Keep Meadows Special Campaign

This Black-tailed Godwit is approaching its nest in a meadow.
If this meadow was grazed, mown, spiked, rolled or sprayed
with slurry at the crucial time of year, the eggs/young
along with everything else would be destroyed.

By highlighting this truly obvious opening statement we focus on a problem that's largely overlooked or not considered at all by most landowners these days. Ever since their creation meadows have been the lifeblood for all kinds of plant, insect and bird species, and are essential breeding and feeding places that should never had been taken for granted.

Meadows are basically grassy places, on the chalk, limestone, sunny slopes, floodplains or even in some of the most unlikely places such as some of the out of the way town verges or playing-fields etc. **Any grass habitat that contains a variety of natural plant communities, some of which might be rarities, is a meadow.** It's not altogether true either that 97% of them were destroyed. In the East of the country they were indeed mercilessly sprayed and ploughed out of existence and replaced with cereal crops or developed upon, but in the uplands of the North and the West this did not occur quite so much. It's just that the management there changed so horrendously as to render them effectively no longer proper meadows in the real sense of the word. But by returning to the more traditional management techniques these places could flourish once again.

The main problem is that meadows are largely underestimated and undervalued, and the boarder-lines between management, mismanagement to outright abuse are so frequently crossed as to have become largely unquestioned. Modern agriculture has seen fit to abandon these tried and tested principles of traditional management, with typically, slurry being sprayed in mid-March, spiking taking place in April, rolling in May, hay/silage-cutting from May onwards, complete with nitrate fertilisers or perhaps some herbicides being squirted around in July. It's the same old story, ever lusting for more and more yields and farmers know best, with procedure after procedure and an ever impatience for getting things done. Military campaign styles of farming, with no windows for nesting birds or for very much else either. Things differ of course very much from farm to farm, each one with their own ideas of what should be done, and some without doubt have better practices than others, but generally the focus is on the business side of things, with conservation if considered at all, coming in a very poor second.

The ultimate assault of course has long been herbicides followed ploughing and the replacement of natural vegetation with rank commercial grasses. With livestock munching away throughout the flowering season, early cutting and the use of fertilisers, all coming in as joint seconds. Many sites have been nibbled out altogether and the higher fertility has resulted in the smothering out of what's left. And with plants not seeding from one decade to the next together with everything else it's not difficult to see what the problems are. **Even very low-density levels of nibbling at the critical time of year will have its detrimental effects. The results to the less discerning eye may not be that obvious, there may still be plenty of buttercups as these are less palatable, but anything else a bit more tasty would be nibbled out altogether and there really is no doubt about it.** And that would include many of the more interesting plants such as the orchids and gentians etc., and of course any birds eggs or chicks would stand a good chance of being trampled upon too. **And even where sites are officially recognised SSSIs., under the control of the authorities in charge of overseeing their management what's more, our observations have shown the treatment of these places to be at best lacking to downright abysmal.** More about this later on.

Anyway, let's get on with how we might **assess** each site on an individual basis before moving on to the **management** side of things.

ASSESSMENT:

In order to simplify, **we'll divide meadows into four different categories; A,B,C & D.** Always be mindful that in most cases nibbling or cutting will belie any value and that proper assessments can generally only be made when a site is in an uncut/ungrazed state.

Grade A. Any of the following:

1. Sites with an outstanding cross-section of characteristic plants and insects.

2. Sites that contain any Orchid, any Gentian, Pasque Flower, Snake's head Fritillary, Adder's-tongue Fern, or any other national rarity.

3. Sites where certain birds are known or suspected of breeding such as Corncrake or Black-tailed Godwit or any other national rarities.

4. All sites situated within the floodplains.

5. Many sites situated on the chalklands.

Meadows with any one of these qualities or multiples of them should be given full protection where only nature reserve status will do.

Grade B. Meadows with a fair to good cross-section of characteristic plants, insects and nesting birds.

Grade C. A poor cross-section of plants, insects and nesting birds.

Grade D. The poorest of all grasslands; a mixture of Rye Grass and Broad-leaved Dock.

MANAGEMENT:

Meadows, Grades A & B. Healthy meadows thrive on impoverishment, and integral to this lies within its management. Real **meadow management is about** taking a relaxed approach, **leaving things completely alone for the whole spring and summer,** followed as and where appropriate by a cut at the end of August. By that time the plants and everything else have done their job, the flower seeds have ripened and the birds have brought up their broods etc. A cut at the end of the season reduces fertility and allows the sunlight to reach through to the germinating seeds which would otherwise have been smothered in the long grass and it's these simple basic systems of management that has enabled meadows to work so well both for us and for so many other species ever since their creation.

