

# POLICY STATEMENT

## Sustainable use and Lepidoptera

### Introduction

Commercial dealings in Lepidoptera are almost as old as the science of lepidopterology. In the early days of collecting in the UK, commercial harvesting and sale of rare and sought-after specimens was prevalent. 'Cheque book collecting' was the term coined for dealers who would haunt the habitats and make offers on the spot for rarities, such as aberrations of the Polyommatae (Blues). At one point in the 19<sup>th</sup> century, specimens of *Lycaena dispar dispar*, the British Large Copper, were changing hands for as much as £5. That was a year's wages for a household servant in those days. And in 1910, 50 years after it became extinct, a specimen was auctioned for £200.

Some enterprising lepidopterists realised that farming them could be profitable. Several businesses sprang up in Great Britain, the US and Europe, selling not only dead specimens but also live eggs, larvae, and pupae. Not only native species, but showy exotic tropical ones, were offered for sale in extensive catalogues. Some of these companies still exist today. This is a form of 'wildlife farming', an activity that can be harmful to the farmed organisms and the biodiversity in their ecosystems if not done carefully and with sustainability in mind. Whilst in South Africa there is already a degree of protection in the form of the National Environment Management Acts, this is general in scope; farmed insects have no rights beyond those of domestic livestock. With the advent of the recent Government White paper draft on the 'Conservation and Sustainable Use of South Africa's Biodiversity', this is likely to be subject to legal regulations.

### Background

Butterfly collecting is a far less popular hobby than it was 150 years ago, but the urge to possess beautiful specimens lives on. So-called 'deadstock' sales are extremely popular on internet websites. In south-east Asia, local farmers rear specimens of the large and spectacular *Ornithoptera* 'Birdwings' (Papilionidae) for sale to collectors. Whilst some may frown on this, in many cases the revenue from such sales has encouraged rainforest people to conserve the habitat and the butterflies because they have commercial value to them.

There is also international trade in showy moth species, such as the large Saturniidae (Emperors and Atlas Moths) and Sphingidae (Hawkmoths). Such 'livestock' sales are also common on the internet. In fact, the rise of sites such as eBay have facilitated this, as well as international courier companies capable of delivering packages anywhere in the world within hours.

One result of this is the popularity of butterfly flight houses. The ability to import large numbers of farmed live pupae led to many of these being established in cooler parts of the world, where people could see, live, the spectacular *Morpho* or *Papilio* species they may have seen on TV. And in warmer climates, they are used to showcase these species in a natural, but controlled, environment. These play a valuable role in educating people about lepidoptera and popularising their conservation.

Another butterfly 'fashion' has emerged – the deliberate release of butterflies at rites of passage such as weddings, christenings, and funerals.

More recently, butterfly tourism has grown in popularity, in the same way that photo safaris and guided birdwatching trips have.

## **Position statement**

The Lepidopterists' Society of Africa recognises that these commercial uses can be sustainable if:

- They allow people to possess specimens without putting pressure on wild populations.
- They provide channels for educational and conservation messages, that utilise the attractiveness of butterflies and moths.
- Humans living in wild, natural butterfly habitat can find a way to gain employment from guiding tourists, and farming or protecting lepidoptera. This discourages them from allowing mining or monocultural farming to damage the environment or otherwise destroy these habitats.

The Lepidopterists' Society of Africa also recognises that there are risks associated with such activities:

- Invasive alien species' spread can result.
- Diseases can incubate in captive-bred lepidoptera and spread to wild populations,
- Hybridisation may occur between native species and close relatives that have been introduced.
- Uncontrolled trafficking in endangered species may occur.
- Habitat may be damaged by ranching or tourist operations.
- Livestock may be transported under cruel conditions.
- Laws meant to protect lepidoptera and regulate trade may be infringed upon.

## **Guidelines on commercial uses of lepidoptera:**

Practitioners must familiarise themselves with the legal and regulatory framework in their areas of operations. These may range from species protection legislation to environmental regulations, to professional requirements for guides.

Bred livestock should not be released into the wild. Deliberate releases at weddings, etc, are not supported by LepSoc Africa.

'Flight houses' should be protected against escapes and managed in such a way that diseases and pathogens cannot incubate or spread.

Nature guides leading tourists around lepidopteran habitats should be cognisant of potential threats that their activities may bring (for example, trampling of vegetation including host plants). They should ensure that their guests are made aware of their behavioural duties when viewing lepidoptera.

Live specimens for captive rearing must be transported in a way that does not cause damage or death of the livestock. Legal and regulatory restrictions must be adhered to.

Dead specimens for study or mounting and display should not be from rare or endangered populations unless there are valid scientific reasons for selling or donating them.

Wild lepidoptera should not be deliberately harvested for commercial purposes. Livestock and deadstock should come from bred populations. It is recognised that these populations may be the progeny of wild caught adults, and release of a proportion of these in their locally indigenous habitat may help maintain the wild population. However, this should only be done under strict protocols to prevent the introduction of pathogens and parasitoids to these.