



GOOD FOOD

MAKES EVERYTHING BETTER

WILDLIFE

THRIVING WILDLIFE populations are a sign that we've got it right; that our natural world is in balance with the 'other' worlds we occupy – the worlds of progress, development and commerce.

Unfortunately all over the world, populations of insects, birds, animals and amphibians are declining at an alarming rate – one that we could not have foreseen decades ago and which is faster than might occur by any 'natural' process.

This decline is important because wildlife isn't just a 'nice to have' or a 'nice to look at' – it's an integral part of every ecosystem.

The reasons for this decline include human population growth, climate change, pollution and the introduction of invasive species. But one of the biggest threats to wildlife, and one that connects most of the other causes, is farming.

Farming irrevocably changes the natural

environment. These changes don't have to be negative, but too often they are.

Farmland accounts for around half of the land in use globally and the presence of diverse wildlife helps in many ways, for instance to pollinate crops, as a natural form of pest control, or to recycle nutrients into the soil.

In a well-balanced world, farming and wildlife support each other – but this is not a well-balanced world.

THE INFLUENCE OF FARMING

Globally, according to a recent survey by the International Union for Conservation of Nature (IUCN), the expansion and intensification of agricultural activity is putting 5,407 species – 62% of those listed as threatened or near-threatened – in peril.

This puts agriculture second only to exploitative activities such as fishing, logging and hunting – and well above climate change

WILDLIFE

– as a cause of species decline.

A detailed survey in 2013, produced by 25 UK conservation groups, found that many animals, birds, insects, fish and plants were struggling for survival and that one in three species have declined by half in the past half century, with invertebrates such as moths, butterflies and beetles particularly affected.

A follow-up to this report in 2016 found these declines were continuing and laid much of the blame on intensive farming. At the same time, a report by the UK's Department for Environment, Food and Rural Affairs (DEFRA) found that in England 75% of over 200 "priority" species – including hedgehogs, dormice and moths – are falling in number.

Across Europe this destructive pattern is repeated, with agriculture cited as one of the most important threats to wildlife.

All over the world land that is home to a diversity of animals, plants and insects has been converted to farmland. Forests are slashed and burned, wetlands are drained, meadows are ploughed under and hedgerows cut down to make room for a vast tracts of monoculture crops and enormous industrial livestock operations.

Intensive agriculture brings with it increased pesticide use, so it's not surprising to find that on farmland, which covers 75% of the UK, butterfly populations have fallen by a third and birds by half since 1970.

SENTINEL SPECIES

That agriculture is a bigger threat to wildlife than climate change seems hard to believe, until you realise that agriculture – responsible for more than a third of man-made greenhouse gas emissions – is one of the biggest contributors to climate change.

Industrial scale farms destroy natural habitats, use large amounts of energy-intensive pesticides and fertilisers and produce a great deal of pollution and waste.

Pollution can easily make water supplies undrinkable; pesticides kill beneficial insects, and residues on plants can poison birds and other animals that eat them.

The fall out affects species around the globe from the biggest mammals – such as the Sumatran rhinoceros, the Western gorilla, Africa's cheetah, Asia's hairy-nosed otter, America's bison and the Amazon's jaguar – to the smallest beetles and birds.

Too often we close our eyes to these losses. Some argue that they are the price we pay for ensuring food security, for successful crops and profitable farms.

Yet many species – such as butterflies, bees and frogs – also act as indicators or 'sentinels'. A sentinel species is one that is very sensitive to environmental changes. When their populations decline, or their health suffers, it is often an early warning that humans are at risk too.

GM CROPS AREN'T THE ANSWER

In recent years, we have seen an alarming push to introduce technologies such as genetic modification into farming.

Genetically modified organisms (GMOs) were brought into farming 20 years ago with a promise that they would reduce the environmental impact of farming. But studies have shown this is not the case.

Far from having a habitat-enriching effect, GMOs have proved to be little more than an extension of the industrialised farming model. They have increased pesticide use and increased farming's impact on wildlife.

FARMING IN A CONNECTED WORLD

Industrial farming is an old-fashioned approach to food production and yet it is the only vision of farming that many farmers, politicians and policymakers have.

If we want to protect the natural world and the living creatures we share it with, we must farm in a truly different way. We must use methods that acknowledge that each farm is its own ecosystem and that the positive contribution of agriculture should

"If we want to protect the natural world we must farm in a truly different way."

outweigh any negative contributions.

Agroecology – a broad term to describe farming methods such as organic, biodynamic permaculture and other wildlife-friendly ways of farming – works with nature to produce food in abundance. Decades of research has shown that organic farming, for example, can produce comparably high yields without the environmental damage that comes from intensive industrial farming.

The living world is sometimes called the 'web of life' – an acknowledgement that all living things are connected. Yet this notion of connectedness is currently at odds with the world view of many influential and powerful decision makers. If the natural world, which we all depend on, is to survive more of us must insist on a new vision for farming.



This leaflet is part of a series on sustainable food, produced by Beyond GM. References available online:

www.beyond-gm.org