's-bit Scabious, sadly to no avail.

Photo: Germander Speedwell (*Veronica chamaedrys*)







LLanmerewig Glebe

2 Belverdere Cottages, Abermule, Wales

A visit to a lovely meadow full of wildflowers and insects near a place I was staying in summer 2021.







Olbury Nature Reserve

Olbury-on-Severn, Bristol

Habitat: Southern Marsh Orchid (*Dactylorhiza praetermissa*)

I was preparing a painting for ABBA Reflections exhibition of the Southern Marsh Orchid and this was the place I found them.

Left to right: Pyramidal Orchid (*Anacamptis pyramidalis*), Field Restharrow (*Ononis arvensis*)







Great Traston

Great Traston Meadows, Newport, Wales

Habitat: Greater Bird's-foot Trefoil (*Lotus pedunculatus*)

The first time in my life I saw Grass Vetchling (Lathyrus nissolia), what an exciting colour! The insects were wonderful to see too, a blue lacewing and a nursery spider web.

Bottom photos: Nursery spider web (*Pisaura mirabilis*), Early Purple Orchid (*Orchis mascula*), Blue Lacewing (*Chrysopa perla*)















Trewalkin Meadow

Trewalkin Meadow, Pengenffordd, Wales

Habitat: Great Burnet (*Sanguisorba officinalis*), Water Avens (*Geum rivale*), Devil's-bit Scabious (*Succisa pratensis*), Cuckooflower (*Cardamine pratensis*), Ragged Robin (*Silene flos-cuculi*)

Five of my chosen species live in this delightful, small managed meadow.

Bottom two photos: Wood Betony (*Stachys officinalis*), Yellow Rattle (*Rhinanthus minor*)

