A particularly rich site covered in Green Winged Orchids.

Where the fertility's about right (a short less than green sward), **a simple autumn and winter graze is probably all that's required. Where the fertility's higher** (a taller green sward of ranker grasses) **a hay cut and removal at the end of August is appropriate, followed by autumn and winter grazing.** Hay-cutting reduces fertility as well as providing a useful crop and it should be noted, by the same token, any hay supplements provided will increase the fertility of a site by a factor of whatever's put on it. Slurry, nitrates and herbicides should positively never be applied to a real meadow. **Remember too that if you're destroying more wildlife than you're actually helping it is counterproductive.**

How this type of management would work practically on a productive farm of today? Well, grass needs resting and livestock needs autumn and winter grazing. So by combining the two needs there's no reason to assume it wouldn't work extremely well on both counts.

Meadows, Grades C & D. These are the ones that can be used at any time, although it should be remembered that most ground-nesting birds will breed in all kinds of grassy places; ungrazed land will always attract them as a potential breeding site. **Where birds are known or suspected of nesting, a delay in cutting by few weeks or even a day or so, can make the difference between life or death to a developing fledgeling.** Certainly a mid-July cut is far better than an early June one, by way of example, assuming no other 'procedures' have occurred in the mean-time, birds would have brought off at least some broods by then.

As a simple analogy, if a tractor were driven through a maternity unit, crushing or fumigating all the babies inside, there would be a public outcry and rightly so. But this is what's happening year in and year out every time a field containing eggs or nestlings is worked. Where are all the Skylarks many might be wondering and why are they doing so badly. No mystery of course, they're all getting flattened! And that's the reality of things.

So let's now take a look at what's occurring within our SSSIs. These are the country's most precious and recognised wildlife sites which are either owned by the various wildlife groups themselves or are in the hands of private landowners. In the case of the latter it is then up to the appropriate government conservation authorities to make any decisions concerning their management. Whatever happens to these places should be the standard, the pinnacle if you like, of how wild sites should be managed everywhere. But as we are finding more often than not this is the reality of what actually happens.

This is a meadow.

This by contrast is an example of one such SSSI. under the management of a local authority.

Grazed throughout the entire year with rare plants nibbled and birds' eggs trampled on.

Or in the same area but managed by a different landowner cut for hay right in the middle of the breeding and growing season.

Just to remind, these are SSSIs., our very best wildlife sites, in which rare plants and other species should be given the best possible guaranteed protection. The main worry is of course that this is what's being replicated throughout the country and indeed the world. And it would be blissfully naïve to assume otherwise.

At the end of June the sward should be much taller and this particular SSSI. site should be peppered with Heath Spotted Orchids and other wild flowers.

These two landowners insist, and not too kindly it has to be said, that there's nothing wrong and Natural Resources Wales, who have visited these sites on several occasions, also tend to agree with them. But here we have photographic evidence that this is not altogether the case.

But meanwhile and on a more positive note decent sized log-piles are being built.

Log-piles are an enormous benefit for hibernating amphibians, insects and fungi etc. and should never be underestimated. The inclusion of these is a recent and welcome trend for the management of the countryside, at least within the local area, and long may it continue.

TRANSLOCATIONS:

But anyway, as we've already said in the past ancient grasslands were ploughed and entire plant populations were lost and as a result of that many plants today are both rare and restricted. Needlessly so I think in so many cases and there others that are just plain beneficial either for insects or for the meadows themselves. **Most of these plants are sedentary, they don't have seeds that are either bird-sown or carried off by the wind, and only with intervention could these terrible policies ever be put right.** There are two basic methods for achieving this and both examples are given here.

The first, a technique pioneered by Dame Miriam Rothschild back in the 80s, **is to do it on mass, after hay-cutting has taken place, by abrading strips across an existing poorer quality meadow and then to drill it with seeds mechanically harvested from a nearby Grade A. meadow site.** This should of course be carried out on a local basis, respecting the principles of re-establishing locally acquired seed, observing soil-types, ranges and like for like habitats etc. And once done, the site should be managed in the appropriate way as has been described, otherwise there really is no point in doing this in the first place. Obviously too, before any real conservation projects like this can be considered at all, each place must be brought into ownership, it's simply not worth doing all that work in an unsecured site. And even where a site is sympathetically managed and protected, problems can arise in the event of a death or when a place is sold up. Basically whoever takes it over can do what the hell they like with it.

