

Newsletter of the Lepidoptera Study Group of Southern Africa

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From the Editor

Many of you have probably been wondering when the next issue of *Metamorphosis* would arrive in your post and I must therefore apologize for the rather long gap between no's 2 and 3. Let us hope that the content vindicates the delay!

At the end of August an *ad hoc* committee formed by me met to discuss pending legislation affecting butterfly collecting in the Transvaal (see *Metamorphosis* 1 (1)). The minutes of this meeting are set out below.

Minutes of an extraordinary meeting of the Lepidoptera Study Group of southern Africa held at 6 Verne Street, Florida North at 20h00 on Tuesday 30th August 1983.

Present:

Dr M.C. Williams (Chairman)
Dr D.M. Kroon
Mr R.J. Mijburgh
Dr J.D.F. Boomker
Mr S.F. Henning
Mr G.A. Henning (Secretary)

The purpose of this meeting was to consolidate the Study Group's position with regard to a possible ban on the collection of Lepidoptera in the Transvaal with a view to contacting the Provincial Council and nature conservation authorities.

Through the efforts of Mr Mijburgh copies of the debates covering the proposed legislation were tabled. It would appear from these documents that there is some confusion as to the extent of the ban as they only make mention of "*Poecilmitis aureus* and *Charaxes*". It was decided that the situation required clarification before any major steps be taken.

The following questions were then discussed:

1. Who had instigated the promulgation of this legislation and why were no professional lepidopterists consulted? Dr Vári of the Transvaal Museum, for example, had no knowledge of the proposed ban.
2. As soon as the final legislation is published it will be made known in the Newsletter of the Study Group. A summary of legislation in other Provinces is also envisaged.
3. If the legislation does cause some difficulties and cannot be repealed who would then be eligible for permits and who would be responsible for the issue of such permits?
4. The major concern of the Study Group is the discouraging effect such legislation would have on the young collectors in the future.
5. A possible contact man was named should the current negotiations prove fruitless. He is Mr Peter Milstein, Assistant Director, Nature Conservation.

The meeting concluded at 22h00.

Following this meeting Mr Mijburgh obtained the relevant Provincial Gazette and has told me that the only Lepidoptera tabled as protected species are *Poecilmitis aureus* and *Charaxes* species. There is thus not, as I was informed by a Mr Greyling at Nature Conservation, a total ban on collecting in the Transvaal. Most of you will probably agree that protection of common, widespread *Charaxes* such as *C. jasius saturnus* and *C. candiope* is unnecessary but it should also be remembered that *P. aureus* may occur in places other than the type locality (Heidelberg) where it may easily be confused with closely related species, making it difficult for the collector to know if he is taking a protected species. In order to discuss these and other questions I propose to contact Peter Milstein (see Minutes above) and will keep you informed of developments via *Metamorphosis*.

Stephen Henning has kindly supplied me with all the legislation he could obtain regarding collecting of Lepidoptera in the Cape Province. I had been told that there is a total ban on collecting in this province but I cannot find any such prohibition in the legislation. There is, however, an amendment to Schedule 2 of the Cape Nature Conservation Ordinance (19 of 1974), effective from February 1976, protecting certain species in the Cape. The list is as follows: (Pennington numbers - 1978) 76, 142 (only form *occidentalis*), 273, 281, 362, 364, 368, 393, 394, 416, 431, 447, 454, 514, 715, 719). The moth *Leto venus* (Hepialidae) is also protected. Anyone who has additional information regarding relevant legislation should please send this to me so that all our members can be informed.

New South African butterflies

M.C. Williams

A number of new taxa have been described since the publication of *Pennington's butterflies of Southern Africa* in 1978. I have listed these below for your information. Since this is not a complete bibliography I would be pleased to receive a reprint (or photostat) of any other descriptions of new species or subspecies of which you may be aware for inclusion in a future number of *Metamorphosis*.

- Charaxes jahlusa rex* Henning, 1978. *Entomologist's Record and Journal of Variation* **90**: 211-215.
- Poecilmitis kaplani* and *Poecilmitis lyndseyae* Henning, 1979. *Journal of the entomological Society of southern Africa* **42**: 153-159.
- Poecilmitis balli* and *Argyrocupha malagrida maryae* Dickson & Henning, 1980. *Entomologist's Record and Journal of Variation* **92**: 294-300.
- Poecilmitis wykehami* and *Trimenia macmasteri mijburghi* Dickson, 1980. *Entomologist's Record and Journal of Variation* **92**: 40-44.
- Stugeta subinfusata reynoldsi*, *S. bowkeri henningi* and *S. bowkeri tearei* Dickson, 1980. *Entomologist's Record and Journal of Variation* **92**: 1-6; 38-40.
- Hypolycaena tearei* Henning, 1981. *Entomologist's Record and Journal of Variation* **93**: 55-57.
- Poecilmitis henningi* Bampton, 1981. *Entomologist's Record and Journal of Variation* **93**: 189-191.
- Aloeides rossouwi*, *A. nubilus* and *A. tearei* Henning & Henning, 1982. *Journal of the entomological Society of southern Africa* **45**: 231-238.
- Lepidochrysops michellae* Henning & Henning, 1983. *Journal of the entomological Society of southern Africa* **46**: 59-63.

