

Transcript of Talk by Joseph Ford – Bohemia Walled Garden Summer Open Day 20 May 2018

Hi everyone! My name is Joseph Ford, I was born down the road in the Buchanan hospital and my family have been in Hastings for a while with my great great uncle Arthur Blackman having set about some of the restorative planting of Alexandra Park with Logan Edgar of Coghurst Camellias. Whilst this was going on the other side of my family were moving to Northiam with their household to help in the creation of Great Dixter, where they stayed for many years in the service of the Lloyds. My great grand-parents were the house keeper and head gardener.

My associations with wildlife gardening would be that I have been lucky enough to grow up in this area on the family farm out by Battle and experience wildlife at its most raw and truthful. I then started my own horticultural consultancy business and have been lucky enough to study at RBG Kew Gardens and The RHS Garden Wisley and garden with gardeners like Christopher Lloyd and Sarah Raven amongst others.

I'm going to be talking to you about how to wildlife garden more effectively to better attract and sustain insect wildlife in your garden. We are going to talk about the local insect wildlife that you can expect to see in this area and why we want to encourage it into our gardens. We will explore briefly the existing ecosystem, already set up, so that we can understand the background habitats of these invertebrates and what we can expect to see.

If you'd like to ask questions I will be taking them at the end of the talk.

In order to garden for wildlife, we should first look at the existing native or endemic wildlife and focus our efforts on attracting what is here already in healthy proportions. It's all very well planting up your garden with Lupinus perennis, the wild blue Lupine, because you've seen it being used at Chelsea, and it's said to be great for wildlife, to attract the Kirks Blue Butterfly *Lycaeides melissa samuelis*. But I doubt you will manage to coax the little butterfly the three and a half thousand miles across the north Atlantic from its native distribution in North America.

As my friends at Dixter say when they begin a new meadow cultivation, if you start the culture first, you may be surprised as to the diversity of the native flora and fauna that springs up already latent in your garden.

The area has a lot of different ecosystems within it, mostly of deciduous woodlands and pasture land, with some heath, and of course coast line, marsh, river and estuary, all on good Sussex clay soil with some sandstone seams running through it. As such the biodiversity here can range from the bog standard urban fox to garden rabbit to the quite exotic European swallowtail butterfly, *Papilio machaon subs gorganus*, due to the Hastings coastlines proximity to the continent. We have warm wet summers and warm wet winters now, and many organisms are thriving in these conditions.

Native insects in our area include the charming Orange tip butterfly *Anthocharis cardamines*. This lovely butterfly is one of the earliest of the spring to emerge and often flies all over England during the spring and summer. Its name actually gives some indication of which plants it likes to feed on, 'Cardamines' means of the cardamine, and this genus of plant is widespread throughout this area in the species *cardamine pratensis*, the Lady's Smock or Milkmaids. This is a lovely spring flower and grows in damp woodland and wet meadow or on verges and hedgerows, and with a little skill you can encourage it to grow in your lawn or shady borders, making a welcome beautiful spring flower, and it will in turn provide the Orange Tip opportunity to frequent your garden for nectar and larval food.

Yes - larval food is often forgotten. We always hear we should be planting trees, shrubs and perennials with masses of 'Butterfly and Bee friendly' flowers for insects to feed on for pollination, though we forget sometimes that the juvenile insect may require a different, less attractive plant to feed upon. As with Peacock butterflies *Aglais io*, whose larva will eat Nettles *Urtica dioica*, this is the case but unless you have a large garden and can afford space for a nettle patch, it's not the best thing to grow near your herbaceous borders. So why not experiment with the caterpillars other food plants, the common hop or a more attractive alternative a golden cultivar of the hop like *Humulus lupulus 'Aurea'* or the cultivar 'Golden Tassel' which is used commercially to brew with. These interesting vines would then not only make an attractive climber in your garden visually with their yellow leaves and iconic female cones, but they would also give rise to bines, the cut vines with leaves and flowers, that can be cut for decoration and can also be used for other ethnobotanic uses.

By planting not only the adults' preferred food plants but also the larval stages' food plant, we create an environment more closely attuned to the creatures' natural habitats, and then there is the incentive for these animals to frequent our gardens more often. A habitat provides all of the physical and biological needs of an animal, though in nature, untouched by man, we often do not see the markers for a particular habitat, or are unable to see the animals within those habitats. But as

gardeners we can orchestrate and design our garden layout and our planting to not only be conducive to the requirements of the animals we wish to attract, but to showcase those animals within a human made stage, to be able to view these creatures from the comfort of an armchair through our windows.

The obvious lifestyle choice here is one that nearly every homemaker has in their lawn, the bird feeder. Very popular and likely to attract in this area birds like the blue tit, bullfinch, long tailed tits, robins, woodpeckers, goldfinches and nuthatches - seed eaters or opportunistic birds who relish the use of a bird feeder all year round. Though consider comparing buying seed in for these birds with growing *borago officinalis* (borage starflower) or *cerinthe major* (honeywort) in any great number. You will soon realise that not only do the amazing blue flowers attract all the bees in the area but that the subsequent seed in the autumn are stripped by flocks and flocks of goldfinch, which is testament to the bees hard work at pollinating the plants in the first place and shows that one plant can have more than one uses in the garden.

