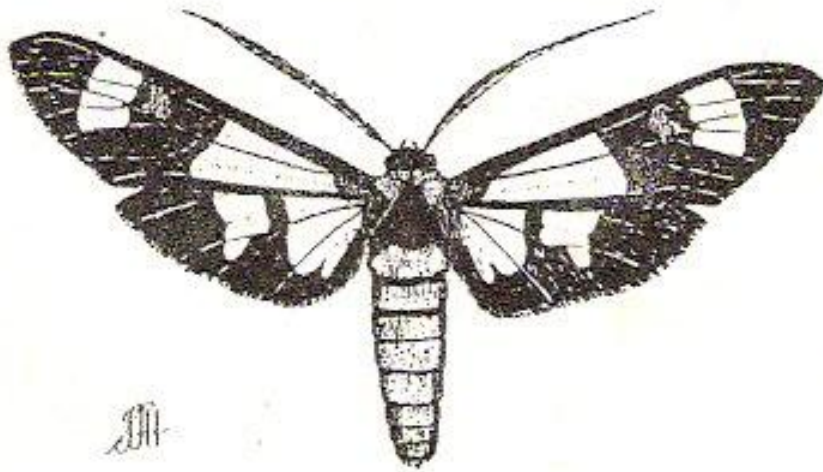


LEPIDOPTERISTS' SOCIETY
OF SOUTHERN AFRICA

METAMORPHOSIS No. **27**

DECEMBER 1990

Editor: W.H. Henning



Euchroma Formosa (Ctenuchidae) male
(Forewing length 23 mm)

Editorial

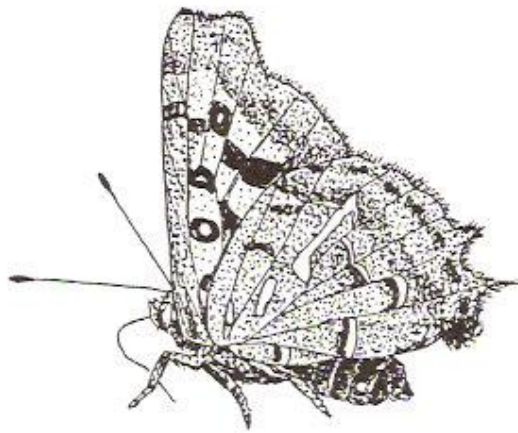
The Conference and AGM for 1990 has come and gone and was again a great success. It certainly appears to be going from strength to strength each year. For a full report on the happenings see the article by Bill Steele in the next issue.

The results of the election for office bearers and councillors was announced at the AGM. I would like to take the opportunity to congratulate them all and wish them the best in the running of the Society for the next two years. The new Council is as follows:

Stephen Henning (President)
Graham Henning (Secretary)
Stephen Woodhall (Treasurer)
Mark Williams
Bill Steele
Nolan Owen-Johnston

The new season is now well under way and I would like to remind you about writing up your experiences and list of captures for *Metamorphosis*. It is only with your continued support that our newsletter will go from strength to strength.

By the time you receive this issue it will be nearly Christmas and I would like to wish you all the best for the festive season and hope that 1991 will be a good collecting year for you all.



Phasis thero cedarbergae male underside

Comment by the President

Stephen Henning

It is unfortunate that in the first of these comments I will have to bring up a most unpleasant matter. As butterfly collectors we rely on the kindness and hospitality of farmers and other people who allow us to collect on their property. This being the case, it involves nothing more than the basis of good manners to ask the farmer for his permission to use his land before we actually set about collecting. Such permission is hardly ever refused, and the way is left open for future collectors to approach him.

We have unfortunately received a letter from a farmer who has been a friend and gracious host to butterfly collectors and other naturalists for over 25 years. His property was trespassed upon by a

Transvaal collector and his wife, who compounded their offence by lying to him. He is understandably hurt and upset by this. We must emphasize that this kind of behaviour reflects badly on all lepidopterists. To the two people concerned and to others who transgress this code, we ask you, please obey the basic norms of courtesy and the laws of trespass in future. We would not like to offend any more of our generous hosts.

The following is his letter, in full, to bring home to all of you, and especially the guilty parties, just how serious this offence is.

23rd October 1990

Dear Sir,

I feel obliged to bring the following under the notice of your Society: over the last 25 years I have, at one or other time, had all the well known S.A. Lepidopterists on my property. With the exception of two individuals, I have found them environmentally sensitive and respectful of the fact that 'Glenlyon' is an environmental treasure and consequently they respect the norms I abide by to keep it that way. Yesterday, I had the unpleasant experience of having to ask a Transvaal lepidopterist to leave my property forthwith, after I found him trespassing, net in hand, on the rocky hills not far from where Ken Pennington discovered *Lepidochrysops macgregori*. I was initially fielded the cock-and-bull tale about nature-calling (by his wife), and on locating him, that he wasn't aware that the paddock belonged to anyone (it is enveloped by a 6 foot jackal-proof fence!). Urban folk still tend to think that all farmers are the epitome of the Van der Merwe stories! Times have changed.

