

METAMORPHOSIS

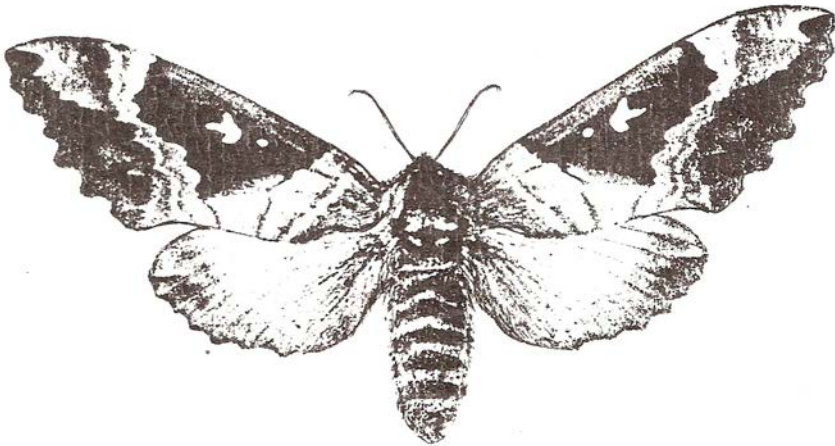


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Lophostethus dumolini {Sphingidae} female
(Forewing length 47 - 78 mm)

LEPIDOPTERISTS' SOCIETY OF SOUTHERN AFRICA

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All drawings, unless otherwise stated, are by
S.F. Henning.

EDITORIAL

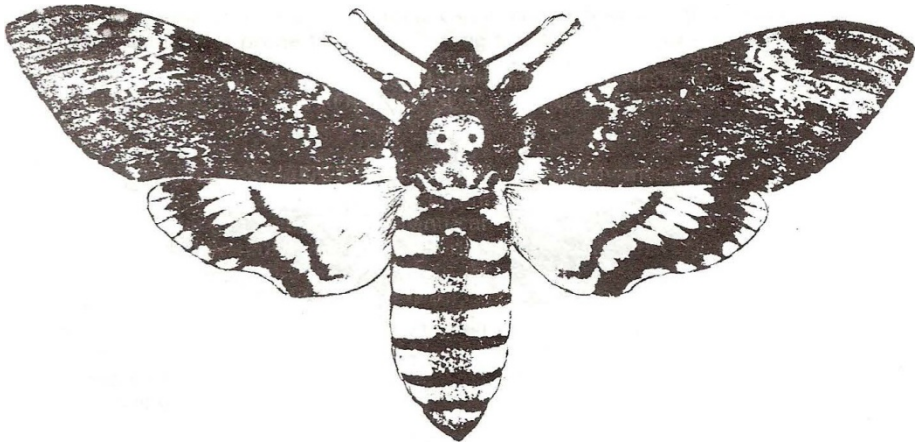
Our new format has now been going for a year and appears to be a great success. Papers are arriving in a fairly steady trickle but we are still not getting enough of them. I would like to have enough papers so that I can select a better mix of scientific and more popular articles.

What we need are more papers describing collecting trips like those in this issue by Steve Woodhall, Ruth Southey, Torben Larsen and Rob Plowes. They need not only be recent trips but ones that were very enjoyable and successful, or with famous personages such as Georges van Son, Ken Pennington, David Swanepoel, Charles Dickson or Cowan Clark, like that described by Ruth Southey. Also of interest would be the events leading up to the discovery of a new species or amusing anecdotes like that described by Charles Wykeham in this issue.

We still need more scientific papers such as checklists, descriptions of new species, life histories and behaviour. We have some good examples by Torben Larsen in this issue.

Please put pen to paper and let us see if we can make *Metamorphosis* into one of the major and important publications on Lepidoptera in the world.

W.H. Henning



Acherontia atropos (Sphingidae) female upperside

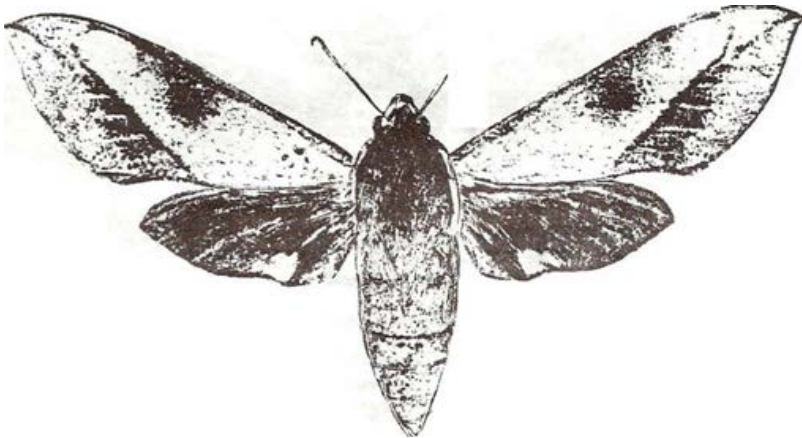
COMMENT BY THE PRESIDENT

It is time for us to vote again for a new council and office bearers. It is your Society so please participate and vote in who you think will do a good job and have the best interests of the Society at heart. Thanks must go to the members who have put themselves up for nomination. It is these people who are prepared to give up some of their spare time and devote it to the interest of the Society.

When the Lepidopterists' Society was inaugurated in 1984 we started a library of books and papers on Southern African Lepidoptera. It never really got off the ground and only consists of a dozen or so papers. The long term idea of the library was to make it easier for members to obtain copies of articles on Lepidoptera. To obtain a copy of any paper one would simply have to write to the Society and ask for a photocopy at cost. However for this to be successful one would need to have a fairly comprehensive collection of papers.

To keep this project alive we are going to have to start building up the collection. Does anyone have any papers, not only that they can spare but, would be willing to make a photocopy of them, or let us do it, so that we can truly make a really good library which members could use. Any contributions can be sent care of the Secretary.

Stephen Henning



Theretra capensis (Sphingidae) female upperside

REGIONAL ROUNDUP

It was very pleasing to receive a contribution from Ernest Pringle who farms at Bedford in the Eastern Cape. It is not only the contents of such writings that are of interest but also the manner in which the author expresses himself which adds enormously to the enjoyment of butterfly collecting. A large part of Ernest's writing is quoted later in this roundup.

Ernest and Anne Pringle visited Stilbaai in early September 1991 and found *Oxychaeta dicksoni* and *Poecilmitis brooksi tearei* in good numbers. He took the farmer to the locality to ensure that it would not be inadvertently destroyed.

Victor Pringle went to Nieuwoudtville and the Cedarberg during November. While most species were not flying he did find two specimens of a very distinctive member of the *Poecilmitis turneri* group. These specimens could very well prove to be a new species as they have extensive dark upperside markings and a large blue area. On the Cedarberg Victor found an *Aloeides* which has certain links with *A. caledoni* and the *A. pallida* group. This large species appears to be quite distinct. On the way home he picked up a good series of *Poecilmitis henningi* from a new spot on the Huis River Pass and also got a specimen of the new Thestor from the Rooiberg. Victor is 80 years old! There are not many men who would undertake such an exhaustive trip on their own, let alone at eighty, and still come back with two possible new taxa. A remarkable achievement by a remarkable man.

At the end of November Ernest and Anne Pringle went to the Knysna area to search for *Chrysoritis cottrelli*. The trip started well with a good series of the new Baviaanskloof *Aloeides*. While travelling slowly up a bad dirt road near Knysna on the following day Ernest noticed a specimen of *Orachrysops niobe* flutter past his car. A number of specimens were recorded on the lower slopes of a ridge flying in thick fynbos. The locality appears to be in imminent danger of being destroyed by property development. Perhaps one of our Cape members can intervene and save this locality!

Ernest felt that the prime target for finding *C. cottrelli* was to find its foodplant *Chrysanthemoides monilifera*. This plant occurs widely in the Buffelsnek and Prince Alfred's Pass region but is quite thinly scattered in most areas. Ernest selected several spots to be searched on the first available clear hot day and within five minutes of arriving at the most likely spot he had his first *C. cottrelli*! "Three more were subsequently collected over an area of about three kilometres, encompassing the whole side of a mountain. Two others escaped into the impenetrable fynbos. It is quite clear that this species is not really endangered in this locality and that its Red Data rating must be downgraded from 'Endangered' to simply 'Rare'. The only thing endangered in the *C. cottrelli* habitat is the butterfly collector who attempts to follow or track down a specimen. This fynbos muck is in most places impenetrable, growing up to 6 metres high, on a dreadfully steep slope. This gives anything with wings a distinct advantage. I spent nearly an hour trying to induce a specimen to make a mistake and come down to my net, (having no extension net with me), but in the end had to admit defeat. This particular insect was pelted with more rocks than the average Putco bus in Soweto on a bad day, but to no avail. By the time it was abandoned the air was blue with oaths - especially when my wife hit me with one of the rocks! Most specimens were flushed by raining stones down onto the foodplant from a forester's track which runs through this habitat. It is a rather time consuming pastime, and really only covers a minimal portion of the total available habitat.

"On the positive side, it must be said that the habitat is very well conserved with no invader plants in evidence. The species is therefore quite secure, with the only real threat coming from possible veld fires through the habitat.

"Interestingly only one of the four specimens has the acutely -angled forewing that is supposedly a hallmark of this species. Their wing-shape is, in fact, very variable.

On the other hand their ground colour is more reddish than that of *C. zeuxo* from the south coast, and their upperside black markings are more reduced (not more extensive as suggested in the description)". Charles Wykeham also found an apparently new *Poecilmitis* in early 1992 on the highest peaks of the Waaihoekberge between Worcester and Ceres. Charles and Jon Ball returned to the locality and secured a number of specimens for the type series.

Still in the Cape, where all the main action has been happening, but through the efforts of Transvaaler Mark Williams who in December, while on vacation, found the elusive *Aloeides southeyae* on a ridge of hills to the west of Mossel Bay. He has written a short article on his discovery which will be published soon.

Reinier Terblanche added to his reputation for finding new taxa by collecting an apparent new subspecies of *Durbania amakosa* on QwaQwa Mountain in the north-eastern O FS.

With all these new and interesting finds the more mundane collectors had to be content with visiting such places as Clarens for *Lepidochrysops oosthuizeni* (G.A.Henning & R.Terblanche), Stoffberg, Verlorenvlei and Manoutsa in the Transvaal and more recently several trips to Cwaliweni Forest in Zululand for *Acraea satis* which was found in some numbers. (D.Edge, N.K.Owen-Johnston, H.C.Ficq, R.Terblanche, W.S.Steele and G.A. Henning) The Gwaliweni forest has been fenced by Kwa Zulu Nature Conservation and there are game guards so this fine patch of forest is well protected. The place to collect is outside the fence near the ranger station.

Johan Greyling from Pietersburg was kind enough to telephone me; he has some interesting *Aloeiaes* and a *Hypolycaena* for study and reports *Appias sabina* from Malta Forest. John Joannou, who recorded *Andronymus neander* from his garden near Krugersdorp last year, has done it again with a pair of *Zophopetes dysmephila*. How this species found its way to Krugersdorp remains a mystery but John will keep his eyes open to see if they are established there, or at least temporarily as they were in Cape Town. This species certainly does seem to get around!

Reinier Terblanche and Gus Butler went to the far north-western corner of Zambia in early 1992. The good captures that they have returned with are being identified. These specimens were shown at a social meeting of the Lepidopterists' Society at John Joannou's house in February and there was many an exclamation over these fine specimens which included a short series of the blood red *Cymothoe sangaris*.

The locality for the vulnerable *Erikssonia acraeina* was also visited by various collectors with Koos De Wet from Transvaal Nature Conservation. The species is safe and well.

I appreciate all the contributions and phone calls from our members, please keep it up. I look forward to hearing from you. My home number is (011) 768-1949 and work (011) 474-1466.

Graham Henning

ON THE STATUS OF *COLOTIS AGOYE* (Wallengren, 1857) AND ITS SUBSPECIES

By Torben B. Larsen

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Introduction

Colotis agoye (Wallengren), 1857 has long been considered an insect of great interest since it has three distinctive subspecies, two of which occur with slight overlap in southern Africa, the third (ssp. *zephyrus* Marshall, 1897) being found in Somalia, separated from the others by nearly three thousand kilometres. The purpose of this paper is to outline the distribution of the two southern taxa in Botswana and to assess their status.

The populations of southern Africa

Two subspecies have traditionally been recognized in southern Africa. The nominate *Colotis agoye agoye* (Wallengren), 1857 is common in the northern half of Namibia and Botswana, in much of Zimbabwe, then extending southwards to eastern Botswana and much of Transvaal. Heath (1982) thinks it will be found also in southern Zambia. *Colotis agoye bowkeri* (Trimen), 1883 is found in the southern parts of Namibia and Botswana, as well as in the northern Cape, Orange Free State, and, occasionally, in southern Transvaal. The frontier in Botswana runs east from the Namibian border, roughly at the 22nd parallel, then swings south to follow the edge of the Kalahari sands proper to the South African border.