The transferal of seeds from one meadow site to another is not as new as we might think. In the olde days, unlike silage we know and not so much love today, livestock would have been fed hay throughout the winter months. **This hay would've been absolutely jam-packed full of seed from wherever source it may have came, and so, accidental rather than deliberate trans-locations, would have occurred quite routinely in any case.** And indeed would doubtlessly have played a major role as to why these places were so overbrimmingly species-rich in the first place. This, together with late cuts and winter grazing, would have created the best possible conditions for these seeds to have germinated and so for all these reasons the hay meadows really came into their own. And their usefulness and productivity didn't end there, all through the long winter months these places were inundated with seeds and were a feeding bonanza for the flocks of mixed finches we once had. **Nowadays, meadows receive their cut in early-mid July at the very best, and it will scarcely be later, but most grass-seeds don't ripen until August, all of which means there are hardly any seeds or sproutings throughout the winter for birds to feed on, and this is just another one of any number of considerations as to why a late cut is more productive than an early one.**

The **second** method, and this can be very useful too, is to **hand select certain seeds,** usually those **of restricted, uncommon or rare plants,** often growing them on in pots **for subsequent planting out.** The reintroduction of plants around the countryside is considered by many as being less than desirable, and for very good reasons too, you certainly don't want everyone broadcasting God-knows-what all over the place. But by working under some kind of license, harvesting seeds from various sites and relocating to other sites elsewhere can also be a good thing. So long as the work's carried out by experts, ie. people who know what it is they are doing, the re-locations are documented if only for the record, each plant's soil-type, range/former range and habitat taken into account, then surely it must be a positive thing to do.

Much of this discrimination is to the detriment of conservation and it seems to me there are those whose mission in life is to hold things up, veto, cast doubts and add as many complications as they can. Not content, they positively ridicule this work by calling it funny names like gardening or tinkering around, I'd just as sooner garden and tinker away than see species go extinct, but with deliberate and targeted reintroductions there can be many beneficial outcomes.

One such plant to have actually received some of this much deserved treatment, and a little late in my view, was the Lady's Slipper Orchid at its site in Yorkshire. A woodland species in this case and was restricted to just that one site down to a single plant; it had to be pollinated with a continental flower in order for it to produce viable seed. The resulting plants have now been transplanted into several sites in the area, the new colonies are still there although they've yet to flower. More recently however another plant has since been discovered on a golf-course in Lancashire which I suppose makes the earlier attempt a little less needed. Things should never had been allowed to have had this plant end up in the pitiful state it was in in the first place and intervention should've been made decades before. Anything like this however should only be carried out with the utmost care and where appropriate to do so.

For one of the most hideous example of what should never be done, we need look no further than the Spanish Bluebell, which, like some kind of creeping cancer, it's invading our native Bluebell populations at an alarming rate. Introduced as a garden plant of course with no consideration as usual as to what this was going to do to our rightfully belonging wild Bluebells. I think too there should be far greater concern about many of these packets of seeds being sold everywhere these days. All too often we find not even natively-acquired wildflower seed and padded out with commercial grasses which bear little if any resemblance to the natural plant communities.

Translocating when and where appropriate can however strengthen gene-pools. With the Snake's-head Fritillary, using this one plant as an example, entire meadows of them went under the plough in decades ago. It would therefore be only right to give them a helping hand and to get them back to the status they once had; especially when you consider the amount of newly protected sites that have been created since and that they are never going to make reappearances unassisted. Transferring Snake's-heads from a Suffolk site to an Oxfordshire one or vice versa would be a prime candidate for such a project.

There are a handful of other plants that come to mind and quite probably scores of others besides. **I was discussing this some years ago now about ways of propagating Late Spider Orchids, a very rare and very restricted plant, found only in two or three sites in Kent.** I was told all kinds of things like the presence of certain fungi were needed for germination to take place and that intervention of any kind was just about impossible. I've since heard however that Channel Tunnel spoil had been dumped in the sea, just below an Early Spider site (a very closely related species to the last), forming an area of bare chalk. **Seeds have since blown over this chalk and without grass to compete with, the whole place is now carpeted with Early Spiders and has now been declared a nature reserve.** It seems this fungus was probably a bit more abundant than was previously thought and given what's happened there, it must be possible, as an experiment if nothing else, to sprinkle Late Spider seeds onto potfuls of chalk, and if all goes well the young plants could then be transplanted to new sites in that area. And there are nature reserves from Kent to Purbeck that would benefit with plant donations from the Channel spoil dump site too.