Over the years I have granted thousands of nature lovers and scientists the privilege of enjoying the wonders of 'Glenlyon'. I have always believed that nature in this wonderful unblemished form is to be enjoyed with others, and that is why I try to share 'Glenlyon'. This philosophy has enriched my life immensely and I have met many beautiful people from all over the world.

I do, however, expect certain norms to be complied with, and obviously one of these is for prospective visitors to ask permission to enter the property. It is important for us to know who is on the property, exactly in what area they are and that they are conversant with the 'do's' and 'don'ts'. We have, for example, had some dreadful fires here in the past, particularly at this time of year, three of them started by outsiders. Also we are running a rather unique and well known Merino stud, consisting of some irreplaceable genetic material. So much can go wrong through someone not appreciating these facts.

I am sure that the vast majority of your members will appreciate the essence of all the above. Times are changing rapidly. Unspoilt areas, like 'Glenlyon', are going to be a rare commodity by the turn of the century. Let's all join hands to ensure their preservation, by all playing the game by the correct and honest rules.

Yours sincerely,

Neil MacGregor.

From the above letter we can all see how the farmers feel when people trespass on their land. But what can we do about it? I have personally spent two or three hours of valuable collecting time looking for the owner of a piece of land on which I would like to collect. Often the farm houses are far away from the proposed collecting areas and difficult to find.

The possible solution is for the Society to accumulate and publish the names, addresses and telephone numbers of the owners of all the private farms which are regularly visited by butterfly collectors. A collector wishing to visit the farm can then write or phone the farmer in advance for permission and find out if it is convenient for him to visit the farm on that particular day.

Not only will we not be breaking the law by trespassing but we could foster interest in the farmer to the plight of some of our rarer species which occur on his farm. A good example of this is the owner of the farm on which *Erikssonina acraeina* flies. He has set aside the area where this rare butterfly flies

and has cooperated with the Transvaal Nature Conservation Department for the long term protection of this species.

However, to make this work we are going to have to rely on you the members to supply us with the names, addresses and telephone numbers of the farmers in your area where you regularly collect (give the name of the locality). These can be sent to the Secretary.

Regional Roundup

Graham Henning

During the last couple of months there has been a great deal of collecting activity as the season got under way to some good weather in the Transvaal, as well as in other parts of the country.

From our OFS [Free State Province] members, Rudolf Swart reports *Aloeides pallida pallida* and *Tylopaedia sardonix* flying at Springfontein in the southern OFS during September. Martin Lunderstedt from Welkom travelled further afield to Zimbabwe where he recorded *Oboronia bueronica* at Chirinda, probably the first record of this species from Zimbabwe. Among many other interesting captures he found *Mylothris carcassoni* flying at the Banti Forest, which, from his account is not an easy place to visit. Hopefully Martin will give us full details of his trip in a later *Metamorphosis*.

From the Cape Jon Ball and Ernest Pringle both report *Oxychaeta dicksoni*. Alan Heath records a number of *Lepidochrysops* from the Rooiberg and also an interesting *Thestor*. He went there in the company of Izak Coetzer (from the Transvaal). Alan further collected *Lepidochrysops jamesi claassensi* from Calvinia and *Chrysothrix chrysothrix* from Wallekraal. Jon Ball, to his great joy, collected a couple of nominate *L. jamesi* at Sutherland. Joel Fortmann of Port Elizabeth records hand picking a *Charaxes brutus natalensis* in his garden. It was busy feeding on fermenting sap exuding from a pine tree. This is an extreme southern record for this species. The specimen was released after identification.

Every so often collectors experience unsuccessful trips, and here is the account of a trip by Alan Heath. He wanted to visit Namaqualand to collect *Thestor protumnus aridus* and some *Poecilmitis*. He would normally go with his wife but she was away on business. Not wanting to go on his own over this particular weekend he went to bed early on Friday night. He awoke at half past midnight and on the spur of the moment decided to go. He packed his new Suni and set forth into the night. After a brief nap at Vanrhynsdorp he arrived at Soebatsfontein, the sky was clear and he was looking forward to a good days collecting. On alighting from his vehicle he found that an icy wind was blowing, he spent several fruitless and very cold hours searching for butterflies but nothing was seen. He became totally fed up and chided himself vigorously for not having checked the weather forecast. He decided to go home then and there and drove back to Cape Town, after stopping for a brief nap (or two) he eventually arrived home at 4 o'clock in the morning. However, his troubles were not over. During the trip he had become dehydrated and come Monday he was so ill with a urinary tract infection that he slept for two days before he got medication from his doctor. The disastrous trips one experiences often live in the memory for almost as long as those really successful ones.