The two subspecies are so strongly differentiated, considering that they are contiguous, that I actually began research for this paper in the firm belief that two distinct species were involved. This assumption was strengthened by the fact that occasional cases of sympatry between the two have been recorded (Otaviefontein, Namibia (Pennington 1978), Hartebeesport and Florida, Transvaal (S. F. Henning & S. Woodhall, pers. comm.)). The Transvaal cases of sympatry followed the 'great migration' of 1966.

Carcasson (1981) and D'Abrera (1980) use the name *eosphorus* (Trimen), 1863 instead of *bowkeri*. This is mistaken on two counts: 1) the name was spelt *eosphorus* by Trimen, who later personally synonymized it with nominate *agoye* (1893); 2) in his description Trimen specifically says that it has 'the whole surface sprinkled with minute blackish atoms', which is one of the chief characteristics of nominate *agoye* of which *eosphorus* is a junior, subjective synonym. I get the impression that Trimen only became aware of (Wallengren)'s work after 1863.

The males of the two subspecies normally differ as follows:

- 1) *agoye* is consistently larger than *bowkeri*,
- 2) *agoye* has the veins on all four wings delicately underlined in black; such underlining is wholly lacking in *bowkeri*,
- 3) *agoye* has the white parts of the forewing sprinkled with a dusting of minute black 'atoms' which are always lacking in *bowkeri*,
- 4) the orange apical patch of *agoye* is relatively smaller than in *bowkeri*,

- 5) the inner black border to the apical patch of *agoye* is of more or less equal width; in *bowkeri* it is much wider in the middle than at the costa and margin,
- 6) the orange colour of the apical patch in *agoye* is usually uniform; in *bowkeri* there is usually a lighter band along the black inner margin of the patch,
- 7) the costa of the hindwing upperside in *agoye* is white; there is always black shading in *bowkeri*,
- 8) the flight of *agoye* is usually faster and higher above the ground than that of *bowkeri*, but this is not quite consistent.

Females are variable and may have black or orange apical markings, and any transitions in between. In *agoye* the inner border of the apical spot is strongly curved, in *bowkeri* it is almost straight, with an indentation into the white in the middle. Also *bowkeri* females normally have black markings on the hindwings which are missing in *agoye*. There is slight, parallel seasonal variation, mainly resulting in dry season morphs with a dusting of black or rusty scales on the underside.

The differences between the two subspecies are quite marked and I never came across specimens, not even females, where there could be any doubt.

The eastern transition zone

Following a trip to the Gemsbok National Park as part of research for a book, 'Butterflies of Botswana and their Natural History', I decided to do a transect survey of *Colotis agoye* in the area between Takotakwane in the central Kalahari (where I have found *bowkeri* very common) and Molepolole (where I have only seen *agoye*) (10.iii.1991). I was quite convinced that in this area I would find sympatric populations which would demonstrate that the two are distinct species. Instead I found a transition zone, leading me to consider them as well defined, ecologically maintained subspecies of a single species.

Between Takotakwane and Letlhakeng (142-111 km W of Gaborone) seven samples at five kilometre intervals only contained *bowkeri*. At km 106 west of Gaborone a few *bowkeri* were found, while at km 103 both *agoye*, *bowkeri*, and many transitional forms were found. At km 100 two intermediates were found, at km 94 a single female *agoye*, and at km 83 an intermediate male. After this point weather deteriorated, but I have previously only seen *agoye* there.

On 19.x.1991 I attempted to find a similar transition zone on the road from Jwaneng to Kanye; from 19 km W of Kanye only *bowkeri* was met with, while I have previously in the Kanye area only taken *agoye*. Somewhere in the 19 'missing' kilometres a transitional zone should be found to match that at Letlhakeng.

The Letlhakeng transitional specimens

The 12 transitional males taken are all more or less intermediate, though on balance tending towards *bowkeri*, and there is variation in the extent of black speckling, the degree of black underlining of the veins, the tone of orange in the apical patch, and - especially - in the extent to which the inner border of the apical patch has the characteristic thickening of *bowkeri*. All transitional specimens lack black costal markings on the hindwings.

The northern transition zone

It was said by van Son (1949) that in the north the ranges of the two subspecies were separated by a broad belt where neither occurred. Examination of all Botswana data showed that the northernmost record of *bowkeri* was at the level of the Okwa fossil river valley and the southernmost record of *agoye* was from the Kuke Pan, both taken by myself. On 18.x.1991 I decided to investigate the situation in this area. Unfortunately the weather was indifferent and the host plants very dried out, so many stops south of the Kuke Pan yielded no specimens. However, at 53 km. north of Ghanzi I came across an area with well-developed host plants and many Pierids about. I soon found a typical male *agoye*, followed by many more, as well as a pair of typical *bowkeri* in copula, another *bowkeri*, and one transitional male, best described as a *bowkeri* with the veins underlined in black. I caught three typical *bowkeri* further south towards Ghanzi. The *agoye* from north of Ghanzi were all very small, with very precise markings, giving the impression of a dry season form, though the undersides were pure white. The *bowkeri* were rather larger and quite typical of that subspecies. The transitional male exactly matches one of the Letlhakeng specimens.

Discussion

The eastern area of transition is on typical Kalahari sands, but in an area where the vegetation of the eastern, rocky hill country intrudes into the sands, including many trees that are not seen in the southern Kalahari proper, such as Marula. The northern transition zone virtually coincides with the transition from the Northern Kalahari Tree Savannah to the Southern Kalahari Bush Savannah. This underlines the fact that *bowkeri* is ecologically adapted to the Kalahari sands and the Southern Kalahari Bush Savannah of Weare & Yalala (1971), at the contour of which its northern and eastern limits practically lie.

Though meteorological data for this area are poor, I would hazard the guess that *bowkeri* is frost-tolerant while *agoye* is not, and that this is the main determinant that maintains them as distinct subspecies.

Under the biological species concept the interbreeding of *agoye* and *bowkeri* can be taken as clear evidence that a single species is involved. In practice the picture is not always clear, since habitat choice may severely limit the extent to which sympatric and quasi-sympatric species actually come into contact (see, for example Sperling (1989) on *Papilionidae*, as well as Clarke & Larsen (1986) and Pierron (1990) on *Papilio machaon* Linne and *P. saharae* Oberthur in North Africa and Arabia). However, given the gradual transition zone in the east, the probably gradual transition zone further north, and the fact that transitional forms were found on both occasions, it seems best to conclude that we are dealing with two well differentiated, ecologically maintained subspecies of a single butterfly. It would, however, be very interesting to study the two subspecies using electrophoresis. The relationship between the two subspecies of *C. agoye* in southern Africa, to my mind at least, shows the value of maintaining the subspecies concept for morphologically well differentiated, allopatric populations, especially when there are ecological and evolutionary reasons for accepting them. It has been suggested that the concept of subspecies would be best abandoned, but such an approach would simply shift the problem of defining geographical populations to the level of the species. I would certainly opt for giving *agoye* and *bowkeri* species rank if I could

not use the subspecific taxon - with the transition zone as one of interspecific hybridization rather than transition between subspecies.

I do not want to hide my personal amazement at the conclusions drawn in this brief paper. I had set up the transects specifically in order to prove a preconceived notion, namely that two distinct species were involved. I ended up convincing myself (the reader as well, I hope) of the opposite. I have no regrets, however, because that is what the scientific approach is all about.

A note on the early stages

I beat many larvae of ssp. *bowkeri* off *Boscia albitrunca* (30 km W of Middelspits, Kang, and near Takotakwane). The colour is green with only a slight dark irroration; the colour is a slightly truer and lighter green than the mature foliage of the tree. The head and eyes are green, as are the true and false legs. The head has a brown spot on the frons. There is a yellow dorsal line and a similar lateral line on either side, just below the spiracles. The dorsal line continues on the head; the lateral line is variable and may be missing. The larva is clearly keel shaped, tapering towards the end. The height is at its most on the first segment of the abdomen. At this point the larva is very clearly taller than it is wide. The anal end is very noticeably bifid, almost as in a Satyrid. The keel shaped profile assists strongly in affording extremely good camouflage on the leaves on *Boscia albitrunca*. I utterly failed to find them visually in trees where many could be beaten down. The larva looks very much like a miniature version of that of *Colotis eris* (Klug), 1832 which can be beaten off the same trees. The shape is very different from that of most *Colotis* which are cylindrical. Many half-grown larvae died when single larvae of a parasitoid wasp emerged, spinning a cocoon of the *Apanteles-type*. I am used to seeing these emerge from fully-grown larvae.

The pupa is apple green, occasionally a very light ivory brown. It is not as flattened and the wing cases are less developed than in many small Pierids, such as *Colotis evenina* (Wallengren), 1857, which I beat off the same trees. The frons is not drawn out to a point, and is rather blunt, though the trace of a point can just be made out. In this respect it differs from that of *C. eris*, which is very like the pupal shape of *Catopsilia fiorella* (Fabricius), 1793.

Acknowledgements

This paper was written partly with the assistance of a grant from the Danish Carlsberg Foundation for research on the butterflies of Botswana, for which I am most grateful. I am very grateful to Rob Plowes for data and useful criticism. Steve Woodhall and Stephen Henning supplied unpublished data from South Africa. My wife, Nancy Fee, deserves thanks for her good-natured acceptance of the curious antics needed to collect the necessary data.

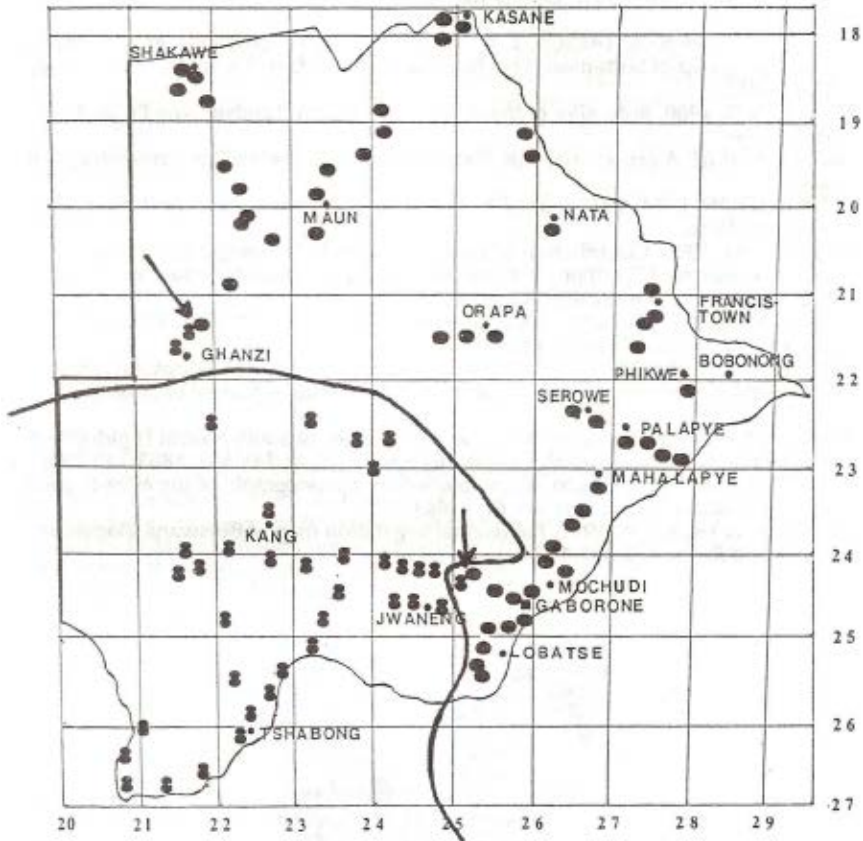
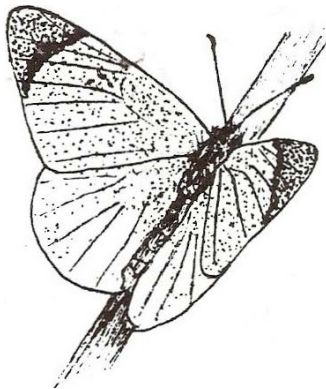


Fig. 1 Records of *Colotis agoye* (circles) and *Colotis a. bowkeri* (double circles) from Botswana; the line through central Botswana is the northern limit of the Southern Kalahari Bush Savannah (after Weare & Yalala 1971); the two arrows indicate the established zones of transition.