For biodiversity, I tend to interplant plants with high pollinator attractiveness like the borage and *cerinthe* alongside fruiting and seeding plants that myself or my family can benefit from. With regard to my borage and *cerinthe* patch, it's also full of *limnanthes douglassii* (poached egg plant), *phacelia tanacetifolia* (scorpion weed), *nicotiana mutabilis* (tobacco plant), *calendula officinalis* (pot marigold), *viola tricolor* (heartsease) and *digitalis purpurea* (foxglove).

Each one of these plants attracts a wide array of pollinating insects, and as such their presence in a localised area can be utilised by interplanting this area with a canopy of fruit and nut trees, a sub canopy of fruit shrubs, and finally a herbaceous layer of vegetables - all of which will benefit from better pollination. In fact, if you have seen a misshapen pear or apple, it is in some cases a direct consequence of that particular fruit not having been correctly pollinated whilst it was still in the flower stage of development. If not enough pollen is brushed against the surface of the stomata and the individual seeds within the fruit aren't pollinated (one pollen grain fertilises each individual seed), the surrounding fleshy fruit will not swell and ripen evenly.

Echiums are another splendid pollinator attracting plant. Our native viper bugloss *echium vulgare* grows up in Hastings Country Park on sandy soil, and we are also lucky enough to have *echium pininana* growing here within the walled garden itself, all the way from the Canary Islands. It's a plant in the family boraginaceae, and many of the boraginaceae plants are so good at attracting

pollinators because of their blue flower colour which insects can easily see in their spectrum of sight and because of their hefty reward of nectar and pollen.

The wonderful advantages of these pollinator friendly plants are that they act as many different roles within a garden not just attracting pollinators:

By self-seeding everywhere they help to suppress other weed species that can carry pests and diseases and rob the plants we want of their nutrients.

Self-seeding everywhere, these plants fill gaps in planting schemes and arrive in locations you wouldn't have thought could - or should - be planted, making pleasant accidents.

As these species are all hardy annuals or bi-annuals, they will often self-seed year after year in your garden and usually produce a couple of generations within a year. The overwintering plants will flower earlier next year.

So fill your fruit or vegetable garden with these companion plants and you are ticking a lot of biodiversity boxes which will increase the wildlife in your garden.

Bees are quite happy to consume only pollen and nectar as a food source, for both larva and adult alike. Other insect species, butterflies for instance, will require plants where the adult and larva can feed on separate organisms.

I want my garden to be full of useful biodiverse plants though. As such what I have done is researched the insects I am likely to attract in the area, (as I've said before) then sourced the adult phase nectar plant, usually the plants with the showy people-pleasing flowers. I have then researched the insect's larval stage food plant also. Where I have found a plant that isn't particularly attractive as a larval food plant, I have used my horticultural knowledge to broaden the use of this plant species to some of its many better cultivars for different uses, so that we do not have to put up with an oversized or thuggish plant in the garden without it being useful.

William Morris once said "Have nothing in your house that you do not know to be useful, or believe to be beautiful."

Let's open this up with some examples I've found:

The holly blue butterfly *Celastrina argiolus*, will most likely be attracted into parks and gardens anyway and so is a good example to use. As the name suggests the larva feeds from the holly tree, (*Ilex*) in spring and ivy (*Hedera helix*) in summer. But why sacrifice a vast area of garden to a massive holly tree and overgrown ivy, when some of the more attractive cultivars of both genus could be used: the holly blue butterfly prefers female holly plants and therein, gives us the opportunity to plant a lovely berry bearing tree also: cultivars like 'Argentea Marginata', 'silver mermaid', 'Golden King' and the ivy 'Ceridwen', 'Golden Ingot', 'erecta'. These cultivars have many architectural qualities as well as year round interest with their variegated leaves and can be pruned hard in late March to fit even a small space, as a standard perhaps.

Another example, the Purple Emperor butterfly flies all over England and is seldom seen at ground level, though it will come down to lay its eggs at all heights from the canopy on *Salix caprea*, the common goat willow or pussy willow. *Salix caprea* is a big tree or shrub and not all of us have space for a mature sized specimen. Though consider coppicing the plant, the act of cutting down all growth to ground level each winter. Not only do you provide the butterfly with ample fresh green leaves every year to lay eggs on, but when you come to cut off all the shoots in winter and dry them, you also have a never-ending supply of plants supports, from pea sticks to full on wigwam structures.

It is my hope that we can banish the old style of wildlife gardening of keeping an untidy garden or overgrown garden which is confusing and doesn't display the plants to any visual benefit, and actually manage the aesthetic of our gardens to better suit us whilst still ticking as many of the boxes for the biodiversity of many other wildlife species.

The brief information I have just given you is only the beginning phase of researching your local wildlife species, discovering their particular habitat requirements and adapting those requirements to better suit a garden environment.

Using the examples I have talked about, try imitating for yourselves how I have described them in your gardens at home and be creative and think laterally.

The walled garden has:

Mellissa (lemon balm)

Achillaea (sneezewort)

Sedum (ice plant)

Digitalis (foxgloves)

Geraniums

Symphytum (comfrey)

Pulmonaria (lung wort)

Echiums

Alcea (hollyhocks)

Astrantia

Sisyrrinchium