The Transvaal contingent of Chris Ficq, Graham Henning, John Joannou, Nolan Owen-Johnston, Bill and Ryan Steele, Dave and Andrew Upshon, Mark Williams and Steve Woodhall have all been very active. Places they have visited include 'The Bonnet' at Graskop and near Hendricksdal where *Lepidochrysops irvingi* and an *Orachrysops* were found. Barberton was visited but with little success. A few *Lepidochrysops jefferyi* and a female *L. swanepoeli* being recorded. The *L. lotana* locality near Pietersburg was visited with the Transvaal Nature Conservation officer but to no avail. The *Aloeides nubilus* type locality at Klipbankspruit is covered with pines but at Moordenaarsnek the species was well out. Haenertsburg yielded a large number of the dark *Aloeides* and at Kowyn's Pass *Bowkeria phosphor borealis* was seen but not captured. Bulwer in Natal was visited and a fair number of *Chrysothrix oreas* were seen. *Capys penningtoni* were also observed hilltopping around the highest points of Bulwer Mountain. Visits to Wahroonga near Merrivale showed *Lepidochrysops tantalus* in

good numbers as well as some *Orachrysops* and *Lepidochrysops asteris*. Other localities visited with limited success were Woodbush, Chuniespoort, Hornsnek and Machadodorp. Nolan spent a weekend in the Cape and visited Red Hill where he collected *Lepidochrysops trimeni*, Brandvlei where he collected *Poecilmitis rileyi* and Du Toit's Kloof, where he found *Aloeides pallida grandis*. Izak Coetzer visited the Platberg near Harrismith and found some *Aloeides* but no *Orachrysops*.

Ernest Pringle from the Cape records the following: "My father has just returned from a short trip to Nieuwoudtville, van Rhynsdorp and the Cedarberg, lasting from 14th to 25th October. Surprisingly little was flying, indicating that late winter weather had retarded normal Spring emergence. However, a very interesting satyrid was taken on the Cedarberg Mountains, which would, at the very least, appear to be another distinct race of *Pseudonympha trimenii*. This is a very dark insect - much darker than *namaquana* on both surfaces - which, unlike *namaquana*, has an additional red patch in the upperside cell of the male forewing. As you know, the male of *namaquana* differs from males of all the other races of *trimenii* in having only one red patch on the forewing upperside, namely the subapical patch around the ocellus. The Cedarberg record is interesting in that, as you know, *namaquana* occurs on all the nearby mountains, from Nieuwoudtville to Calvinia, and all the way down to Sutherland. (I myself do not believe that Nieuwoudtville-Calvinia-Sutherland specimens are sufficiently or consistently different from those in Namaqualand to justify drawing any distinctions between them). Furthermore we have found typical *trimenii* to occur as least as far north as the Gydo Mountain near Ceres. So the Cedarberg insect occurs in close proximity to two of the already known races, but is quite different from both. I will myself conduct further investigations into this insect. Another interesting find was that of numerous examples of *Aloeides apicalis* on the Cedarberg. These are highly variable and seem to be showing characteristics which are transitional between *Aloeides thyra* and *apicalis*."

Jon Ball from the Cape visited the Transvaal and with Chris Ficq travelled through the Natal Midlands, Zululand and Eastern Transvaal. They found a dozen *Teriomima zuluana* at Manguzi, fluttering about the trees.

Craig Shaw reports *Charaxes etesipe tavetensis* from Venda earlier this year, this species seems well established in the region.

The regional roundup needs your support, and if you cannot write then phone! Work no. 474-1466, home no. 768-1949 (both code 011).

Our new President

W.H. Henning

Stephen Frank Henning has been elected president of the Society for the term 1990-1992. The following is a brief introduction for those of you who do not know him.

Stephen Henning was born on the 25th September 1948 in Portsmouth, England. His parents emigrated to South Africa in 1950. He matriculated in 1966 and upon leaving school, worked as a medical technologist, obtaining the National Diploma in Medical Technology (Clinical Pathology) in 1971. He continued his studies at the University of the Witwatersrand from 1972 to 1979 and obtained his BSc(Hons) and MSc degrees in Zoology. He is currently working for his doctorate through the University of Potchefstroom. From 1979 to 1984 he worked as a research officer in the Department of Medical Entomology at the South African Institute for Medical Research. Since then he has been teaching and obtained the Higher Education Diploma (HED) from the University of South Africa in 1989. He is also a very talented wildlife artist and works in watercolours, pencil or pen and ink. Several of his publications are illustrated with his pen and ink drawings of butterflies.

Stephen has always had an active interest in natural history and he and his brother Graham were junior members of the Witwatersrand Bird Club as far back as 1957. In 1960 under encouragement of

their father Bill Henning they started collecting butterflies and over the past 30 years has built up the largest private collection of butterflies in southern Africa. Together they have also discovered many new taxa, some of which are named after them.