Lepidochrysops oosthuizeni, *L. littoralis* and *L. outeniqua* Swanepoel & Vári, 1983. *Annals of the Transvaal Museum* **33**: 323-336.

Studying myrmecophilous Lycaenidae

S.F. Henning

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Very few of the life histories of myrmecophilous (ant-associated) Lycaenidae have been described. We need to establish the requirements of these species before they become endangered in any way. One point when studying these species is that we must be careful not to disturb the host-ant colonies too much by digging them up to search for the early stages. By destroying the host-ant colonies you are destroying the lycaenid colony as well.

The most effective way of studying these ant/lycaenid associations is to keep colonies of ants at home in formicaria. For specifications on how to construct a formicarium see Claassens (1974) [*Journal of the entomological Society of southern Africa* **37**: 387-392] and Henning (1983) [*Journal of the entomological Society of southern Africa* **46**: 65-85].

One can determine the host plants by watching females ovipositing and obtain larvae by collecting these eggs, or collecting one or two females and getting them to lay in captivity. One will usually need both the presence of the host ant and the host plant to induce a female myrmecophilous lycaenid to lay in captivity. Remember your major concern is the study and preservation of these butterflies, therefore do not be tempted to collect too many females as this could affect the viability of the colony. Larvae and eggs can also be found by searching the host plants.

To determine the correct host ant in, for example, a *Lepidochrysops* species, one can take third instar larvae that have stopped feeding on the host plant and offer them to various ant species in the wild. I discovered the host ant of *L. ignota* (Trimen) by taking third instar larvae that had stopped feeding back to their colony and placing them on the flowers of their host plant (*Becium obovatum* (Benth.) N.E. Br. (Labiatae)), which were being frequented by various species of ants and then watched the ants' behaviour. The ant *Camponotus niveosetosus* Mayr investigated the *L. ignota* larvae and carried them off into their nests. One ant carried a *L. ignota* larva three metres before entering its nest.

Having established the identity of the host ant, do not dig up a nest within the lycaenid colony as this could adversely affect the butterfly population by disturbing the ants. Instead, find a nest of the host ant well away from the butterfly colony and dig this up. The ants can live in captivity for a number of years even without the presence of a queen.

I hope the breeding of myrmecophilous Lycaenidae will give you as much pleasure as it has given to me.

Lepidochrysops vansoni in South West Africa

Chris Ficq, 8 Wilson St., Roodepoort

During January 1983 while doing my military service at Oshivello in Ovamboland, I had the opportunity of spending a few hours collecting in

the area. I was surprised to find a *Lepidochrysops* flying around the base of some tall shrubs, which were growing in a shona (a depression with a small pool of rainwater in the centre). This specimen was later identified as *L. vansonii*. Other males were observed flying around stunted bushes, while the females tended to remain around the foodplant or flew at random around the larger bushes.

The foodplant which was oviposited on by the females was identified by me as a species of *Becium*. No *Lantana* was observed in the area (this is the foodplant recorded from the northern Transvaal).

Further examination of the series collected by me revealed that one specimen was a halved gynandromorph. These aberrations are apparently extremely rare among the Lycaenidae and this specimen is now in the Henning collection.

Other species collected at Oshivello included *Acraea stenobea*, *A. lygus*, *A. horta*, *Lepidochrysops plebeia* and a specimen of what could possibly be *Crudaria wykehami* (this requires further investigation as *wykehami* is only known to fly in the north-western Cape).

Further observations concerning the Satyridae of Lesotho

Ernest Pringle

In my last article, I omitted to mention our discovery of a new *Torynesis*, now named *Torynesis pringlei*, high up in the Black Mountain range. This species was discovered in early February 1977, when seven specimens were caught. The locality was revisited in late January 1979 and not a single specimen was found – despite an extensive hunt through all the adjoining peaks.

It is interesting to note that, while no *Torynesis pringlei* could be found on this trip, *T. orangica* was seen in numbers on the Golden Gate Reserve only three days later. This fact, as well as the fact that the species was missed by past collectors in Lesotho, has puzzled us. It is not like a *Torynesis* to be rare: so could it be that we have not yet been able to pinpoint the peak period for colonies of this insect?

Collecting satyrids in the Golden Gate Reserve proved to be an interesting experience. We did not find it easy to locate the colonies of *T. orangica*, and spent a great deal of time fruitlessly searching the highest points in the Park for the insect. However, once we had identified the species' foodplant – a coarse tussocky grass – we found the species to be relatively plentiful, and easy to catch.

A word of warning for collectors who wish to secure this species: do not attempt to do so in the National Park. We were spotted by the authorities and, that night, were confronted by the Chief Ranger who demanded that we hand over all our material. Fortunately for us this material was then on the setting boards, so a compromise was reached whereby we undertook to send him half of the material caught, once the specimens had been removed from the boards. After the trip, specimens were duly sent to the Parks Board for their private collection: they were never acknowledged, so we can only hope that they have been properly cared for!