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Colotis agoye agoye male upperside

SYSTEMATIC NOTES ON THE *CYMOTHOE ALCIMEDA* GROUP (PART 3)

By A.H.B. Rydon

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In addition to *C alcimeda trimeni* female form *ochrotaenia* discussed in *Metamorphosis* Vol. 2 No 4 of December 1991, f p 11-20, D'Abrera also figured, on p. 270 of his book, the uppersides of a male *trimeni* from Zululand and a female of the same subspecies from Durban. The male is close to the Neotype male of *trimeni* which I designated and figured in *Metamorphosis*, Vol.2, No.1 of March 1991 (but the female has a broader white median band than the Neallotype female in *Metamorphosis*. (The Neotype and Neallotype of *trimeni* were collected by Marshall in "Natal", and may represent a separate population of *trimeni* from D'Abrera's specimens.) On the same page of his book, and above the male and female of *trimeni* just mentioned, D' Abrera has figured the uppersides of a male of *C alcimeda clarki* (taken at Hogsback by T. H. E. Jackson in April 1940) and a female of the latter subspecies which had been bred by Gowan Clark from a larva from Hogsback and which had emerged on 28.vii.1939, about the same time as the Holotype male of *clarki* (3.viii.1939) and its Allotype (1.viii.1939). Both of the specimens figured by D' Abrera are now in the Natural History Museum, London (BMNH), the female having been donated, together with 62 other specimens of Lepidoptera, to the latter institution in 1965 by Dr E. Pinhey, late of the National Museum, Bulawayo. For some unknown reason, this topotypical female of *clarki* does not carry a Paratype label, which seems to indicate that Stevenson never saw the specimen which is almost identical to the three Type females which Clark had sent to Stevenson in 1940 and which Hancock, as already stated above, made Paralectotypes of *clarki* in *Arnoldia Zimbabwe* of 8th February 1985. The female figured by D'Abrera, though not a Paratype of *clarki*, can be considered to be representative of the typical female form of *clarki* (see figs. 25 and 26, which represent the upperside and the underside, respectively, of the latter female).

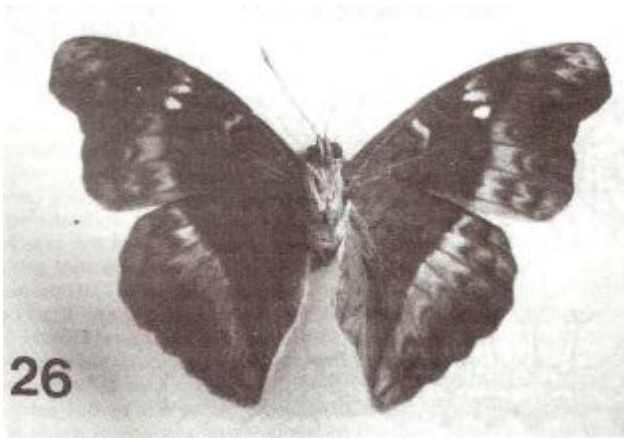
As can be seen, this form of female is quite unlike the female forms of *trimeni*, and does not occur in *trimeni* (in a strict sense). The upperside ground colour is a warm blackish-brown; the discal chevron mark in the forewing is white, as are the postdiscal spots which, in three of the four females that I have seen that were bred by Clark in 1939, are limited to spaces 4-6 (M2-RS). Only in one female (the Allotype) is there a trace of a spot in space 2 (CuA 1), which is always present in *trimeni* females. The median band is narrower than in female f. *trimeni* and is light ochraceous-buff in colour. It extends as crescents from space 3 (M3) as far as space 5 (M 1) in the forewing where it is suffused with light brown scaling. The series of postmedial interneural spots are reduced in size and are white in the forewing but pale ochreous-buff in the hindwing; these postmedial spots are smaller than in *trimeni* because, on closer examination, it will be seen that the submarginal series of black hastate marks in the fore and hindwings are larger than in *trimeni*. At the ends of veins 1 to 6 (1A + 2A to M2) are orange streaks. The underside: ground colour of basal half of both wings cinnamon-brown, becoming paler in the outer half; the white upperside markings only represented by pale white marks in spaces 4-6 (M2-R5); otherwise the discal chevron mark and narrow light ochraceous-buff band of the upperside are obscured by pale brownish scaling on the underside.

I have another female from Hogsback similar to the above one, which was collected by T. H. E. Jackson in April 1940, and a white-banded *trimeni*-like female collected by the late Bernard Barton-Eckett at Hogsback on 14.iii.1971, but it differs from *trimeni* in having the postmedial series of white spots reduced in size on the upperside due to the black submarginal hastate marks, distad of them, being larger than in *trimeni*. The ground colour of the underside is dark vinaceous-brown, with all the upperside white marks clearly reproduced below. There is also a female from Hogsback, collected by N. A. Brauer on 1.ii.1958, in the Transvaal Museum, which has an ochreous-orange band, much as in female f. *ochrotaenia* of *trimeni*, but the specimen is larger than *trimeni* (forewing length 33mm against 27mm of *trimeni*), and the orange band is relatively narrower than in *trimeni*. All these coloured female forms occur in material, either wild-caught or bred out by Messrs. J.C. McMaster and C.D.Quickelberge, in the Stutterheim area (which includes Cwen-Cwe, Katberg, as well as Hogsback), so that *clarki* can be considered to be an aggregate for the time being (as I said at the beginning of this paper when discussing the venation of the *alcimeda* group).

Before concluding this paper; it is necessary to deal briefly with the males of *clarki*. I have seen the Lectotype male of *clarki* (which had been bred by Clark in 1939), two wild-caught specimens, and two males from Hogsback, which had been bred by Clive Quickelberge in 1972. The forewings of these males tend to be more produced at the apex and at the anal angle of the hindwing than in typical *trimeni*. The Lectotype male has the outer margin of both wings on the upperside blackish grey, the margin connected to the series of black submarginal hastate marks in both wings without any intervening pale cream scaling, hence giving the butterfly a darker termen than in other Hogsback males, which do have this intervening cream scaling, as in the male figured on p. 270 of D'Abrera's book. The Lectotype male also has the postmedial series of black crescentic marks well-marked and extending as far as space 5 (M 1) in the forewing, unlike the other males in which the latter crescentic marks normally end in space 1 b. (as a W-shaped mark lying on its side) or space 2 (CuA2 or CuA 1). The underside of the Lectotype male is dark vinaceous brown, with all the underside markings, including the median line, a darker tone of brown. The underside of D'Abrera's male (which was not figured in his book) has, however, a very pale underside, the basal half of the wings being pale cream, with the median line pale greyish-brown, as are the postmedial and submarginal series of marks and also the termen of both wings. Out of the five males from Hogsback three have a vinaceous-brown underside, and two have a pale cream underside.

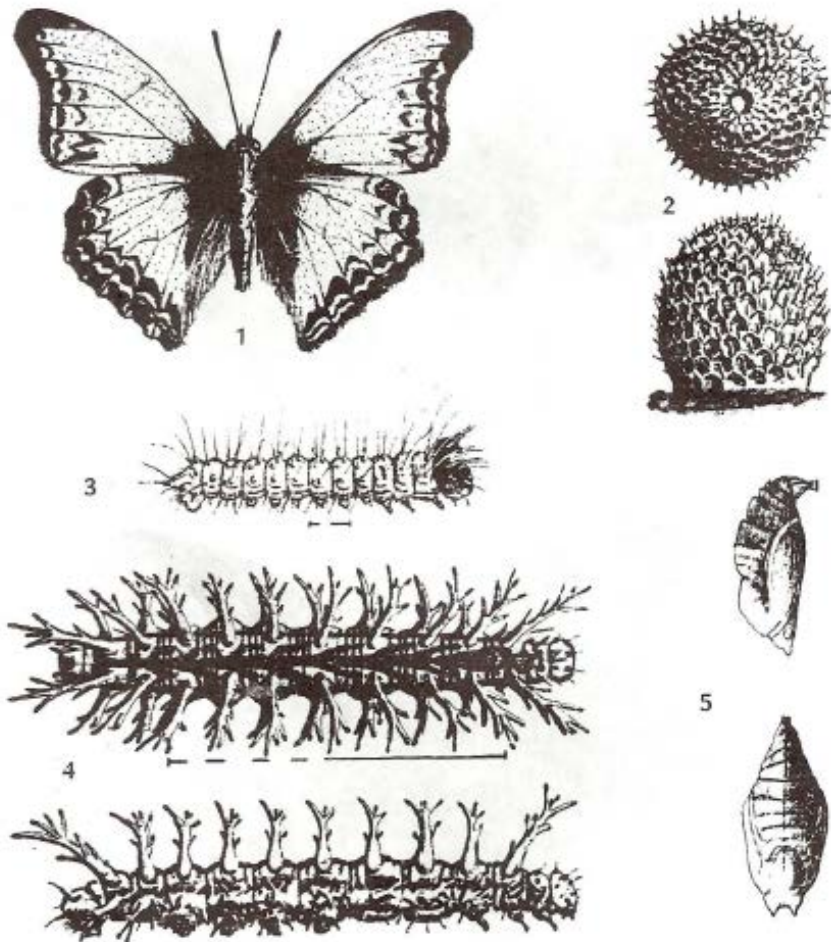
In *Metamorphosis*, Vol. 2, No. 2 of June 1991, pp. 8-9, Paul Kruger speaks of two migrations of many species of butterflies on 25th March 1981 and a week later on the 2nd April at East London, the butterflies coming from the south-west both times. Among the many species listed by Kruger as taking part in these migrations is *C alcimeda trimeni*! This, if anything, shows that there may be some linking up of various populations of *trimeni* and casts doubt on the stability of such populations. The specimens of *trimeni* that Kruger saw may have come from the Grahamstown area which is south-west of East London. The subspecies, according to Clive Quickelberge (*in litt.*, 12.i.1972), does not occur on the Zuurberg Mountains, west of Grahamstown, where he and McMaster spent a few days looking for it; they could not find its foodplant, *Kiggelaria africana* L. there. However, van Son, in his paper on the *Charaxes xiphares* group (in the *Ann. Transv. Mus.*, Vol. 22(2) 1953, p. 225) has found *Ch. xiphares thyestes* (Stoll) occurring there, presumably because

its foodplant, *Scutia myrtina* (Burm.) also grows there. Van Son says that the geographical barrier between nominate *xiphares* (of the Southern Cape Province) and *thyestes* (of the Eastern Cape Province) "is the wide stretch of dry karroid country between their nearest habitats, namely the coastal forests of Van Staden's Pass and the Zuurberg Mountains." In April 1-70, I spent several days in the Van Staden's Pass area in search of nominate *alcimeda*, but did not see it, though Leon Hersalek (*in litt.* 19.xi.1969) told me that he had seen "a butterfly very like the female *alcimeda* over a year ago at the Van Staden's Pass. It appeared gliding over high trees."



C. alcimeda clarki Stevenson: figs 25-26, female f. *clarki* Stevenson, Hogsback, Cape Province, bred by G. Clark, emerged on 28.vii.1939 (The Natural History Museum, London)

* The dry karroid country, referred to above obviously acts as a barrier between nominate *alcimeda* and subspecies *trimeni*, or else it indicates that nominate *alcimeda* is not in the habit of migrating great distances as does *trimeni* (apparently). Thus the populations of nominate *alcimeda* are more stable than those of *trimeni*. This leaves the problem as to why *trimeni*, if it is capable of migrating north eastwards (and returning south-westwards?), has not invaded the Southern Cape Province yet?



Cymothoe alcimeda trimeni 1. Male upperside. 2. Egg - dorsal, lateral view. 3. First instar larva. 4. Final instar larva - dorsal and lateral views. 5. Pupa - lateral and dorsal views (after Cowan C. Clark, 1979).

MKUZI CAMP 1958

By Charles Wykeham

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When the legendary Ken Pennington and Colonel Hugh Bridges camped at Mkuzi in October 1958 the bushveld was in wonderful condition and there was such a variety of species on the wing that many a hard choice was made in deciding which to catch in preference. The relaxing boxes were totally overloaded. The hurricane lamps burnt late into the night and at early dawn setting of prize specimens recommenced. It was during these hours that the mosquito squadrons of the Mkuzi Flats attacked the collectors like Japanese war planes at Pearl Harbour.

For those who never met Ken Pennington it would be as well to give a short character sketch. He was a man who was always in command of the situation. A man of great understanding, patience and tolerance. Nothing could shock Ken Pennington. Ken had organised the camp at Mkuzi and had invited Hugh as a guest. The camp was pretty basic, comprising Ken's small caravan, canvas tents, camp stools etc. It was set out under some Fever trees in savannah bushveld at the foot of the Mkuzi Hills.

Hugh arrived in his 1951 Austin A40 towards dusk. He was hot and sweaty from the dusty road from Hluhluwe. In India, army officers camped liked Maharajas in the bush. He had been idly reminiscing about hot showers, scotch on the rocks, steak and kidney pudding and a lovely camp bed with clean linen sheets and woollen blankets. The sight that met his eyes was far from what he had been expecting.