Stephen was one of the founder members of the Lepidopterists' Society of southern Africa and was the first secretary, serving for three terms. He is an extremely keen conservationist and was involved in the establishment of the Ruimsig Entomological Reserve at Roodepoort.

Stephen has published some 50 scientific papers mainly on butterflies, ants and mosquitoes. He has described to date 18 new species and 10 new subspecies. A further 9 new species and 6 new subspecies will be described in *Pennington's butterflies of southern Africa* which will be published in 1991.

He has published three books. The first was *Southern African butterflies* in 1984 and was illustrated with paintings by Clare Abbott. In 1989 his magnificent book *The Charaxinae butterflies of Africa* was produced. Together with his brother Graham, he has recently had the vital work *South African red data book - butterflies* published (1989). Stephen and Dr Andre Claassens have just completed *Gardening with butterflies in southern Africa* which will probably be published in 1991. He and his brother Graham, together with John Joannou and Steve Woodhall, are currently working on their magnum opus, a five volume book on the butterflies of southern Africa illustrated (hopefully) with photographs of all species in the wild.

List of species and subspecies described by Stephen Henning

Dingana alaedeus (1984)
Charaxes fionae (1977)
Charaxes jahlusa rex (1978)
Charaxes pythodorus ventersi (1982)
Charaxes pythodorus sumbuensis (1982)
Charaxes martini helenae (1982)
Charaxes ethalion binghami (1982)
Charaxes ethalion handmanni (1982)
Charaxes ethalion fisheri (1982)
Charaxes dowsetti (1989)
Iolais (Argiolaus) silarus brainei (1984)
Iolais (Epamera) helenae (1989)
Capys hermes (1988)
Capys meruensis (1988)
Capys collinsi (1988)
Capys bamptoni (1988)
Capys calpurnia (1988)
Capys juliae (1988)
Capys cupreus (1988)
Capys connexivus gardineri (1988)
Capys brunneus heathi (1988)
Aloeides rossouwi (1982)
Aloeides nubilus (1982)
Aloeides tearei (1982)
Aloeides merces (1986)
Poecilmitis kaplani (1979)
Poecilmitis lyndseyae (1979)
Lepidochrysops michellae (1983)

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Surveys of Lepidoptera on provincial nature reserves

Koos de Wet

The Directorate Nature and Environmental Conservation of the Transvaal, will consider the granting of permits to members of the Lepidopterists' Society to make surveys of Lepidoptera on Provincial Nature Reserves.

The holder of a permit will be expected to visit the reserve/s agreed upon repeatedly, so as to obtain a complete checklist of butterflies, as well as information on foodplants, behaviour and estimated numbers of the five most common species recorded during each visit.

The permit holder will be permitted to collect three males and three female specimens of each species per locality on each visit. Of these at least one male and one female must be handed over to the Officer-in-Charge of the Invertebrate Conservation Section in Lydenburg.

After each visit a full report with details of all the above mentioned information and an updated checklist must be sent within three weeks of the visit to the Officer-in-Charge of the Invertebrate Conservation Section at Private Bag X1088 LYDENBURG, 1120.

A permit to collect on Provincial Nature Reserves must be applied for, and the applicant must indicate who will accompany him, for instance his wife and children.

Each permit will be considered individually. After a permit is granted, the holder of the permit must contact the Officer-in-Charge of the Invertebrate Conservation Section, to co-ordinate the visits to reserves, as well as the times that he will be doing his survey. Thereafter he must arrange directly with the Officer-in-Charge of the relevant reserve.

Permits issued are usually valid for a year from date of issue and the holder must apply for a renewal well before the expiry date. If the holder of the permit does not comply with the conditions on the permit and other conditions agreed upon, the permit may be revoked at any time.

Applications for permits must be made to: The Director of Nature and Environmental Conservation, c/o the Officer-in-Charge, Invertebrate Conservation Section, Private Bag X1088, LYDENBURG, 1120. This office will forward the application then to Head Office. Permits can only be issued by our Head Office.

Reserves in Group A are reserves with higher priority for surveys than those in groups B and C.

RESERVE	TOWN
Group A	
Loskop Dam	Groblersdal
Hans Merensky	Tzaneen
Langjan	Vivo
Atherstone	Thabazimbi
D'Nyala	Ellisras
Messina	Messina
Wolkberg/Serala	Haenertsburg
Nooitgedacht Dam	Carolina
Rustenburg	Rustenburg

Group B

S A Lombard	Bloemhof
Bloemhof Dam	Bloemhof
Pongolapoort	Golela

Group C

Wolwespruit	Bloemhof
Barberspan	Delareyville
Hans Strijdom Dam	Ellisras
Happy Rest	Louis Trichardt
Boskop Dam	Potchefstroom
Sterkspruit	Lydenburg
Ohrigstad Dam	Ohrigstad
Roodeplaat Dam	Pretoria
Abe Bailey	Carletonville
Jericho Dam	Amsterdam

Observations of the biology of *Lepidochrysops plebeia plebeia* (Butler) (Lycaenidae: Polyommatainae)

Mark Williams
P.O. Box 12538, Onderstepoort 0110

Lepidochrysops plebeia is a widespread species in the savannah regions of southern Africa (Dickson & Kroon, 1978). I have been studying a population of *L. plebeia* in Turf Thornveld (Acocks Veld Type 13) (Acocks, 1953) 2 km north of Rosslyn, Transvaal over the last few years and have made some interesting observations on the early stages.

