



SNR FACT SHEET

SURVIVAL STRATEGIES

All creatures and plants have particular ways of making sure that they survive and perpetuate their own species. Butterflies are particularly fragile and vulnerable to predators – so how do they protect themselves?



The strategies of two butterflies which can be found in Steenbok Park are particularly interesting. The appearance and flight pattern of the Garden Acraea (*Acraea horta*), warns its predators to avoid what seems to be an easy target. In nature, the universal code for danger is black with either red, orange or yellow; or black combined with white. The Garden Acraea's red wings and slow, almost lazy, flight is a clear warning to predators – this butterfly is not suitable to eat!

The female Garden Acraea lays its eggs only on the leaves of the Wild Peach tree (*Kiggelaria Africana*).

The spiny black larvae which hatch and feed on these leaves are protected by rows of spines filled with a noxious cyanide-containing liquid. Biologists believe that the cyanide in the caterpillars, and in the adult butterfly, is derived from the leaves of the Wild Peach, which release the sharp smell of cyanide when crushed. The Diederik cuckoo seems to be one of the few birds able to eat these caterpillars.



The large showy Citrus Swallowtail (*Papilio demodocus demodocus*), sometimes called the Christmas butterfly, is another familiar butterfly in the Park. Its flight pattern is completely opposite to that of the Garden Acraea, being a restless one with rapid wing beats. After mating, the female Citrus Swallowtail is attracted by the smell of citronella oil – found in the Cape Chestnut (*Caleodendrum capense*) and White Ironwood (*Vepris lanceolata*), as well as in cultivated citrus trees – and lays her eggs on these leaves.

These larvae use mimicry and smell to survive. When first hatched the young caterpillars look like bird droppings on the leaves. In the last stage of their growth they switch to mimicking chewed-on leaves. They convert the citronella oil to a concentrated defensive secretion and when attacked, can spread a repulsive smell from glands behind their heads

with forked, red protruding tubes – which also makes them look like small snakes. In this way they increase their chances of survival in a hostile world.