"Good day Kenneth" he said in his raspy burly voice as he eased his great bulk out of the Austin. "Some place this, what!!" Ken helped Hugh move his baggage and equipment into his poorly appointed tent.

"Ken, I need a hot shower. It's been hell getting here. Where are the ablutions?" "Hugh, you follow that kaffir path for about 300 yards and you can't miss it on your right." Hugh had stripped off his safari clothes and had wrapped a large towel around himself. Slippers and a toiletry bag completed his attire. .

"Darn bloody ridiculous place for the ablutions" he muttered as he walked off down the path. The bush was quite thick but then it opened into a clearing and plum in the middle stood an old cast-iron bath fed from an underground spring by a rusty iron pipe.

"My damned sainted aunt" he declared aloud. What had things come to! Hugh pondered the situation for a while and realising that he had little choice, stripped off his towel and got into the bath. The cool clear water was refreshing and soon Hugh, soaping himself down and washing himself off, began to see the brighter side of the situation. "Basic chaps these South Africans" he thought to himself.

Suddenly Hugh heard pistol shots, the thunder of stampeding hooves, whistling and yelling. Hugh thought of the Indian Rebellion. Should he run for cover or stay put. No, they were cracking raw-hide whips not pistol shots. Within seconds Hugh was surrounded by a large herd of red Afrikaner long-horn cattle, thirsty from a long trek and red in the eyes, desperate for water! The cattle wheeled and surged, their sharp horns perilously close to the bath where Hugh cowered in fear of his life. In a desperate last stand Hugh stood up and flailing his arms about, fled as best he could, the cattle opening a path for him in sheer amazement.

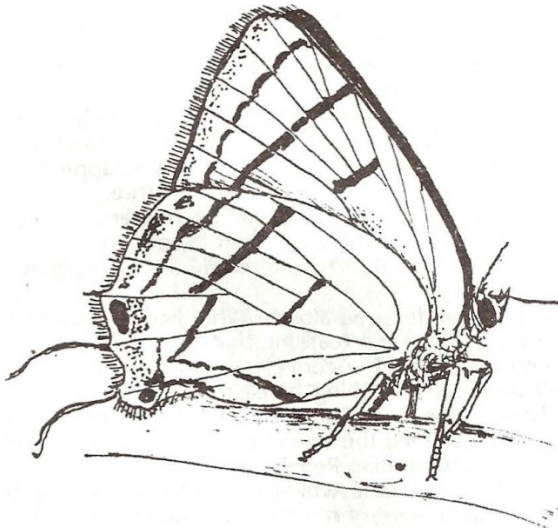
"Bloody hell, Ken, I am not prepared to tolerate any more of this" he shouted as he arrived at the camp totally exhausted in his birthday suit. Hugh was intent on leaving immediately.

"Hugh, have a look at these *Charaxes castor* I caught on the koppies early this morning and these perfect *Iolais lulua*. Tomorrow I'll show you a good spot for *Deloneura millari*".

The sight of the beautiful specimens sobered the Colonel somewhat. Then Ken poured a double scotch and handed it to him. "Africa is a wild continent old boy" he said with the big Pennington smile.

These episodes have been written in response to the express wish of my late uncle, Mr Charles Dickson. He enjoyed these anecdotes and wished that they be shared with the butterfly fraternity. It is my pleasure to fulfil his wish.

In the next episode we will examine the classic trip to the Drakensberg when Ken and Swannie were obliged to share a sleeping-bag one frosty night!



Iolais lulua male underside

FEMALE FORMS AND VARIATIONS OF *CHARAXES ETHALION ETHALION* BOISDUVAL CAUGHT AT ESHOWE

By J.T. de Kock

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Van Son, in his monograph on the Nymphalinae butterflies of Southern Africa (1979), states that *Charaxes ethalion* is an extremely variable species with more than ten female forms described. The nominate subspecies *C. ethalion ethalion*, that flies at Eshowe, has four female forms. In addition to these recognised forms, the author has found numerous variations, the subject of this paper.

Female form *ethalion*: By far the most common form found at Eshowe. The width of the forewing discal band varies from very narrow and trapezoidal with the lowest postdiscal spot in area CU2 distinctly separated from the discal band, to very wide and almost triangular with the postdiscal spot in CU2 fused with the discal band. The degree of rufous suffusion on the hindwing underside also varies and I have one specimen with the discal band completely suffused over.

Female form *aurantimacula*: Also a common form in Eshowe, but good specimens with deep orange spots on the forewing are rare. These spots are mostly pale yellow in colour. The yellow colouring sometimes extends below vein CU2 almost to the inner margin. The width of the discal band varies as described for the *ethalion* female form. The degree of suffusion on the underside seems to be linked to the intensity of the colouring on the upperside.

Specimens with light yellow spotting may have typical female form *ethalion* undersides, whereas really dark specimens may have all of the normally white marking of the undersides of the fore and hindwings completely obscured by rufous brown scaling.

Female form *swynnertoni*: Typical *swynnertoni* female are rare in Eshowe and I have only one good specimen in my collection.

Female form *rosae*: Relatively common in Eshowe. I have not found this form to be generally smaller than others. A batch of females bred from a single *rosae* female produced 50% *ethalion* and 50% *rosae* females with no discernible difference in size. Some specimens have yellow postdiscal spots. G. Upfold has collected a specimen near female form *imitans*. The discal patch in the hindwing is narrower and very blue. The forewing postdiscal spots are greatly reduced with only the first three spots clearly visible. .

Female variation near *fisheri* pattern: The discal and postdiscal spots are well developed and tend to be joined, as if to develop a single band. A spot in the forewing discal band in M2 is present and proximate of the rest.

Female variation (*aurantimacula* X *swynnertoni*): I have in my collection one exceptionally beautiful female specimen (also collected by G. Upfold) with absolutely no white 1n the fore or hindwing discal bands. All the spots in the forewing above CU2 are deep orange whilst the remainder of the band is deep blue.

Having noticed and described the extent of variation between specimens one cannot but agree with van Son on the extreme variability of the species. Interforms and colour patterns, the amount of violaceous and ochreous suffusion in fore and hindwings, all vary to such an extent that one wonders where one "form" starts and another ends. Thanks to G. Upfold for supplying many of the specimens described.

**BUTTERFLY COLLECTING IN THE TSWAPONG HILLS, BOTSWANA
(SEPTEMBER 1991)**

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and

Rob Plowes

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We decided to go up to have a look at the spring butterfly fauna in the Tswapong Hills, near Palapye, in eastern Botswana, during tile period 22-24 September, 1991. From previous visits we knew the hills to be of entomological interest, but they much exceeded our expectations. The Tswapong Hills stretch from Palapye almost to the RSA border. From a distance they do not look like much, but they are a real set of low mountains, and very different from most of Botswana. Their geology differs from the surroundings, being Precambrian quartzitic sandstones, surrounded by Karoo sediment mudflats. Their vegetation is much more dense and diverse than anywhere close by, not least the Mopane woodlands which dominate much of the mudflats.

The trip up from Gaborone is 350 km through the flat, monotonous, parched fringes of the Kalahari. For someone (like Larsen) without prior knowledge of seasonality of the butterflies in southern Africa, it seemed we had a trust with nothingness. Can there really be anything of note in such apparent desolation?

We met on a cloudy, cool and blustery morning, with a cold front lying over the mountain, convinced that the first day's collecting was washed out. We took solace in sagely convincing each other that this was exactly what made the hills so interesting, since moisture levels are obviously better than on the surrounding plains. So we drove up towards a permanent moisture patch near the Moeng College, set up some traps, and selected a suitable camping spot, prepared to while away the afternoon with computer chess.

To our delight the front suddenly dissolved, and by 13.00 we were up at the permanent little streams which feed the reservoir at Moeng College. Everything suddenly began coming to the damp patches. Dozens of *Papilio constantinus* and *Graphium morania*, as well as a few *G. antheus*. In Botswana *G. morania* is only known from the hills; the other two are also known from the north. Many *Acraea*, usually rare in the area, such as *A. aglaonice*, *A. lygus*, *A. stenobea*, and *A. caldarena* were frequent mud-puddlers. *A. zetes* was unexpectedly common, both sexes coming to water with equal zeal - if you miss one the first time, you will not get another try. All Botswana material so far are unequivocally ssp. *barberi*.

While surveying this splendid scene, a passing *Eurema brigitta* was absentmindedly netted, since it looked very light. It had black lines underneath, and was the first Botswana record of *lo/aus pallene*! Both sexes came to water, and at one stage we found ourselves playing ping-pong with one over a small ravine, each missing it four times before it was finally netted. What an amazing insect. Shortly after, another first for Botswana materialized in the form of a single *Acraea obeira burni*. Since one of us erected *Tuxentius* Larsen, 1982 (formerly *Castalius*), members of that genus are always of interest. Out in the dry savannah *T. melaena* was quite common, but in between a few *T. calice* also turned up. In Botswana it

has only been noted once at Mpandama-tenga, some 500 km to the north. Another great range extension came in the form of a single *junonia natalica*, very unusual in true savannah country - the few prior Botswana records are from Kasane and the Chobe area.

Just below the reservoir dam is a shallow valley with a small stream with grassy banks, surrounded by dense trees - some flowering *Combretum* had dozens of *P. constantinus* sipping from their crowns. One of the characteristic plants is *Acacia schweinfurthi* and *Charaxes zoolina* abounds (uncannily like Steve Woodhall recently described it from Thabazimbi in this journal). The plant is both butterfly-net and man eating, but *C. zoolina* of both sexes came readily in the traps (all dsf). We have always had great hopes for this swampy valley (*Bicyclus*, *Ypthima*, *Leptotes pulcher*, and who knows what Skippers) but have not had much luck. We did pick up a fresh *Acraea rahira* female, but where were the males? A while later, back at the traps we found them full of *Charaxes jahlusa rex* - as if by magic, since we had seen none on the wing. There were plenty of both sexes of *Charaxes vansoni* - Pennington's remark that they are shy of traps puzzles us. Others of the genus were *saturnus* and *achaemenes*; *phaeus* of both sexes were caught at damp patches, while *varanes* and *candiope* failed to turn up.

The *Colotis* are not much in evidence in the hills proper, except for *C. euippe*, since the vegetation is too dense and vigorous for the main host plants to occur. However, in the foothills virtually all the Botswanan *Colotis* occur, and it is one of the few places where we have seen *C. pallene* and *C. lais* in exact sympatry.

All this excitement covered two days and was interspersed with a good braai on a night of almost full moon. On the Sunday we had to split, Plowes returning to Gaborone, and Larsen setting off for the Moremi Gorge on the north side of the hills, with the sketchiest of sketch maps for guidance. In the event it was easily found, and it is - by Botswanan standards, at least - an exciting place. The gorge is no more than six to seven metres wide, with a permanent rivulet and standing pools of water, surrounded by thickets of ferns. It is clothed in dense vegetation and so cluttered with rocks and fallen trees that it is cattle-proof - always an important consideration in Botswana since most permanent water sites are hopelessly trampled. The sides are so sheer that the sun only reaches the bottom of the gorge for about four hours. It looked good. Breakfast was had while the Cape vultures which roost on the cliffs circled for landing with their characteristic whoosh and they were pleasant company all day.

It was good! Soon *Salamis anacardii* turned up, a great rarity in Botswana. A vigorous colony of *Precis archesia* played about, all but one dsf. There are very few records from Botswana. Tantalizingly out of reach were several *Acraea obeira burni*, circling tall flowering trees. Then, suddenly appeared a large, worn female *Tagiades flesus*. I saw a male later. It has been predicted for Kasane by Pinhey, but in the Tswapong Hills!?! (back home it was found that Swanepoel had not been studied well enough; he describes exactly the same conditions in Transvaal, but the Tswapong Hills must still be hundreds of kilometres from the nearest known colony). A few *Deudorix dinochares* extended the range of this species some 600 km south in Botswana. *Leptotes pirithous* was common - on my return to Gaborone they all proved to be *L. brevidentatus*, new to Botswana, a reward for our patience in having dissected more than a hundred *L. pirithous* from all parts of the country.

In the late afternoon, over a well-earned beer, it was possible to see hundreds of the four Swallowtails making their way back up the gorge after having gorged themselves on the banks of the rivulet in open country in tight clusters of up to 50, chiefly *G. antheus* and *P. constantinus*. A single *Charaxes candiope* came to investigate the beer - it is uncommon in these parts. We shall have to revisit Moremi Gorge, despite the expense - the going is so tough that a pair of slacks, a shirt, and underpants had to be discarded. Thank you, *Acacia schwe1nfurti!* We hope that the Carlsberg Foundation, which finances some of Larsen's research, will be suitably impressed.