Female *L. plebeia* oviposit on the flower-heads of *Lantana rugosa* Thunb. (Verbenaceae), a herbaceous perennial growing mostly in the shade of large *Acacia* species. Eggs are laid between the base of the flower corolla and calyx. Two or 3, but occasionally up to 5, are laid in a row and are covered by a translucent foam, which hardens to glue the corolla and calyx together, thereby completely concealing the eggs. As far as I know this 'embedding' is unique, not only in *Lepidochrysops*, but in the Lycaenidae as a whole. The eggs are relatively small (ca 0,4 mm in diameter) compared with the eggs of congeners of similar size (*L. patricia* (Trimen), *L. glauca* (Trimen) and *L. ortygia* (Trimen) have eggs ca 0,8 mm in diameter). The egg of *L. plebeia* is more or less the same size as those of the smaller *Lepidochrysops* such as *L. letsea* (Trimen) and *L. vansoni* (Swanepoel). Furthermore, all other species of *Lepidochrysops*, in which oviposition has been observed, lay their eggs singly (Clark & Dickson, 1971).

The eggs are very pale blue, similar in shape and pattern to others of the genus, and eclose in about 6 days. The discarded shell is not eaten. Newly hatched larvae are about 0,5 mm long and pale cream, with numerous reddish markings on the body. They immediately bore into a developing seed ovule and feed on the contents. The first moult (after ca 4 days) takes place within the ovule as does the second (after ca 4-5 days). The first two larval instars thus span only 8 or 9 days. After the second moult larvae leave the seed capsules and sit in the open. They are 2,5-3 mm long, pale cream with reddish-brown markings and possess a dorsal nectary organ (honey-gland) but tubercles are absent. Third instar larvae may feed intermittently on seeds but do not bore into them and die within 4-6 days. Presumably, as in other *Lepidochrysops* species, they are carried into ant's nests, but this has not been observed in nature.

The study site has been searched for likely host ants (*Camponotus* spp.), especially in the vicinity of the food-plants. An unidentified, diurnal, *Camponotus* sp. similar in size to *C. niveosetosus* Mayr., but having numerous, fine, golden setae on the gaster (*C. niveosetosus* has fewer, coarse, pure white setae), was found in abundance, on, and in the vicinity of the food-plants. Nests of this ant were excavated and ants and brood were housed in a formicarium (Claassens, 1974). An introduced third instar larva of *L. plebeia* was accepted by the ants and observed to feed on the ant brood. The larva survived in the formicarium for nearly 3 months, growing from 3 mm to ca 9 mm. The general body colour of the larva was reddish brown with the ventro-lateral surfaces of a bright turquoise blue colour. Although the third moult was not observed this larva was almost certainly fourth instar.

Unfortunately, available ant brood either hatched or was eaten – the larva survived for a further 2 weeks by feeding on ant's eggs, as these were laid, and then disappeared from the nest without trace.

L. plebeia has usually been placed in the *L. patricia* species group (Dickson & Kroon, 1978, Plate 137) but the differences noted above with respect to the egg, larva and host ant suggest that it is not closely related to members of this group and probably diverged from them in the relatively distant past. In all probability it is more closely related to other species to the north of our sub-region, such as *L. parsimon* (Fabricius).

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Report on a recent trip to the south-west Cape, and on other matters

Ernest Pringle

I am delighted to be able to announce that my wife and I have at last had the good fortune of finding a reasonably strong and viable colony of the endangered *Oxychaeta dicksoni* near Vermaaklikheid, on the Cape South Coast. This was the culmination of a long and sustained effort to relocate the insect in this area, following Lou Schoeman and Brian Stuckenberg's original find at Witsand some years ago. As you may know, the insect has since disappeared from the Witsand locality – probably as a result of building development that has taken place there. It has also dwindled perilously in its numbers at the only other locality known for this species, at Mamre on the West Coast.