After this, we kept out of Parks Board territory, and collectors will be relieved to know that *orangica* is fairly widespread in the general area – where its foodplant occurs. It is therefore not necessary to search only in the Parks Board area, in order to find this species.

It was while walking on the high points in this area that I was able to make an interesting observation. The highest peaks of these mountains are grass-covered and very open. They are also infested with *Pseudonympha magoides* and patronised by dozens of Mountain Swifts, which continually circle and dive-bomb the area. While there, I took the opportunity to observe the interaction between these satyrids and the birds, and saw at first-hand what I believe to be the reason for the erratic, skipping flight of our South African Satyridae.

On two occasions, I saw Mountain Swifts attack a *P. magoides*, and on both occasions saw the birds miss their prey. The birds would see the satyrid and aim straight for it. However, by the time they reached the insect, the butterfly would have ‘dipped’ down (as they normally do in flight), and the bird would fly harmlessly overhead. Immediately after the attack, the satyrid would increase its speed of flight for a short period, and then settle on the ground between tufts of grass. Settling on the ground was the most logical thing the insect could do in the circumstances, because Swifts are prevented by their wing-shape and the shape of their bodies (as any ornithologist will tell you) from ever settling on the ground. Therefore, there is no way that a Swift can ever secure its prey, once it has so settled.

We have used this trait among Satyridae to good effect, in order to secure elusive or strong-flying satyrids like *Pseudonympha hippia*. When collecting *hippia* we always go immediately onto the attack, swinging wildly at the insect – and invariably missing it, of course. Eight times out of ten the immediate response of the insect to this is to settle on the ground – thus rendering its capture easy. My experiences at the Golden Gate Park provide an instant and logical answer to this behavioural pattern.

Butterflies in odd places

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Weighing up possibilities and probabilities one is often at a loss where to look for the most forceful impellent prompting butterflies to fly from their customary stamping grounds, often to places so out of tune with that of their natural habitat that the collector who has been wandering and observing butterflies for years all over the R.S.A. is somewhat dazed by the appearance of a species he is wont to see elsewhere.

Does nomadic instinct, common among most living creatures, play the leading role or do quirks of curiosity sometimes come into play forcing the creature to go on exploratory flights or wanderings?

Whatever the reason may be for such extraordinary behaviour collectors of butterflies the world over recount strange and exciting encounters with certain species of butterflies that wandered far beyond the precincts of their natural domains.

One day a certain collector in his travels around the globe was peeling potatoes on the deck of a large ocean liner. He almost jumped out of his skin when as from nowhere a specimen of the rare and elusive – in the

R.S.A. – *Coeliades anchises* circled around him. The liner at that particular time was about 100 miles from land.

H.E. Irving often regaled his visitors with fascinating stories of butterflies that came to the very hot and dry Bloemfontein. Many of them from the damp coastal forests of Natal. Did they fly from there or come by train from Durban? No one has so far been able to solve the puzzle. Joining in the flight during the great *Catopsilia florella* migration of 1966 were butterflies that during normal times would hesitate to go a few miles beyond their habitats.

A collector once stood spellbound among some peach trees watching an *Aterica galene* flit about. What had prodded this devoted inhabitant of Zimbabwe's rainforests to go so far south to Vanderbijlpark?

Two collectors went entomologizing along the slopes of the Magaliesberg above Van Son's house one year and there feeding on the flowers of a creeper was a fresh specimen of *Acraea rabbaiae*. Van Son, by then a well-seasoned collector, could hardly believe his eyes when shown the specimen. How did it get there from its classical habitat 400 or more miles away in the Zululand and Mozambique coastal forests?

The most intriguing story of a butterfly far from home comes from Durban. The finding by D.E. Whiteley of the European Cabbage White butterfly in the coastal forests is so far without peer in the butterfly history of the R.S.A. For a long time the collector stood there wondering if he was dreaming or not. The most feasible explanation proffered was that caterpillars in a fairly advanced stage came in cabbages stored in a boat from Europe. Some weeks later when reaching Durban some of the caterpillars had reached pupal stage and the chef of the boat, annoyed by the ravage to the cabbages threw them overboard. The waves took them to the beach where evidently the butterflies emerged and took to the forests.

Not so extraordinary but worthy of mention is the *Acraea machequena* saga. The two specimens of this species initially captured in the northern Transvaal were for many years the only known ones netted in the R.S.A. and caused much speculation as to where they had come from. An obscure report of one taken in Zululand made its rounds 30 years later. Then came April, 1978. Two collectors ascended Buffelsberg near Munnik and there, soaring around the tree tops, were butterflies displaying the unmistakable habits of *Acraea neobule*. It could be said they were as plentiful there as flies on a dead cow. When captured one and all turned out to be *machequena*. Since that memorable encounter none has been seen there again.

Ladybrand school boys were elated one year when specimens of *Charaxes saturnus* were seen playing about trees in a park. No fewer than 20 were netted there. What had impelled so many to pay a visit to that park many miles from their home?

The writer of this article would welcome letters from collectors who have had encounters with butterflies in odd places.