That weekend we saw 83 species, and on previous occasions we have seen an additional 20, for a total of 103. Since we have not so far had much luck with Skippers and the scarcer Blues, at least another score is certain. Who would have credited anywhere in eastern Botswana with 125 species or more? Finally, we have jointly decided that this is where the elusive *Cnodontes vansoni* will be rediscovered, so watch this space!

BUTTERFLIES FROM THE TSWAPONG HILLS (22-24 September, 1991)

*additional species seen on 16.i.91, 5.ii.91, 5.iv.91

<i>P. constantinus</i>	<i>S. phanes</i>	<i>Z. hylax</i>	<i>P. phalanta</i>
<i>P. demodocus</i>	<i>A. tjoane</i>	<i>A. jesous*</i>	<i>A. encedon</i>
<i>G. morania</i>	<i>A. amanga</i>	<i>E. mahallakoaena *</i>	<i>A. eponina</i>
<i>G. antheus</i>	<i>A. damarensis</i>	<i>E. subpallida</i>	<i>A. rahira</i>
<i>C. florella</i>	<i>C. leroma*</i>	<i>L. glauca</i>	<i>A. aglaonice</i>
<i>E. brigitta</i>	<i>I. mimosae</i>	<i>F. trochylus *</i>	<i>A. axina</i>
<i>C. electo*</i>	<i>I. pallene</i>	<i>D. chrysippus</i>	<i>A. stenobea</i>
<i>P. eriphia</i>	<i>I. bowkeri</i>	<i>M. leda*</i>	<i>A. lygus</i>
<i>C. vesta</i>	<i>H. caeculus</i>	<i>C. natalii*</i>	<i>A. caldarena</i>
<i>C. ione*</i>	<i>H. philippus</i>	<i>C. candiope</i>	<i>A. natalica*</i>
<i>C. regina</i>	<i>G. henningi</i>	<i>C. saturnus</i>	<i>A. anemosa</i>
<i>C. danae</i>	<i>D. antalus</i>	<i>C. achaemenes</i>	<i>A. zetes</i>
<i>C. auxo</i>	<i>D. dinochares</i>	<i>C. jahlusa</i>	<i>A. obeira</i>
<i>C. antevippe*</i>	<i>A. amarah*</i>	<i>C. phaeus</i>	<i>A. neobule</i>
<i>C. euipe</i>	<i>C. iobates</i>	<i>C. vansoni</i>	<i>C. forestan</i>
<i>C. pallene*</i>	<i>P. sichela</i>	<i>C. zoolina</i>	<i>T. flesus</i>
<i>C. lais*</i> (foothills)	<i>L. boeticus</i>	<i>H. daedalus</i>	<i>S. phidyle</i>
<i>C. evagore</i>	<i>L. pirthous</i>	<i>B. anvatara</i>	<i>S. seineri</i>
<i>C. agoye</i>	<i>L. brevidentatus</i>	<i>B. ilithyia</i>	<i>L. levubu*</i>
<i>C. subfasciatus</i>	<i>T. melaena</i>	<i>H. misippus *</i>	<i>S. spio</i>
<i>C. eris</i>	<i>T. calice</i>	<i>S. anacardii</i>	<i>S. diomus</i>
<i>B. aurota</i>	<i>Z. hintza</i>	<i>J. oenone</i>	<i>S. mafa</i>
<i>B. creona</i>	<i>T. sybaris</i>	<i>J. hierta</i>	<i>S. delagoae</i>
<i>M. agathina</i>	<i>Z. knysna</i>	<i>J. natalica</i>	<i>B. borbonica *</i>
<i>S. ella</i>	<i>A. ubaldus*</i>	<i>P. archesia</i>	<i>P. mathias</i>
<i>S. natalensis</i>	<i>A. moriqua</i>	<i>V. cardui*</i>	

ZULULAND SELDOM DISAPPOINTS!

By Steve Woodhall

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On 14 Dec 1991, Alf Curle, his son Martin and I set off for Zululand to see what was on the wing. We set off early in the morning in Alf's Toyota Hilux Double Cab 4-wd, laden with all necessary gear. This proved to be a superb safari vehicle. It is as roomy as a road car inside, and has all the mod. cons., and cruises happily at 120 kph all day. Off the road it is a true "go anywhere" device, and this allowed us to explore some of the more remote areas of Manguzi Forest.

We stopped off at Alf's brother Neville's house in Vryheid, which he had kindly allowed us to use as a base. Then we headed south via Melmoth to Eshowe. On the way we noted the prominent hill in the bushveld on the left hand side of the road, just before the road drops down to Eshowe. It has a big crucifix on a plinth at its summit, and is the haunt of *Iolaus diametra natalica* Vari. A big thanks to Chris Fiq for very precise directions! We decided to spend the day at the Mpushini Falls outside Eshowe, and return to this hill in the late afternoon to search for larvae.

Mpushini Falls is a spot I had discovered a few years earlier as a good locality for all the forest species of Eshowe. It is a little way outside the town, on the road which goes past the police station. The falls form a series of cataracts on the Matigulu river, which flows down a steep, forest-filled gully in the escarpment there. The sides of the gully are too steep for the cultivation of sugar cane or gum trees, so its forest has escaped the fate of many of those in the area. There is a small car park and picnic area at the summit of the falls, as it is a popular local beauty spot. A tortuous path follows the river, sometimes falling right down to the water's edge, sometimes rising high up the gully sides. This allows good access to various habitats; from the wet riverine margins to the high canopy.

When we first reached the spot, at about 1030 hrs, not much was on the wing. We hung a couple of traps and set off downriver. As the day warmed up, we were struck by the large numbers of *Lachnoptera ayresii* Trimen that were flying in the dense undergrowth. *Rawsonia lucida* Harvey & Sander is one of the commonest understory plants in this forest. Not only *L. ayresii* but also *Cymothoe coranus* Grose-Smith, 1889, and *Acraea cerasa cerasa* Hewitson, feed on this plant. Consequently, these species are all abundant at Mpushini. On this day, *C. coranus* was just coming onto the wing as evidenced by the few fresh males and single female we saw. *A. cerasa cerasa* was not flying. In my experience this insect is found later in summer, from February to May.

As we walked down the path, taking care not to slip on the wet, algae-covered rocks, an excited Alf, who had walked on ahead of me whilst I watched some *L. ayresii*, came to show me a perfect pair of *Pseudacraea eurytus imitator* (Trimen), that he had caught in copula. We went back to the spot where he had caught them, which proved to be a large specimen of *Bequaertiodendron natalense* (Sonder) which is a food plant of the butterfly. Occasional specimens were flying around this tree, including another female which unfortunately refused to start ovipositing for us! She was netted, as this was my first ever female specimen of *P. eurytus imitator*. A few more males were taken and one more female was kept alive for an attempt at captive breeding. Sadly this failed.

Needless to say this success buoyed us up considerably. We set off further down the river in happy anticipation. We were not disappointed. A few specimens

of *Mylothris trimenia* Butler, were seen, and great joy for me was a female *Hypolycaena buxtoni buxtoni* Hewitson, flying around a bush of *Clerodendron glabrum* E. Meyer. She looked as if she was going to lay eggs, which would have allowed me to rear the species through. However, she decided against it and flew into the canopy. A few minutes later, another, less fresh female descended to the same bush and circled it just like the previous specimen. This one also failed to lay any eggs, preferring to feed on some small purple flowers at the water's edge. I netted her as she was my first reasonable female specimen of *H. buxtoni buxtoni*. A short way further downstream we spotted a female *Graphium leonidas* Leonidas (Fabricius) ovipositing on *Artabotrys monteiroae* Oliver. A few eggs were taken, but it was impossible to take enough of the foodplant to last the larvae through to pupation. Happily, when the eggs hatched one larva was persuaded to switch to *Uvaria caffra* E. Meyer ex Sander.

Finally we reached the point where the river crosses a cane cutters' road, which if one follows up the hill for a short distance to the right (facing downstream) leads to a steep path between the forest and the cane. This path leads eventually back to the car park. The river goes under a bridge in a large clearing, which is normally a good spot for *A. cerasa cerasa*, but today none were flying. We set off up the steep forest path, which eventually brought us to a point overlooking the river gorge. Here there was the most glorious view of the forest canopy, and ~ a lot of *Xylothea kraussiana* Hochst, around which were flying male *Acraea petraea* Boisduval. Unfortunately no females were available for breeding - the species was just starting its flight period and it appears that the males are the first to emerge.

It was at this spot that we had a shock. A medium-sized *Charaxes* flew over us, too high to be netted. It was black with a yellow transverse band on each wing, and too small to be *C. castor flavifasciatus* Butler. Could it have been *C. etesipe tavetensis* Rothschild? We will never know, because time was marching on and we wanted to have a look for *Iolais* larvae on the way back. At the same spot a beautiful female *Charaxes ethalion ethalion* (Boisduval) f. *rosae* Butler settled on a twig in front of us. We hardly had time to react before she flew tantalizingly back into the canopy, which at this spot is largely made up of *Albizia adianthifolia* (Schumacher), the foodplant. We made a mental note to hang traps here on our next visit to the falls.

When we returned to the traps we found that a few *Charaxes* had taken residence in them, namely *C. druceanus cinadon* Hewitson, (males), *C. cithaeron cithaeron* C.& R. Felder, (females), and *C. brutus natalensis* Staudinger, (males). The females were taken alive for captive breeding.

On the journey back we stopped at the hill with the cross and asked the farmer's wife for permission to collect. This was granted, so we set off up the hill in the late afternoon sunlight. It was very hot, and we worked up quite a sweat! We found the mistletoe *Actinianthella wyliei* (Sprague) without any trouble, it has similar but smaller flowers to the foodplant of *Iolais alienus alienus* (Trimen), *Tapinanthus natalitius*. The larvae of *I. diametra natalica* were another kettle of fish! After much searching, we found a bright yellow fourth instar larva. Two hours' more eyestraining search brought six more larvae in all instars from first to fifth, and three (all infertile, as it turned out) eggs. This is not the easiest insect to find! I saw an adult female flitting around inside a mistletoe clump, she laid an egg but strangely this failed to hatch.

The next day saw us up with the lark to drive to Manguzi to try our luck there. Our spirits were high because of the beautiful bright day. As we drove across the Jozini dam wall, we could see that it was beginning to get a little cloudy. Also, just about

every cow in Tongaland was using the road as a place to chew its cud! On the way from the Ingwavuma T-junction towards Manguzi, we stopped at a dirt road leading north along the fence of the Tembe Elephant reserve. We followed this for a short distance before turning left, away from the fence, into some thick bush. This spot was very reminiscent of the "Makathini Flats" spot many of us are familiar with - huge mature *Acacia* woodland interspersed with clearings which are lightly wooded with *Terminalia sericea* Burch. ex DC. At the time of our visit not a lot was on the wing - *Graphium colonna* (Ward) and *G. porthaon porthaon* (Hewitson), both species found also at Makathini, were present in small numbers. We hung a couple of traps in the hope of getting *Charaxes etesipe tavetensis* Rothschild, and pressed on towards Manguzi.

When we reached the usual Manguzi spot, a few kms short of the hospital, I slowed down to stop, but Alf urged me on. We eventually turned left off the road towards the school, taking an immediate left turn again down a good sand road which forked to the left again just before reaching the school. To my surprise this led us back into the Manguzi forest, but not at my usual collecting spot. This new spot follows the road through the heart of the thickest part of the forest, and eventually we parked under some old mango trees and started to hang traps. Butterflies were not abundant (at least not by Manguzi standards) and the traps failed to attract much, only *C. ethalion* and *C. cithaeron* being seen. There were a few *Acraea acrita acrita* Hewitson, on the wing, and surprisingly a *Papilio constantinus .constantinus* Ward, fell to my net. Lycaenids were uncommon along the forest edge, with *Anthene kersteni* (Gerstaecker) and *A. lemnos lemnos* (Hewitson) being the only ones seen. By this time the clouds had lifted and it started to get seriously hot. I got a little bored with trudging hopefully along the forest margin and decided to try my luck along the road which led straight through one of the thickest (and coolest!) patches of forest. As I entered the green gloom, the first butterflies I noticed were large numbers of *Amauris ochlea ochlea* (Boisduval), both sexes, flying in the understory. *Papilio dardanus cenea* (Stoll) was also much commoner inside the forest than along its edges. The tiny pierid *Leptosia alcesta inalcesta* Bernardi, was also abundant, its fairy-like flight along the forest floor an enchanting sight. *Euphaedra neophron neophron* (Hopffer) was also seen in this shady spot, but in small numbers. I then noticed a small buff insect fluttering weakly through a ray of sunlight and my heart leaped - could this be a *Teriomima zuluana* van Son, at last? I had to chase it into a small clearing by the roadside to catch it, and was dismayed to find that it was *Baliochila aslauga* Trimen - only my third ever specimen! And then I noticed something small and white, slowly opening and closing its wings as it sat on a small twig by my foot. At first I thought it was only another *L. alcesta* but then I did a double-take! *Ornitholidotos peuceitia penningtoni* (Riley)! No sooner was she in my net than I saw another perching on the opposite side of the clearing. There followed about 30 minutes of determined bushwhacking, but no more specimens came to light. The same clearing was also home to a good number of another pentiline, *Pentila tropicalis tropicalis* (Boisduval). There was plenty of tree lichen about but I could see no sign of females ovipositing. I hot-footed it back to the truck to find a somewhat despondent Alf, who had had hopes of a better haul of *Charaxes*. He was amazed at my lucky find, and we immediately returned to embark on some really intense searching. Just when we thought we were out of luck, young Martin came up to us and pointed to something in his net, asking "what's this?" We both looked and a happy cry of "He's got one!" rent the air. I seem to be fated to visit Manguzi with youngsters who come up to me with a net containing a rare Lycaenid asking "what's this?" - Andrew Upshon once did it to me

with a *T. zuluana*! Dear old David Swanepoel would at least be pleased that they didn't ask "what was that?!"