Anyway, knowing this historical background to the species, my wife and I set out on a series of trips to the South Coast, with the object of uncovering other colonies of this insect. On two previous trips, we had covered much of the area from Stilbaai to Witsand, and on this trip we extended our search to Cape Infanta as well. For two days we continued to search the area, going over a good deal of ground and dozens of different localities, but without success. At this stage there was much talk about 'needles in haystacks' from my long-suffering wife, and I was at last starting to agree with her. But in the end, success came in an extraordinary way. We were returning from the search of yet another promising-looking (but useless) locality, at about 12h30, when we encountered a small obstruction in the road. My wife hopped out to remove this, and I noticed, among the *Melampus huebneri huebneri* flying around her, a small, darkish insect pass over her shoulder, and settle on a low bush about twenty metres from the car. Curious, I got out to have a closer look, and was absolutely astonished to find an *Oxychaeta dicksoni* female, perched there with her wings half opened. Naturally, because this was the last thing I was expecting, I had left my net in the car. A frantic flurry of activity ensued, but in vain: no sooner had I got ready to catch the insect, than she took off and disappeared. For the next one and a half hours, the immediate vicinity was carefully searched without success. Then the inevitable happened: two days of foul weather followed, during which doubts as to my sighting started to set in. Could it not have been a large *zeuxo* female? After all, *zeuxo* is quite common in the area.



Female *Oxychaeta dicksoni*

Finally, on the last day of our trip, the weather cleared, and allowed us a second chance. This time, we walked for a considerable distance across country, on the assumption that the insect had been blown off its colony by the wind, and been displaced. After two hours of fruitless searching, we started back toward the car in a wide circle. Some of the ground looked promising, but was also quite clearly uninhabited. Time was now running out, and it was decided to return to the car for lunch,

and a little more careful thought. The situation once more seemed hopeless. Then, while I was crossing some rough ground, an *Aloeides* flew up in front of me, and settled on a low bush with its wings folded together. This was very casually swept into my net, and killed. Imagine my surprise when I took out a perfect male *O. dicksoni*! We had at last found the colony, approximately half a kilometre away from where the original specimen had been seen. The colony was quite a strong one, containing approximately a dozen specimens. But great care was taken to disturb it as little as possible – particularly by avoiding collection of the females. Believe me, it is the hardest thing on earth for a red-blooded collector with a net in his hand to see a perfect female sunning herself with half-opened wings, and to turn away from her and leave her be! But with an insect as rare as this one, this sort of approach is absolutely necessary.

As with all the colonies of *O. dicksoni* found to date, the surface area of this one is small, amounting to about half the size of a rugby field. As is the case with all similar specialised, highly localised Lycaenidae, the species is extremely vulnerable to disturbance and changes in its environment. Destruction of the habitat or change in the environment has been demonstrated in all scientifically investigated cases of extinction of a species or isolated colony.

At this stage for the sake of the species, this colony will not be revealed to any collector, and steps will be taken to obtain the co-operation of the local landowner in safeguarding and closing off the entire area concerned. In the meantime, concerned collectors can rest assured that the area is at present perfectly safe from its two greatest enemies: the plough and invader weeds.

*Another possible and often overlooked danger to the safety of this and other similar colonies of localised lycaenids is the introduced Argentine Ant, *Iridomyrmex humilis* Mayr. It has been demonstrated that it will drive away our indigenous ants by harassing them, killing them and taking over their nests and food supplies. This would obviously have a disastrous effect on any myrmecophilous lycaenid larvae living in the nest. This pest has spread throughout most of the Cape Province and reached the Transvaal in the 1970's. – Editor*

Other matters

1. It is of interest to collectors to know that we have recorded a *depicta*-like *Aloeides* from near Witsands, which looks suspiciously like *A. carolynnae*. This will be confirmed once they are off the setting boards. If it is *carolynnae*, this would constitute a remarkable habitat extension for that species.
2. The case of *Thestor obscurus* has now been formally drawn up by myself, and submitted to the International Commission for Zoological Nomenclature for a decision. The name *obscurus* has a very good chance of being retained, because its case is at least as strong as was the case of *Azanus mirza*. (see article by Torben Larsen in this issue – Editor).

What is in a name?

Torben B. Larsen
Private Bag 366, Gaborone, Botswana

On reading *Metamorphosis* 1 (24) there is obviously a lot in a name! Your readers are most fortunate that Rolf Oberprieler basically sets the record very straight. I am sorry to say that *Thestor nogelii obscura* Ruhl, 1893 is perfectly valid and must stand. I do not personally consider it a valid subspecies, but Ruhl did not explicitly make it infrasubspecific, the name has frequently been quoted in more recent literature, and that is what matters. There is still serious discussion about this taxon among people interested in Middle East butterflies, and the *nogelii*-group is a very interesting one. *Thestor obscurus* Ruhl is very much alive, at least on paper. This means that *Thestor obscurus* van Son, 1941 cannot stand, exactly on the grounds that Oberprieler so succinctly stated. Tough luck ... van Son should have made sure that there was not a previous *Thestor obscurus* (even the greatest of us do

not always cover all bases). Rules of Zoological nomenclature or not, most reasonable people must admit that you cannot have two obviously different insects bearing the same name.

