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Wild thing

Scotland’s nature-rich wildflower meadows are in decline and we must act now to avert further destruction

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Bordering our small farm in Highland Perthshire, there is what remains of a traditional wildflower meadow. It sits on a south-facing slope on upland pasture, and in spring and summer is stippled with dozens of flowers and grasses. Meadow fescues, timothy, cocksfoot, barren brome, Yorkshire fog, and crested dog’s tail, are just some of many that thrive here. Plantains waver amid oxeye daisy, yellow rattle, orange hawkweed, buttercup, red and white clover, red campion, eyebright, vetch, bird’s foot trefoil, bugle, self heal, orchid and dandelion. Amongst these, insects, invertebrates, moths and butterflies appear to be doing well.

The meadow remains ‘unimproved’, which in this case means ‘unspoilt’. It hasn’t been ploughed, marred by the addition of artificial fertilisers, nor have its minute life forms been obliterated by herbicides and pesticides. A century ago, it would only have been fertilised with animal dung, for dung is all it will ever need. Many important pollen-rich plants thrive on impoverished soils, and in turn provide vital food, either directly or indirectly, for insects, invertebrates, birds and mammals.

It is a place I come to listen to the thrum of insects, the regimental ticking of grasshoppers, or simply to absorb the meadow’s unsurpassed beauty, particularly when it is in full bloom. I become absorbed by the to-ing and fro-ing of bees, a tiny emerald caterpillar wriggling on a leaf, and the glistening of a froghopper’s frothy cuckoo spit on a feathery frond.

Iridescent turquoise damselflies flit, amongst hover flies, leaf bugs, crane flies, meadow ants, beetles, day flying moths and butterflies. In spring, bluebells and wood anemones edge the field’s perimeter, but blackthorn, hawthorn and creeping thistle are beginning a takeover bid. This unique, fragile grassland needs a careful

Image: A hoverfly lingers on a mint flower. **Opposite page:** A starling about to enjoy a grub.

grazing regime, for otherwise it will be choked out by more dominant species.

Although it appears vibrant, the meadow is a shadow of what it should be – a lush island in a sea of intensive arable ground. Skylarks no longer sing overhead and other bird species which should be present in large number, appear only fleetingly in tiny flocks or as singletons.

Today, fewer than 10% of the country's wildflower meadows remain, which equates to around 1,000 hectares in England and only 100 hectares in Scotland, mostly in Perthshire, Aberdeenshire, South West Scotland, and the lime-rich machair of the Western Isles.

These meadows, once cut by hand for hay, provided some of the finest wildlife habitats, and in turn were vital for food and shelter, providing breeding and roosting areas for myriad farmland birds.

Twenty-five years ago, my elderly farming neighbours – tenants on the Drummond Estate near Crieff – told me that during their childhood on the family's small Perthshire farm, they made hay every year in little fields divided by thickets of hawthorn. Corn buntings and corncrakes were an integral part of avian life.

I have regularly seen corn buntings – nicknamed 'the fat bird of the barley' – in the Uists. This charming creature with its rattling song was once widespread and typical of lowland arable farming ground where it chose a nest site in grassland or crops, and like the equally delightful yellowhammer, twite and linnet, relied on weed seeds and grain in winter. However, the more efficient farming becomes, the less there is for nature.

My neighbours also said that lapwings and curlews bred every year near the rush-filled areas beside the burn, while flocks of starlings, tree sparrows and grey partridges were abundant, and at that time the ceaseless song of skylarks serenaded them. Cuckoos returned each May to terrorise the local tree pipits, wagtails, reed warblers and sedge warblers.

Flowering hedgerows erupted with mixed flocks of finches, linnets, twites and yellowhammers. But since the scythe was replaced with the grass-cutting machine and work-

Above: Wildflowers thrive in an unspoilt meadow. **Left** Curlews breed on grasslands. **Top Right:** Orange hawkweed with cuckoo spit. **Inset:** Corn buntings were an integral part of Perthshire's avian life in the past.

horses swapped for tractors, the natural life of every progressive farm countrywide has plummeted visibly on a yearly basis.

Species-rich field margins, verges and hedgerows have been obliterated to make way for computerised machinery, leaving few safe nest sites. And with the current trend for taking several cuts of silage from grass fields each summer, chicks have no chance of survival.

Since the 1970s, largely due to industrial agricultural practices, many birds long-associated with farmland have crashed in number, in some cases by a shocking 90% or more. For some species such as the grey partridge, this downward trend continues.

With constant pressure to increase home food production, the best fertile areas are always taken for farming, felled of any woodland, and scrub drained and reshaped. Only the very poorest corners are left for wildlife – and these too are increasingly vulnerable.

Even our national parks appear to offer little or no extra protection for wildlife from intensive farming practices. Dedicated nature reserves are often the only places remaining as safe havens, but these are quickly surrounded by intensive agriculture or development. There is simply not sufficient wild habitat.

The problems start below ground level, for every living thing is dependent on soil, with earthworms and invertebrates key to the health of the land, its fauna and flora. As we continue to degrade soils through deep ploughing and the addition of chemicals to push production

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to the maximum, organic content is reduced and often lost altogether.

Impacted soils and removal of trees and hedges leads to serious flooding, and bare winter ground to large-scale erosion. Many bird species depend on short grasslands during the winter months. Pesticides kill a far greater range of species than those specifically targeted, with drastic knock-on effects right up the food chain.

Whilst chemicals may produce food for us, this forced regime creates nothing for wildlife. Recent revelations of a disastrous decline in insect numbers confirm why so many bird species are struggling to exist at all.

My neighbours and I look back nostalgically to better times. Often this rose-coloured idyll is flawed but unfortunately it is all too accurate when it comes to biodiversity. Younger generations have no memory of these days of natural abundance so can't be blamed for accepting our depleted, dysfunctional ecosystems as the norm.

With regard to the fat bird of the barley, even small changes in farming policy can prove beneficial. Dedicated work by some enlightened farmers and landowners in parts of Fife, Angus and Aberdeenshire has reaped rewards and helped achieve a record-breaking recovery of the corn bunting in areas where it had all but vanished. By leaving small field headlands uncombined, keeping stubbles unploughed over winter, planting grass strips in arable fields, or simply by feeding specialist seed, wildlife will benefit.

We must seek new ways to help and encourage farmers to work together with nature. It is only in so doing that we will avert further disaster. SF