Another half an hour of hunting resulted in another *O. peucetia penningtoni*, Alf being the lucky one this time. We saw another, but that one shot into the thick undergrowth and sat tight. All the specimens we had taken were fresh and we speculated that if we had been a week later we may have found them in the kind of numbers that *O. peucetia peucetia* (Hewitson) has been found in Malawi. The butterfly is obviously a denizen of the thickest forest understory like *P. tropicalis*, and the solitary specimen I had taken on the forest edge in December 1989 was evidently a stray. Now we have a well-documented locality, and another visit later in December would be worthwhile to attempt to discover the life history. By this time it was getting late, so we set off back to Vryheid. The traps at Tembe had not produced anything, but we were smiling anyway!

The next day dawned quite cloudy, so we cancelled a plan to head back into the lowveld and decided rather to explore some interesting hills that Alf had found along the road to Wakkerstroom via Utrecht. We were dodging clouds as we drove up into the Balelesberg, and we stopped for a while on an interesting hillside dotted with rocks, in the hope of finding rocksitters. In this we failed, the hillside producing a few *Aloeides natalensis* Tite & Dickson, and lots of *Stygionympha wichgraphi wichgraphi* van Son. A single *Thestor basutus basutus* (Wallengren) was also taken.

We pushed on to our main destination; a hillside at a place called Groenvlei where earlier in the year, Alf had discovered the second locality for *Dingana alaedeus* Henning G.A. & S.F. We found an interesting *Orachrysops* flying on the slopes, which will require Graham Henning's expert eye to identify. On the summit of the hill there was a colony of *Aloeides* consisting of two species, a very large and well-marked *A. titei* and a bright orange form of what looked like *A. henningi* Tite & Dickson. Unfortunately our collecting at this spot was curtailed. A big thunderstorm suddenly blew up from the south-east in a manner which will be well-known to all who have collected in the Wakkerstroom area! We beat it off the mountain quickly to avoid a soaking, or worse.

We drove back to the Reef via Amersfoort and Morgenzon, constantly being chased by rain. We stopped at Vaalkop, near Morgenzon to look for the *Aloeides* and *Poecilmitis* taxa that fly there, but the sun was definitely NOT going to come out. Seemingly, the weather had decided that we'd had our share of luck for the weekend. Martin at least found some larvae of the saturniid *Gonimbrasia tyrreha tyrreha* (Cramer) feeding on a *Diopyros* there, so we did not leave empty handed. All in all it was a successful trip, proving that Zululand seldom disappoints! Thanks are due to Alf Curle for providing the transport and Neville Curle for the accommodation.

**PLATYLESCHES AYRESII TRIMEN AND *P. LANGA* EVANS
ARE DISTINCT SPECIES (LEPIDOPTERA: LYCAENIDAE)**

By Torben B. Larsen

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I recently caught the first Botswanan specimen of *Platylesches ayresii* Trimen, 1889, on a hill top near Kanye on 8 September, 1991. It was much whiter on the underside than those figured in Pennington (1978), so I decided to compare the genitalia with Zimbabwean specimens referable to the taxon *langa* Evans, 1937, kindly placed at my disposal by R.M. Plowes. There were quite evident differences. S. Woodhall and S.F. Henning kindly placed at my disposal Transvaal material from near Johannesburg, the genitalia of which wholly matched the Botswana male. The larval host plant, *Parinari capensis* (Chrysobalanaceae) (S. Woodhall, pers. comm.) was present on the hills, where I collected a female on 27 October 1991.

Evans (1937) described *P. ayresii langa* for Zimbabwe and neighbouring areas, but several authors have tended to treat this as a mere form. According to Pennington (1978), Pinhey certainly held this view, probably because he saw the two taxa more or less sympatrically. Specimens of *langa* tend to be slightly larger than *ayresii*, to have the inner margin of the forewing underside much whiter, and to have less white dusting on the hindwing underside. The brown upperside ground-colour tends to be glossier.

In fact, Kielland (1978) had already formally promoted ssp. *langa* from south-eastern Tanzania to full species rank because of genitalic differences from *P. ayresii*. Examination of his excellent genitalia drawings show that his *P. langa* fully matches the Zimbabwean male that I dissected, and that it differs considerably from Kielland's putative *P. ayresii* from the same area. However, his genitalia drawing differs considerably from true *P. ayresii*. Kielland (1990) shows in colour the underside of the two taxa. That of *P. langa* matches Zimbabwean material, while that of *P. ayresii* is an undescribed species - it lacks the white marginal line at the tornus of both forewings and hindwings and the white irroration is more extensive, covering much of the forewing underside (not just the apex) as well as the anal fold of the hindwing underside. It is also very large for *P. ayresii*.

The genitalia of the three taxa differ as follows:

Platylesches ayresii. The uncus is more narrow than in *P. langa*, and the space between the two distal lobes is much more narrow. In the undescribed species the uncus is hardly bifid. The valves of *P. ayresii* are proportionally more narrow than in the two other species, while the serration at the distal end of the valve is less robust than in *P. langa* (one specimen from Botswana and two from the Transvaal are very consistent).

Platylesches langa. The uncus is much broader than in *P. ayresii*, and the distance between the two distal processes much wider (this cannot be due to the mounting process, as the feature has been studied in unmounted material as well). The relative size of the entire uncus-tegumen structure is larger than in *P. ayresii* and in the undescribed species. The valve is clearly relatively broader than in *P. ayresii* and with a more serrated distal end (a Zimbabwe male matches that illustrated by Kielland).

Platylesches species. The entire tegumen-uncus structure is proportionally smaller than in *P. langa*. The valve is broader than in *P. ayresii*. The heavily chitinized distal end of the valve is much shorter than in the two other species and its shape at the base is also different.

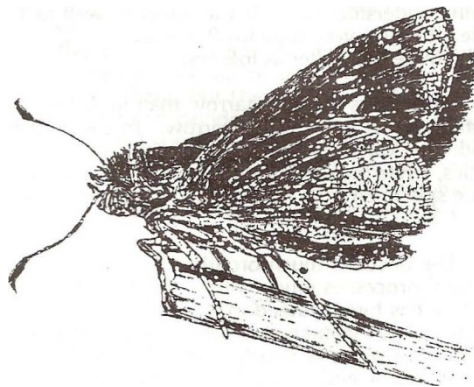
Thus, it is certain that three distinct species are involved. Kielland (1978) was right to raise *P. langa* to species level, though the comparison with the undescribed species was not the right one. The genitalic differences between *P. ayresii* and *P. langa* are too large to be ignored. In addition there is also some evidence that the two are more or less ecological vicariants, with *P. ayresii* being adapted to the bushveld of Botswana and western Transvaal, while *P. langa* is restricted to more mesic environments. I have no records of sympatry, but the two might well meet. Kielland (pers. comm.) agrees with these conclusions after studying a Transvaal *P. ayresii* which I sent him. He will eventually describe the new species.

Acknowledgements

This paper was produced under a grant from the Danish Carlsberg Foundation which partly covers my research into a book on the butterflies of Botswana. Jan Kielland kindly screened a draft of the paper. Comparative material was generously given to me by Stephen Henning, Rob Plowes and Steve Woodhall.

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Platylesches ayresii male underside

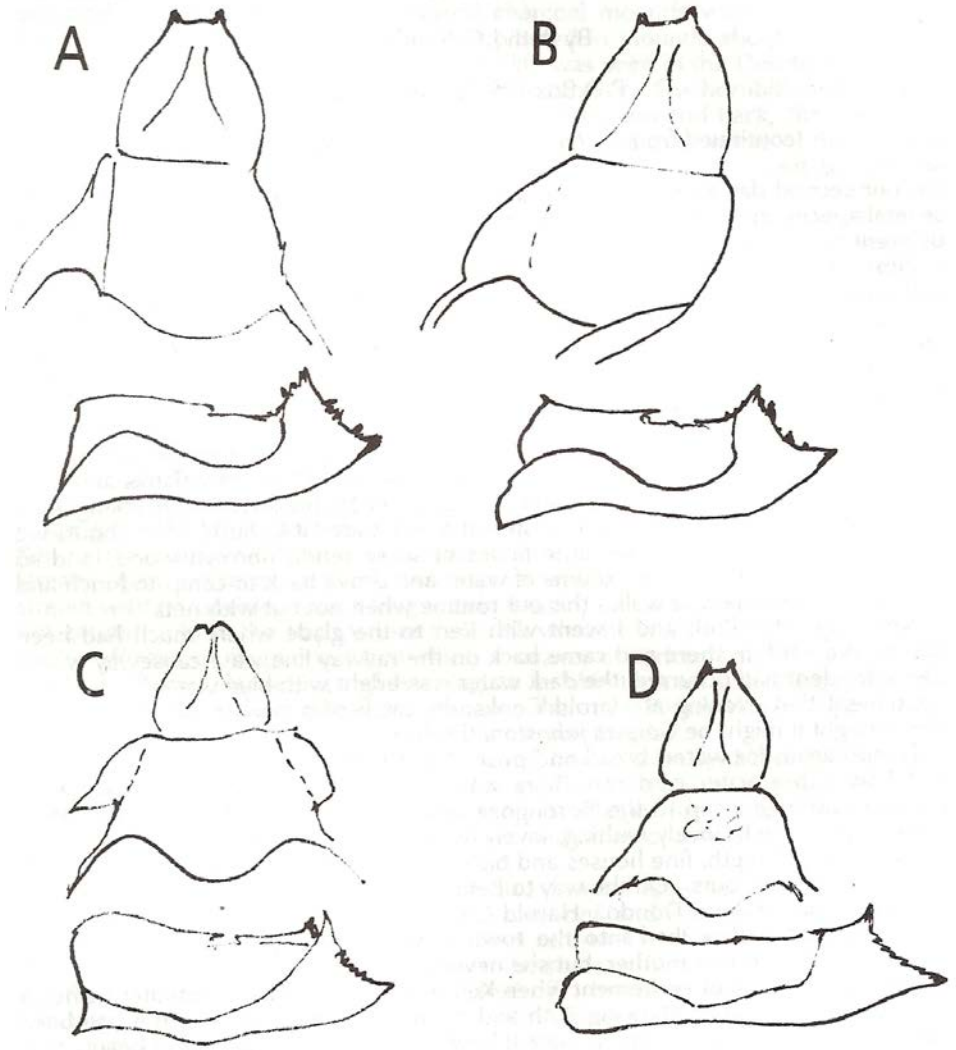


Figure 1. Uncus, tegumen and right valve of:
 A. *Platylesches langa*, Tanzania (after Kielland, 1978);
 B. *Platylesches langa*, Zimbabwe (coll. Larsen, prep. AVS);
 C. *Platylesches* sp. nov., Tanzania (after Kielland, 1978);
 D. *Platylesches ayresii*, Botswana (coll. Larsen, prep. AVR).

RAMBLINGS OF RUTH SOUTHEY (PART 2)

By Ruth J.C. Southey

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(continued from *Metamorphosis*. 2(3): 41, September 1991)

On our second day Ken came in for a late lunch limping badly after a fall, but with several specimens of David's new "blue" among other good material, all found in a different area. Everyone satisfied with the day's catch.

Next day on the 3rd, Ken, in spite of a very painful leg, went out with the others with their nets while Neville, Ruth and I went to Dondo - a most unexpected place - a broad open square in which were situated a modern hotel, police or magistrate's court and a few shops, but none with fresh fruit. A young Portuguese took us to a friend's house where pawpaws were pressed on us, all payment being refused. Generosity and courtesy were the hallmarks everywhere we went. At this home we were shown a hand-reared tame kudu, tied by a long rope to a tree; it was in fine condition and happy. He then took us to his home and we were shown his pet gazelle, a delicate reddy-brown in colour with white spots on rear flanks and legs. We met his mother; on our admiring a gorgeous Eucharist-Lily, the young man promptly plucked it, and with a flourish and bow handed it to Ruth! Hereabouts we saw a native making beautiful little tables of some reddish-brown wood, and so back we went, picked up our drums of water and drove back to camp to lunch and laze, knit, write letters or walk - this our routine when not out with nets.