Oberprieler expresses surprise that the Commission on Zoological Nomenclature (*Bulletin of Zoological Nomenclature* 45: 78) dealt differently with another replacement name suggested by Kocak. He had found that the species we know as *Azanus mirza* Plötz was originally described as *Lycaena mirza* Plötz, 1880; this name was identical with *Lycaena mirza* Staudinger, 1847, a rather obscure Afghan butterfly. Kocak therefore proposed the replacement name *mirzaellus*, an action which is formally quite correct, since it is a primary homonym.

But... Staudinger had immediately realised that he made a mistake. A few years later he admitted that his *Lycaena mirza* was identical with another species described by someone else under another name a few years earlier, and he did so in print. Not surprisingly, Staudinger's decision that his own name was invalid was universally respected for more than a hundred years, and the name *mirza* was never used by anyone else till Kocak refound it. So when he published his replacement name, I decided to send an application to the International Commission on Zoological Nomenclature, asking them to suppress the name *mirzaellus* under their plenary powers. The grounds I gave were that the name *mirza* Plötz was universally understood in Africa, that it had been used without any chance of misunderstanding on several hundred occasions from 1880 till now, and that it would cause great confusion if it now had to be called *mirzaellus*. After all, the name *mirza* Staudinger, 1847 had never been used since 1850, except expressly as a junior synonym.

The Commission agreed that to uphold the name *mirza* Staudinger, 1847, though technically valid, would lead to so much confusion in Africa that it was better to suppress it, and to place the name *mirza* Plötz, 1880 on the list of accepted names. All Commission members agreed that Kocak was technically correct; a few voted in a minority because they thought the law of precedence was so important that a bit of confusion was worth the price. The majority agreed with my application, and I, obviously, thoroughly agree with them. Would you have liked the name *Azanus mirza* to disappear, because there had been some confusion in 1847?

There may be a moral here. If, when ferreting through ancient and obscure literature, you find a potential senior name, that has never been used, then let sleeping dogs lie. If they sleep for another 150 years, they will then certainly be dead. There was never any need for Kocak to bring up the name *mirza* Staudinger. But if you cannot avoid bringing up a name, which may result in chaos, ask the Commission to suppress it, unless there is some reason that makes this an impossible course of action.

As you can see, I have my differences with Kocak. I also think that van Son has written some of the best entomological works ever written. I objected to the name *mirzaellus* because I thought that my objection would stick (as indeed it did). But it does not matter whether you like van Son, whether or not you like Turks, Dr Kocak in particular, his wife, or her name. It remains *Thestor yildizae* Kocak, 1983 (= *obscurus* van Son, 1941 primary homonym). I certainly could find no valid reason to object, and I look forward to the day when the most enigmatic of butterflies, *Tomares nogelii obscurus* Ruhl, is finally sorted out.

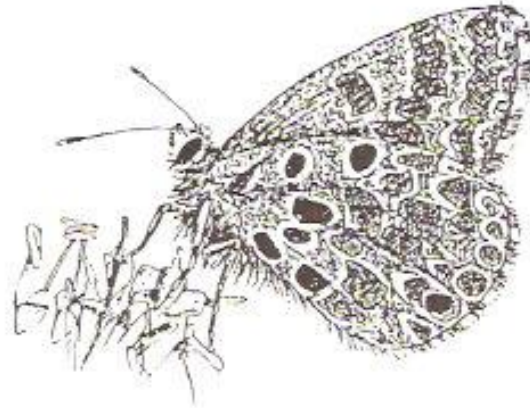
Trip to Namaqualand

Mike Schlosz

From a mid-September 1990 three-day trip to Namaqualand, my wife Pat and I have the following to report.

Our first stop was a hill we have visited before, in the Nuwerus district. *Aloeides barklyi* was out in abundance, females as usual far less common than males. *Brephidium metophis* and *Cacyreus dicksoni* were two lycaenids very much in evidence, as was an *Aloeides* species answering to *juana*. Large *Argyraspodes argyraspis* were out, but uncommon; only two very wary specimens being seen.

Tarsocera species were plentiful, however nearly all of the specimens seen, or captured were worn. A few *Myrina silenus penningtoni* were seen at patches of *Ficus* growing over the rocks. As many as ten larvae were located almost at a glance, feeding on small fruit. They varied from early 2nd to late final instar. The hilltop was a bit disappointing compared to previous visits; we had expected to see *Lepidochrysops wykehami* as we had observed a worn male and an elusive female on a previous trip in late September.



