

Although the insect trade is a multi-billion dollar industry globally, it's still a relatively unknown concept in South Africa. It is important that you purchase products using insects that are sustainably bred. Below you will find some literature that has been published on the subject that will hopefully help inform you on the many benefits of sustainable breeding farms.

Butterflies: big, beautiful and bountiful?



The world's largest butterflies, Birdwings, are being farmed or 'ranch'ed' by villagers in Papua New Guinea and Irian Jaya to provide economic incentives to landowners to conserve valuable virgin tropical forest.

Classified as a renewable natural resource in PNG, butterflies are collected extensively to be sold to collectors, naturalists, scientists and artists around the world. Most are in no danger of extinction but in the case of the Queen Alexandra's Birdwing (*Ornithoptera alexandrae*) and other birdwing butterflies, destruction of their habitat from extensive logging and expansion of oil plantations has led to declining numbers and the government now requires that these species are bred to supplement remaining populations.

To 'ranch' the butterflies, villagers plant flower gardens to provide nectar sources that will attract adults and provide food for caterpillars. The chrysalides are then collected to obtain first class adults for sale.

The PNG government has allowed the Insect Farming & Trading Agency (IFTA) to help one village grow and sell the Goliath Birdwing (the second largest butterfly in the world) and for other programmes to be established for the Meridionalis Birdwing and the Paradise Birdwing. Eventually the PNG government hopes to be able to allow villagers to ranch and sell about 100 specimens per year to the IFTA.

Overall, the IFTA sells and exports over \$400,000 worth of PNG insects: butterflies make up a large percentage of this revenue but stick and leaf insects and some of the large, spectacular

beetles are also in demand. Many villagers make hundreds of dollars a year in a country where there is still relatively low formal employment (~15%). This well-paid trade has all but halted the black market trade in insects especially as all exports have to be issued with a permit. This is not only so that the Agency can control the market and keep prices stable but also to ensure that maximum revenue is returned to the villagers.

A similar scheme has been initiated in Irian Jaya where more than 1,000 families benefit from selling butterflies and over 60% of the earnings from the exported insects are given back to the communities. Through the success of these agencies, villagers have come to realize the importance of the forest as habitat for the insects they collect and as a source of income.

Without the increasing export trade in insects, villagers would clear the forests in order to plant cash crops. Conservation of the forest also helps to preserve the rich biodiversity of flora and fauna including over 3000 species of orchid and most of the world's birds-of-paradise and bower bird species.