Next day, 4th, Ruth and I went with Ken to the glade where much had been taken. We left him there and came back on the railway line via a causeway where Ken's accident had occurred; the dark water was bright with blue water-lilies. Great excitement that evening at Harold Cookson's eaten of a new (probably) skipper. Ken thought it might be *Goryra johnstoni* (Butler).

Dondo again for water, bread and post. Here I might mention that mostly Ruth and I were the water carriers. Beira was our next destination where we went chiefly to arrange a trip to the Gorongoza Reserve at Turismo. It was a fascinating town, lovely beach, lovely bathing, lovely Avenida des Republicas with overarching trees its whole length, fine houses and buildings, some old style, many new, mostly painted in vivid colours. On the way to Beira we saw a small elephant walking with a group of natives into Dondo. Harold Cookson had told us a while before that a baby elephant had walked into the town a few months previously, and it was thought to have lost its mother, but she never claimed it.

Next day was full of excitement when Ken netted the much-sought-after *Euthecta cooksoni* Bennett while showing Ruth and me the big trees near which it had been netted previously. *Sallya amulia rosa* (Hewitson), a lavender and gold beauty was also caught and *Deloneura millari dondoensis* Pennington sighted. A while later we heard Ken calling out to us "cooksoni", while performing an acrobatic tight rope act across a fallen trunk 8 or 9 ft (nearly 3 metres) above ground, amid a chaos of broken jagged branches; he caught it, but it was *Baliochila barnesi* Stempffer & Bennett, a not-rare butterfly.

On the 8th, Ken netted some good skippers as he took us down a glade, with buck droppings all along the path, to the smoking charcoal mounds. A native was filling sacks with charcoal roughly 5 cm diameter and 10-15 cm long. A deep hole roughly 4 ft (just over 1 m) in diameter and full of water about 4 1/2 ft (about 1 1/2m) deep

served several mounds, whether for human consumption or for the manufacture of charcoal we could not find out as the man was quite unable to understand us. We passed more disused charcoal mounds with attendant water holes. At one site we saw banana trees planted in mounds about a metre high, presumably to keep them moist. Little wild life was seen in the Dondo forest area, birds were seldom seen or heard, with the exception of a few hornbills and loeries.

The 9th was a very busy day: water carriers to Dondo and back, then with Ken we went to Beira taking Celestine and Gideon to see the wonders of the city and the ocean. Ken kept his appointment with an official for a permit to visit the Gorongoza Reserve and Gorongoza mountain.

After this our helpers were shown the wharfs and ships, and then went to the beach for paddling and sea water tasting, and so homewards. En route Ken stopped to take what he wanted from his trapnets and to release many unwanted beauties, then camp, tea, sundowners - bliss - dinner, but unhappily a bad night for all with painful itchiness from bites of dozens of minute ticks.

Next day we went out with nets to visit the trapnets, and passed a native with something (which turned out to be a fish) wrapped in a big green leaf. We then met the Vissians who told us they had seen what happened at the black stream of blue water lilies. The native had thrown in 45 cm lengths of bruised yellow wood, which obviously gave off a strong poison, as fish rose, bemused, almost immediately, and were expertly speared.

On crossing the railway line, we went downstream through terrific steaming jungle growth. I saw - and missed a magnificent eau-de-nil and-black butterfly, and Ken netted a large chestnut coloured insect that pleased him greatly. Crossing the stream again we found a native fish-trap, a woven wickerwork wall across the stream with an opening into a long wicker basket, into which fish swam but could not get out. On to the traps where Ken took what he wanted, and released many more - dozens of magnificent butterflies, *Charaxes* of various species and glorious colours. I hoped, by seeing and listening, to be able to learn something. Ken, the Cooksons and the Vissians never took more than they required, and were always generous in giving to others where specimens were needed.

The heat was suffocating, and the after-lunch laze was always bliss. On our afternoon walk, Ruth and I saw a third most interesting thing of the day - a native xylophone, being carried by its owner (with handle) in the form of a bow; two beaters were held in the other hand. Home, and an enjoyable evening after a most instructive and interesting day.

On the 11th, while Ruth and I were out, I was happy to net two *Baliochila barnesi*, similar to; but larger than *Eutheca cooksoni*, and a lovely blue in the damp river course. It was swelteringly hot and. we returned to camp by 12 and found a jubilant Ken with a male f. *cooksoni*, which by some acrobatic feat of net, extension rod plus a length of bamboo, he had netted off a branch well over 6 metres from the ground. The Vissians and Harold Cookson came back from a 12 km trip with good material, but sadly without the latter's longed-for but too elusive *Euphaedra orientalis* Rothschild.

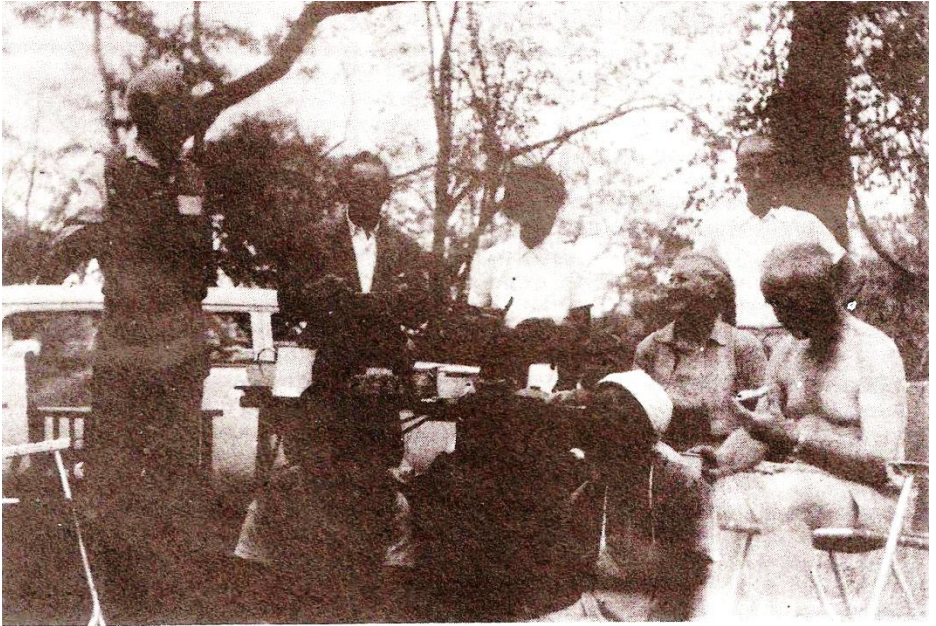
That evening the Cookson mercury-vapour lamp was started, but no hawk moths came, only innumerable small beetles which Neville took to send to a collector friend.

On 12th the three of us went for 6 km along the road to Gorongoza in blazing heat and Ken got the beautiful *Crenidomimas concordia* (Hopffer), but with midges, Dondo flies - wicked biters - heat and sweat we were driven well-nigh mad. Jubilation in the camp when Claire brought back an f. *orientalis*, 6 km from home.

Evening entertainment was provided by Ken and Neville who indulged in acrimonious scientific arguments to the amusement of some and irritation of others! The next few days brought the collectors some very fine catches, including, for Harold Cookson, his longed for f. *orientalis* from his trapnet; *Baliochila barnesi*, *Spindasis victoriae* (Butler), *Graphium junodi* Trimen and many more.

Now .the 14th; passing natives brought into camp a revolting python, killed on the banks of a nearby river, its body was bulging with newly-swallowed prey. Ken, Ruth and I went to Dondo for water and on our return, about 2 km from camp, a large snake was driven over. It moved sluggishly across the road and Ken dispatched it. It turned out to be a Gaboon adder, a thick ghastly creature about a metre long, fat in the middle and with bright dark markings on its back. Harold Cookson told us it was the most poisonous of the fat adder family. Not far from this scene we found a giant antheap topped by a kia, presumably a lookout for marauding baboons near banana plots.

On the 15th the Beira Festival started and. Rally cars passed from 8.30 to 10 a.m. but did not return. After early breakfast the usual visit to Dondo for water and supplies in readiness for our move to the Amatongas on the morrow.

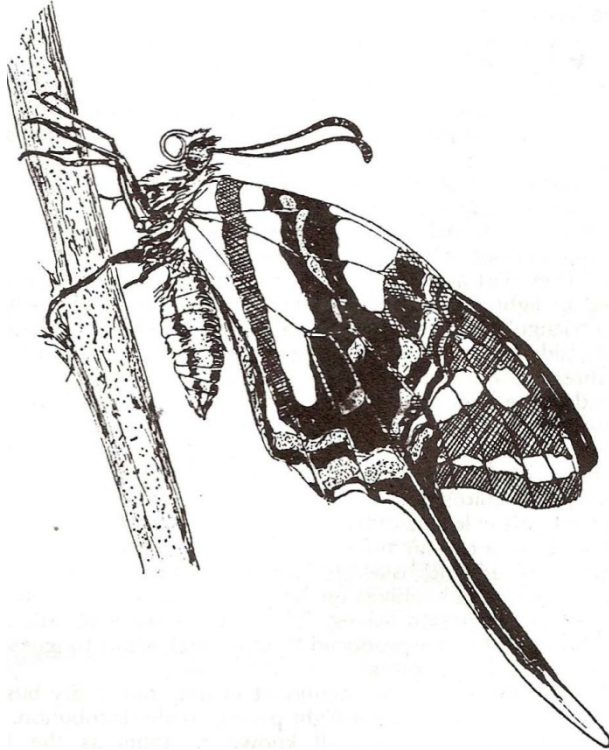


Dondo Forest, Mozambique 1957. Standing at back from left Harold Cookson, Neville Vissian, Claire Vissian, David Cookson; seated right Ruth Pennington, Ken Pennington; in front "the Bishop" and Celestine (photo R. Southey)

On return, hunted with Ruth and missed *Spindasis apelles* (Oberthur), but netted several flies which were graciously accepted by Ken - and not cast away as being "the commonest butterflies in the region"! He also received 2 male *S. apelles* from Vissian with gratitude. A lovely evening followed with sundowners, dinner, vino and much hilarity on this our last night at Dondo.

After early coffee and breakfast, the Cooksons left at 7.30 to reconnoitre. David located a likely spot about 2 km from their camp of 1952. All followed, travelling through fine forest, largely msasa. Butterflies were plentiful. There was hard work for all clearing elephant grass, but the site was beautifully located on a slope at bottom of which ran a lovely river - and joy of joys - BATHING.

To be continued



Graphium junodi male underside

GETTING TO KNOW MOTHS. -HAWK MOTHS, SPHINX MOTHS-

By Stephen Henning

5 Alexandra Street, Florida 1709

The hawk moths belong to the family Sphingidae (Sphingoidea). They are medium to large-sized, stout, streamlined, with narrow forewings and small hindwings, linked by frenula. Antennae are usually thick, crooked at the apex. The haustellum (proboscis) is usually well-developed, occasionally much longer than the body. In some species, however, the haustellum is very short or even absent. The eyes are large and the labial palpi are thick and well developed. Tympanal organs are absent.

The eggs are laid singly on the leaves of the food-plant. They are smooth and rounded. The larvae are characterized by the horn on the last (eighth) abdominal segment. In young larvae the tail moves up and down as they walk. They are normally smooth and some have eyespots on the anterior thoracic segments. It is thought that the eyespots may serve to frighten off predators. Sometimes they are variously coloured, the larva being dimorphic or polymorphic. They are generally either green or brown to camouflage with different parts or kinds of food-plant. The larvae often rest with the anterior end held away from the twig in a rigid stance reminiscent of a sphinx. They pupate in a flimsy silken cocoon among dead leaves, or in subterranean cells in the ground.

Most species are nocturnal or crepuscular. They can often be observed at dusk or dawn hovering in front of flowers into which they insert their long haustellum to obtain nectar. They dart away rapidly when disturbed. The nocturnal species are often attracted to light. When at rest hawk moths hold their wings backwards giving them a triangular shape, which together with their camouflage markings on their forewings, aids in concealing amongst the foliage where they normally rest.

There are three diurnal species which are characterized by a tuft of thick black hairs at the end of the abdomen. In addition the Oriental Bee Hawk (*Cephonodes hylas*) has transparent wings - the loose scales being lost soon after emergence from the pupa. They are frequently seen at flowers hovering bee-like with the abdominal tail fan spread out. Their resemblance to bees possibly gives them some protection from predators such as birds.

