



BATTLE FOR THE BUTTERFLY

Synonymous with the sunshine and blooming meadows of spring, butterflies are hard-hit by human sprawl. Here's how a bright new project is helping to ensure they survive.

THEY'RE DELICATE, winged creatures, sensitive to the slightest change. So when our indigenous butterflies lose their natural habitat to human development, or find themselves exposed to pesticides and pollution, they quickly disappear.

In fact, they're what's known as an 'indicator species' – a kind of barometer of environmental health. Where they thrive, we can assume the

region is in fairly good natural balance; where they're scarce, we can be sure something's just not right. For this reason, scientists in many parts of the world use regular butterfly counts to assess the ecological state of an area.

It's not just heaving urban centres that drive such insects away. Since agricultural and domestic chemicals leech into the water system, even apparently pristine spots can be laced

with toxins that short-circuit the poetic life cycles of these creatures, which begin all slow and squirming before transforming themselves into bright flying things.

What's more is that they're very particular about the plants - called - 'hosts' on which they feed and lay their eggs. Too often, indigenous plants are stripped away by farmers, gobbled up by livestock or smothered by invasive

species. If we want to conserve the butterfly, there's no option but to conserve its carefully chosen hosts.

Sadly for some, it's already too late. Two species and one subspecies of South African butterfly are known to be extinct, and a sobering 60 species are under serious threat.

How, then, can we give them a fighting chance? Back in 2010, Pietermaritzburg-based zoologist Dr America Bonkewitz had an ambitious idea. Passionate about the plight of the South African butterfly, he started the Butterfly Route in KwaZulu-Natal – a network of community-owned butterfly houses that breed and display indigenous Lepidoptera (as they're scientifically known to the public).

Under the auspices of the African Conservation Trust, an established NGO and NPO, and funded by the National Lottery Fund (except for the MacButterflies dome, which does not receive funding), it's the first project of its kind in the country. And, just two years in, it's very effectively helping to conserve butterflies, educate visitors and create jobs for people from surrounding communities.

The striking insects flit freely through futuristic, semi-spherical steel geodesic domes covered in antivirus netting. 'This allows for the free flow of air and the natural regulation of temperature, creating a biodiverse system within the dome,' explains Ursula Witthoff, who administrates the network from offices in Pietermaritzburg. It also affords visitors the rare and magical experience of walking among a profusion of butterflies. Each dome features different species, depending on the climate and vegetation of the area. Adjacent to the domes are indigenous

nurseries, where visitors can buy host plants to attract butterflies to their own gardens.

But, much more than just a pretty novelty, this is practical, sustainable conservation at its best. The communities that own and sustain the domes gain specialised knowledge that makes clear the impact of their actions – be it clearing land or disposing of household chemicals – on the environment. Visitors, too, cannot but consider how summer campaigns against common lawn pests (that is, big boxes of noxious insecticides) have unseen, yet devastating consequences. Many leave hoping to attract, rather than exterminate, creepy-crawlies to their gardens. At the very least, there's an increase in eco-sensitivity – the awareness that what we pour down our sinks or choose to grow on our small suburban patches of green will, in large part, determine how many species manage to survive.

The Butterfly Route is keen to expand and is currently on the hunt for potential sites. But the right spot can be hard to find. It needs to border a local indigenous forest in a subtropical region – so the insects can breed all year round, be

near a community that's willing to run a dome, and be accessible to a steady flow of tourists. 'The most rewarding thing,' says Ursula, 'is seeing that conservation can be community-based and run.'

Visit the Butterfly Route

There are currently four butterfly houses in the KwaZulu-Natal route, which breed indigenous species and display them to the public. You can walk among the butterflies, take a guided tour and buy indigenous plants to attract them to your own garden.

Isiphaphalazi On the edge of the iSimangaliso Wetland Park, St Lucia, 082 332 7085

Eshowe On the edge of the Dlinza Forest, part of the Fort Nongqayi complex, 076 323 3540

Tembe Near the Tembe Elephant Park in northern KwaZulu-Natal, 076 323 3540

MacButterflies Palm Beach, on the South Coast (5km from Port Edward), 072 018 5427

For more information visit www.butterflyroutes.org.

DO YOUR BIT FOR THE BUTTERFLIES

Find out which butterflies species are indigenous to your region and what their host plants are. Adding these plants to your garden will attract the pretty critters, and provide them with much-needed feeding and breeding grounds. Note that even though exotic flowers do sometimes attract butterflies, it's always better to use indigenous plants.

Don't kill caterpillars! You might find their presence in your garden unsightly, but they're unlikely to do serious harm – and they will soon be flitting about in the sunshine.

The South African Botanical Society recommends a comprehensive butterfly-friendly garden guide: *Bring Butterflies Back to Your Garden* by Charles and Julia Smith for more detailed information ([see bookbase.co.za](http://bookbase.co.za)).

The Lepidopterists' Society of Africa organises butterfly counts. To volunteer to assist on the next census visit www.lepsoc.org.za.