I'm sure in the conservation world there are many missed opportunities and I think it's about time practices radically changed perhaps even by experimenting occasionally. It really is not good enough not to do every conceivable thing possible to save endangered plants from extinction and everything that can be done should at least be considered. There are scores of plants that would benefit from this work and some of these are listed below together with their locations and habitat requirements:

Various Gentians: See guide books for details.

Deadly Nightshade Atropa bella-donna: Sun-traps in scrubby places on the chalk and limestone.

Pasque Flower Pulsatilla vulgaris: Thames to the Humber; chalk and limestone slopes.

Woolly Thistle Carduus eriophorus: Rough, often rabbit-nibbled places on the tops of chalk or lime-stone hills and quarries.

Snake's head Fritillary Fritillaria meleagris: Thames and Suffolk; damp meadows and floodplains.

Various Orchids, especially:

Early Spider Orchid Ophrys sphegodes: Dorset, Sussex and Kent; chalk grassland.

Late Spider Orchid Ophrys fuciflora: E. Kent; chalk grassland.

Lizard Orchid Himantoglossum hircinum: S. England; chalk, limestone and sandy dunes.

Monkey Orchid Orchis simia: Kent and Chilterns; chalk grassland.

Yellow Rattle Rhinanthus crista-galli: Not a plant that needs any special treatment with propagation but one that's nonetheless worth a mention. A fascinating, semi-parasitic plant that no meadow should be without. To acquire them simply abrade the strips as described and drill in the seeds.

The Ghost Orchid, the holy grail of plants if you like, making an appearances every 10 or 15 years or so after lying dormant in our Beech woods. Populations of this plant are so few and so isolated this plant must by now have such a weakened gene-pool as to make its continued existence in the UK. uncertain. I personally would see nothing wrong in swapping genes from a Buckinghamshire site to a Herefordshire one etc., or perhaps even bringing over some continental specimens in order to strengthen things up a bit here. And whilst I agree it's important to recognise and protect regional variations wherever they occur in the world, if we hold onto things too preciously we run the risk of allowing plants like these to fizzle-out altogether, especially where isolation was caused by ourselves in the first place, ie. through the felling of woodlands or the ploughing of meadows etc. I think in some cases, this being one, there is room for debate. It wouldn't be an easy project but certainly not impossible for an authority like Kew to undertake.

Cornfield Weeds: It's a commonly misunderstood belief that these weeds have the self same requirements as every other plant. But do in fact have an entirely different type to those of meadow-plants and if they're to be grown successfully these are things that need to be known. People often buy these packets of seed mixes, they sow them in the ground, they come up along with all the other plants but within a few years the Ox-eyed Daisies and other plants are still around but the cornfield weeds will all have disappeared. What's not realised is these plants need a whole different regime of disturbed soil management that's ploughed on an annual basis and without this they simply do not compete with the grasses for much more than a year or two. The best method is to grow them, harvest the seeds, plough and harrow the field and then to drill the seeds straight back in, all of this taking place at the end of the season in the autumn. With all the chemicals doused on our fields these days, there really is an urgent need for these kinds of man-made nature reserves in order to prevent many of these plants from dying out altogether. And as with the other plants, we have those with different locations, soil-type requirements and all of these things need taking into account before going ahead with these projects too.

Before coming to a close there's one thing I really do have to add. There are many out there, mainly those with concerned but very misguided views as to how we might reverse what's happening to our insect populations, probably with the best intentions in the world, whose ideas are not altogether shall we say great. I've heard of schemes where seeds of all kinds of plants imaginable have been scattered around in order to help the current crisis; the thought being that if the insects prefer them then that must be the right path to take. Insects however are not that discerning when it comes to the benefits of the general countryside. A bee will just as sooner visit a Spanish Bluebell as it would a native, and this being just one example. There also seems to be no consideration at all given to the joys of botanising, looking for a plant in a natural site and actually finding it growing there, for them all of this magic is missing in the bottom of a pit somewhere. This idea might well have its place in our town parks and gardens but as a concept for the wider countryside it is just not the path we should be taking.

It is hoped this booklet might encourage people and provide some thoughts on how plants and reserves could be better managed, as well as giving information and ideas for more sympathetic landowners. Certainly if it helps inspire some kind of change for the better then it can only be a good thing.

Details of other campaigns please visit: http://cates1980.wix.com/cateswebsite#!projects/c10d6

A GOOD MEADOW SHOULD BE LEFT STRICTLY ALONE DURING THE SPRING AND SUMMER BUT NIBBLED TO WITHIN AN INCH OF ITS LIFE THOUGHOUT THE AUTUMN AND WINTER