The larvae feed on the leaves of trees, shrubs or herbs. The species of the genus *Hippotion* often cause a certain amount of damage to grape vines or garden plants such as arum lilies and fuchsias. The short-tongued Death's Head Hawk (*Acherontia atropos*), raids beehives for honey and can be a nuisance to apiarists. Its larvae often feed on potato leaves. The adult moths emit little squeaks when handled, which are said to be produced through their short tongues. Their larvae and pupae can make grating noises.

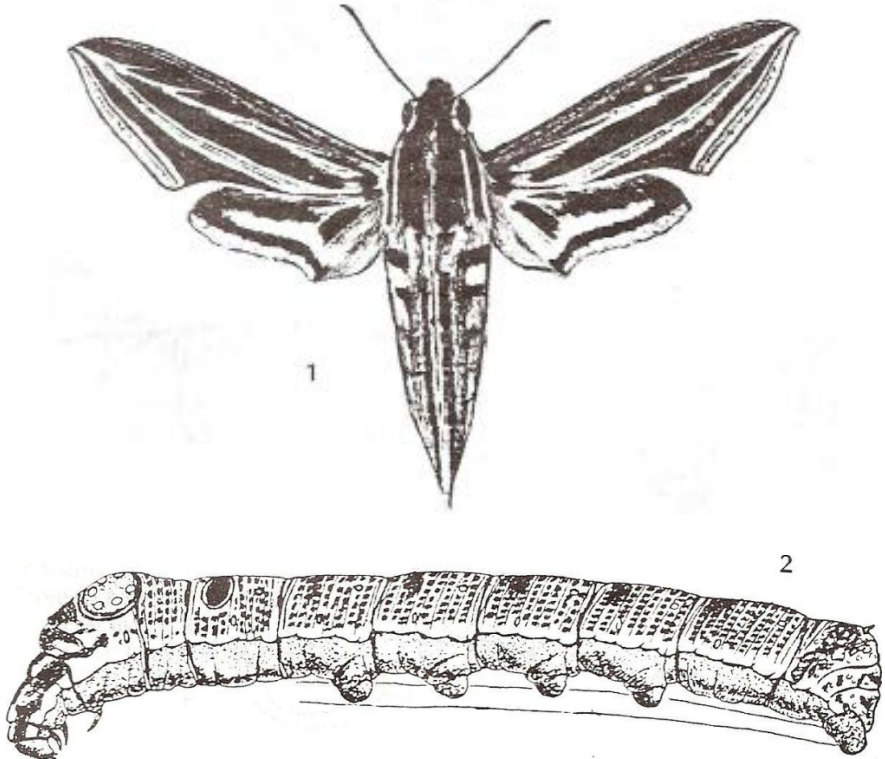
Hawk moths are probably more abundant in hot, rather dry bushveld than in dense forest. However, their strong flight permits wide distribution. Those of the widest distribution include such well-known migrants as the Death's Head (*Acherontia atropos*), the Convolvulus Hawk (*Agrius convolvuli*) and the Oleander Hawk (*Deilephilia nerii*), all of which are known in Europe and Asia as well as in Africa.

There are some 49 genera and 108 species in Southern Africa belonging to two subfamilies the Sphinginae and Macroglossinae.

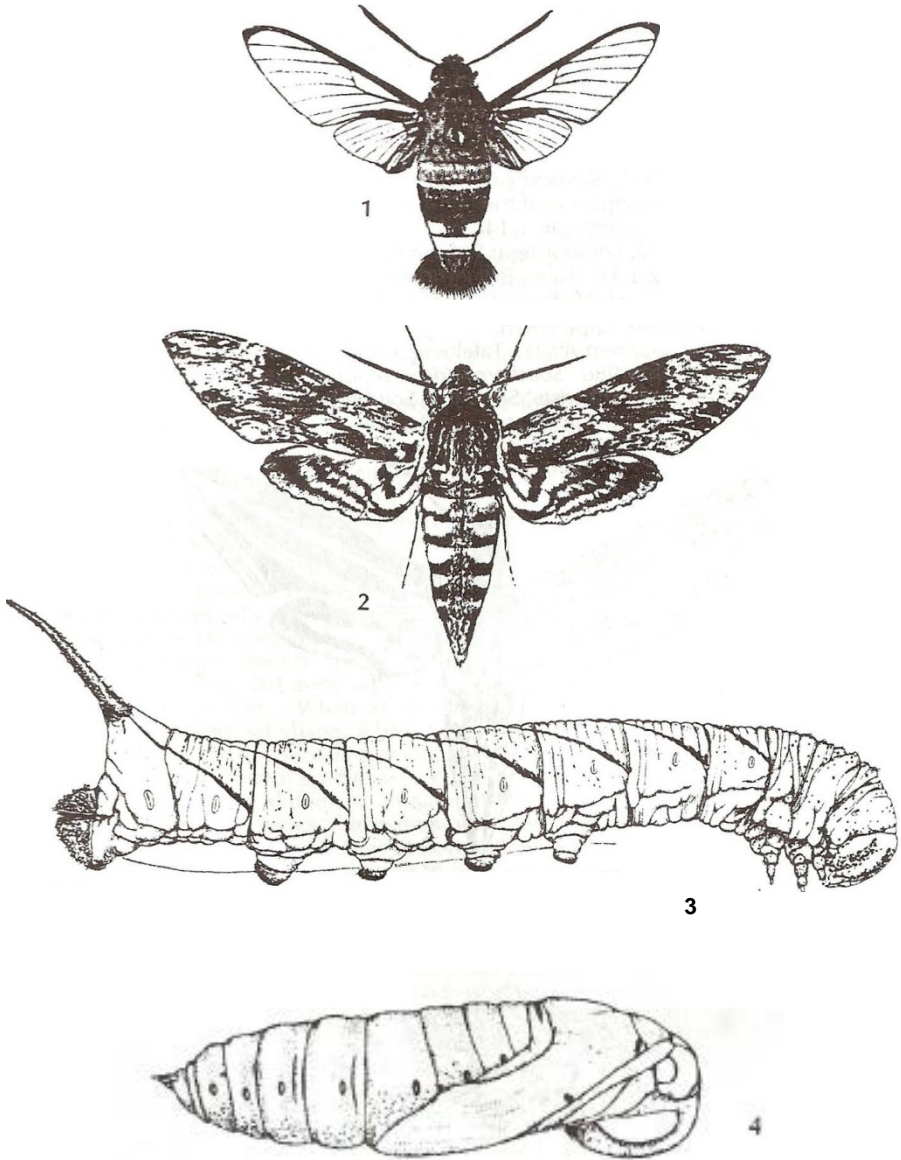
The Sphingidae of Southern Africa have been dealt with by Pinhey (1962, 1975) and Carcasson (1967). Vári and Kroon (1986) provide detailed lists of all the species in Southern Africa.

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Hawk Moths (Sphingidae) - *Hippotion osiris* 1. Female. 2. Larva (After Pinhey, 1975).



Hawk Moths (Sphingidae) - *Cephonodes hylas virescens* (Oriental Bee Hawk). 1. Male. *Agrius convolvuli* (Convolvulus Hawk). 2. Male. 3. Larva 4. Pupa.

PHOTOGRAPHER'S CORNER No.6

By Steve Woodhall

As we enter the latter part of the Lepidoptera season, I wonder what all my fellow shutterbugs have been up to this year? I do know of at least two people who have invested in some good macro equipment, one of whom is a moth man (brave fellow!). We can definitely expect a further upsurge in quality at the next Photographic competition. Another new development (no pun intended) is the growing use of video as a recording medium for Lepidoptera. I'm sure all of us who were at the 1991 ACM were very impressed with the videos produced by John Joannou and Dave Upshon. The easy viewing of these videos belied all the midnight oil, sweat and muttered curses that I know went into them! I have now found out that a new member, Trevor Snyman in Pinetown, has been videoing life histories of Lepidoptera found in his garden - so I am hoping to persuade him to come to the next ACM to enlighten us. -

So what have I been up to recently? Well the short answer is - not a lot. The pressures of a new job combined with the gestation of the forthcoming book on study methods for Lepidoptera have conspired to keep me out of the field. I have had a couple of memorable days, both in the Transvaal.

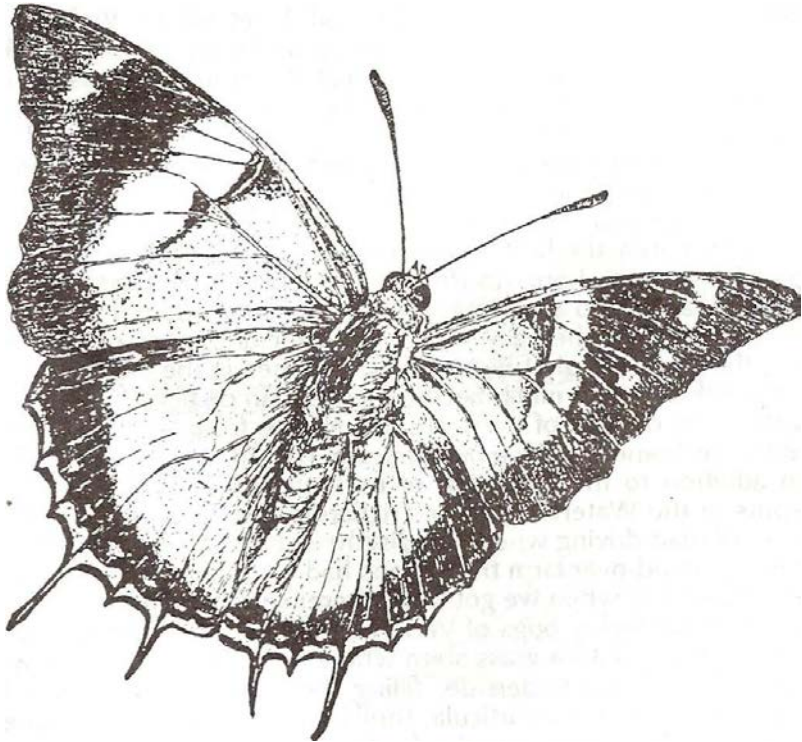
On New Years' Day my wife Jayne and I set off to Verloren Valei in the Dullstroom area. It was a glorious sunny day, and the green hills of this fascinating area were looking very promising. The vlei at Verloren Valei was full of wildflowers and teeming with butterflies. As well as the *Pseudonympha* satyrids for which the area is well-known, the new *Orachrysops* species being described from the spot was well out. The skipper *Metisella aegipan aegipan* (Trimen) was on the wing. Hundreds of specimens of the small blue *Harpenderyeus noquasa* (Trimen) were feeding on the multitudes of blooms - I have never seen so many *Lobelias* outside a garden! Unfortunately the butterflies were far too active to be photographed in the wild, so we took some home to the studio. I concentrated on taking some locality shots, which was all too tempting with all those flowers! I found that the biggest problem was avoiding the easy wide-angle shot of masses of flowers. One of the frustrating things about photographing landscapes is the way that vast vistas that impress the naked eye so much become pedestrian on film. -

Recently, Koos de Wet of the Transvaal Nature Conservation Department kindly took me to the home of *Eriksonia acraeina* Trimen, to get a few shots. This butterfly, in addition to the attraction of its scarcity, also inhabits one of the most scenic spots in the Waterberg, near Trichardt's Pass. We finally reached the spot, after some off-road driving where we discovered the ability of a Hi-Lux to find every pothole in a grassed-over farm track! Koos had warned us that there were not many specimens flying, but when we got there there were enough for our purposes. What a difference to the flighty bugs of Verloren Valei! A perfect male presented himself and fluttered slowly onto a grass stem where he posed perfectly. I was able to get some great shots of his underside, filling the frame well and even being able to bracket a couple! There is a particular thrill for the photographer that equals that for the collector catching a new species for the first time. That is when one gets a rare bug in full focus, filling the frame with no grass stems in the way on a windless day, and one sees the bug still sitting still after one has released the shutter! Unfortunately none of the specimens we saw in the wild would open their wings, so we took a pair home alive to try the old fridge trick.

When I had satiated myself with shots of the butterflies I looked around and realised that I was standing in a piece of classical African scenery. Sweeping, bush covered mountains in the distance with an ultramarine sky dotted with clouds just begging to be photographed through a polarising filter. And in the foreground, unspoilt veld dotted with small groups of very photogenic *Burkea africana* trees. The scene looked like a Pieterneef painting come to life. In short, the kind of shot that you just KNOW will look great on film. What a difference to Verloren Valei!

I fitted a wide-angle with polarising filter, raised my Nikon to my eye, composed the shot and pressed the tit. All I heard was the dry click of the motor drive trying to expose a frame that wasn't there. And no, I hadn't got a spare roll in my bag.

Lesson no.1 - always take enough film!



Charaxes bohemani female upperside (Del. S. F. Woodhall)

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