Lepidochrysops wykehami male

We drove to a spot some 10 km west of Bitterfontein where, in the late afternoon, literally hundreds of *Tarsocera* species and *Cynthia cardui* were observed feeding at a yellow flowered shrub. At this spot, a single brown *Lepidochrysops* sp. was captured but turned out to be completely worn. Our overnight stop was the Railway Hotel at Bitterfontein where we were entertained throughout the night to the raucous sounds of the local disco. The following morning we headed on to Garies. It was a beautiful clear sunny day. After a brief stop half way up the Studers Pass, at a spot where we had previously located *Stugeta bowkeri subinfuscata* (but not this time) we headed on to Witwater, where on one of the slopes a fresh brown *Lepidochrysops* sp. was captured. Two further worn specimens were released. They were flying around clumps of flowering *Selago minutissima*. The species could be *L. bacchus*, according to earlier reports from the general area. We climbed a number of hills, at the top of most of which numbers of *L. wykehami* males were sporting together with *Gonatomyrina lara* and an *Aloeides* sp. Many of the *L. wykehami* males were worn, but three males in reasonable condition were taken. Once more, a very large *Argyraspodes argyraspis* avoided capture. *Pseudonympha trimenii namaquana* were quite plentiful as was *Phasis clavum*. A single *Poecilmitis* sp. was observed, possibly *P. chrysaor* or *P. aridus*, but not captured. A worn female *Lepidochrysops wykehami* was seen ovipositing on a species of *Selago* that was not in flower. The eggs were laid in bracts of the elongated, spherical flower head. The *Selago* sp. was abundant over a large area. On one plant that branched into three flower heads, three amber-coloured larvae were observed, measuring it was estimated, about 5-6 mm in length. The larvae were of the typical *Lepidochrysops* form; they had eaten the entire flower buds away and were resting completely exposed and glistening in the sunshine, presumably waiting to be carried off by ants.

On arriving home, I made several enquiries about *Selago* and the identification thereof. It would appear that the genus in Southern Africa is so vast that unless a specimen in flower is procured, it is virtually impossible to identify. I noticed that this particular *Selago* sp. was sticky when lightly pinched between thumb and forefinger and in this manner I was able to identify it over an area of at least 4 kms. I compared this *Selago* to a few sprigs that I had procured from the Worcester/Robertson district a week earlier, around which a *Lepidochrysops* sp. (? *dukei*) was flying. It was also sticky, but was in flower, and showed various differences to the Namaqualand plant. Apparently the stickiness

is not common to the genus, but from my point of view is quite an interesting way of identifying at least two of the genus.

Life history - *Aphnaeus hutchinsonii* Trimen 1887

D.A. Edge

Food-plant: *Burkea africana*

Appearance and distribution

This species is known from the Transvaal in the warmer areas – extending as far south as the Magaliesberg just north of Pretoria, and extending along the northern side of this range wherever its food-plant can be found. *Burkea africana* only grows on the northern slopes of the mountain where temperatures are higher. The butterfly is also known from the thorn country around Estcourt, and in Zululand – and in the north-eastern Transvaal from whence the earlier record of its life history was made (Clark & Dickson, 1971) from ova and larvae collected by D.A. Swanepoel.

Description of the locality

The life history described below is recorded from ova and larvae collected at the northern base of the Magaliesberg in the vicinity of Hornsneck [the study was carried out from September 1985 to January 1986]. *Burkea africana* is extremely plentiful along this slope, growing in a distinct altitude belt, with *Acacia* species below and other flora predominating higher. The most favoured trees are fully grown but slower in generating new growth. The female deposit her ova on young shoots which are a rusty red colour at the base, lending the larvae extremely good camouflage protection. The favoured trees also will contain a good population of *Crematogaster* ants (presumed to be *C. castanea*) and have many holes in the bole and branches.

The adult males of *A. hutchinsonii* have the very well known habit of visiting the summits of nearby mountains during the afternoon. The adult female is an extremely infrequently seen insect and only very rarely will visit the mountain tops. However, my observations have shown that the females congregate around certain favoured groves of breeding trees where 3 or 4 may be seen in the course of an afternoon, fluttering in and out of the branches as they oviposit.

Egg Laying

As described above, the female lays on the younger shoots, but slightly lower down the shoot where it is very knobbly. The grey egg looks exactly like the small knobs on the twigs. The eggs are most frequently laid in pairs, but sometimes only one will be laid, or more. In one case eight fertile eggs were found on a single shoot of the food-plant! In many cases the shoots selected for laying were at head height or below, although the females were also seen ovipositing near the top of the trees.

Egg Description

The eggs are grey in colour (see Clark & Dickson, 1971 – page 149 and plate 74). They are 1,1 mm in diameter x 0,6 mm high. Hatching takes place after 7-12 days.

Larvae Description

The first three instars are described in Clark & Dickson, 1971.

1st instar: 1,5 mm long on hatching, growing to 3,0 mm in 5-6 days

2nd instar: growing to 4.5 mm in 6–8 days

3rd instar: growing to 9-10 mm in 12–14 days

4th instar: growing to 14-15 mm in 10-11 days

5th instar: growing to 20-22 mm in up to 60 days (semi diapause)

The colouration in the first three instars is cream and brownish red – a combination which blends well with the young shoots of the food-plant. In the 4th and 5th instar the larva is generally grey with black markings.

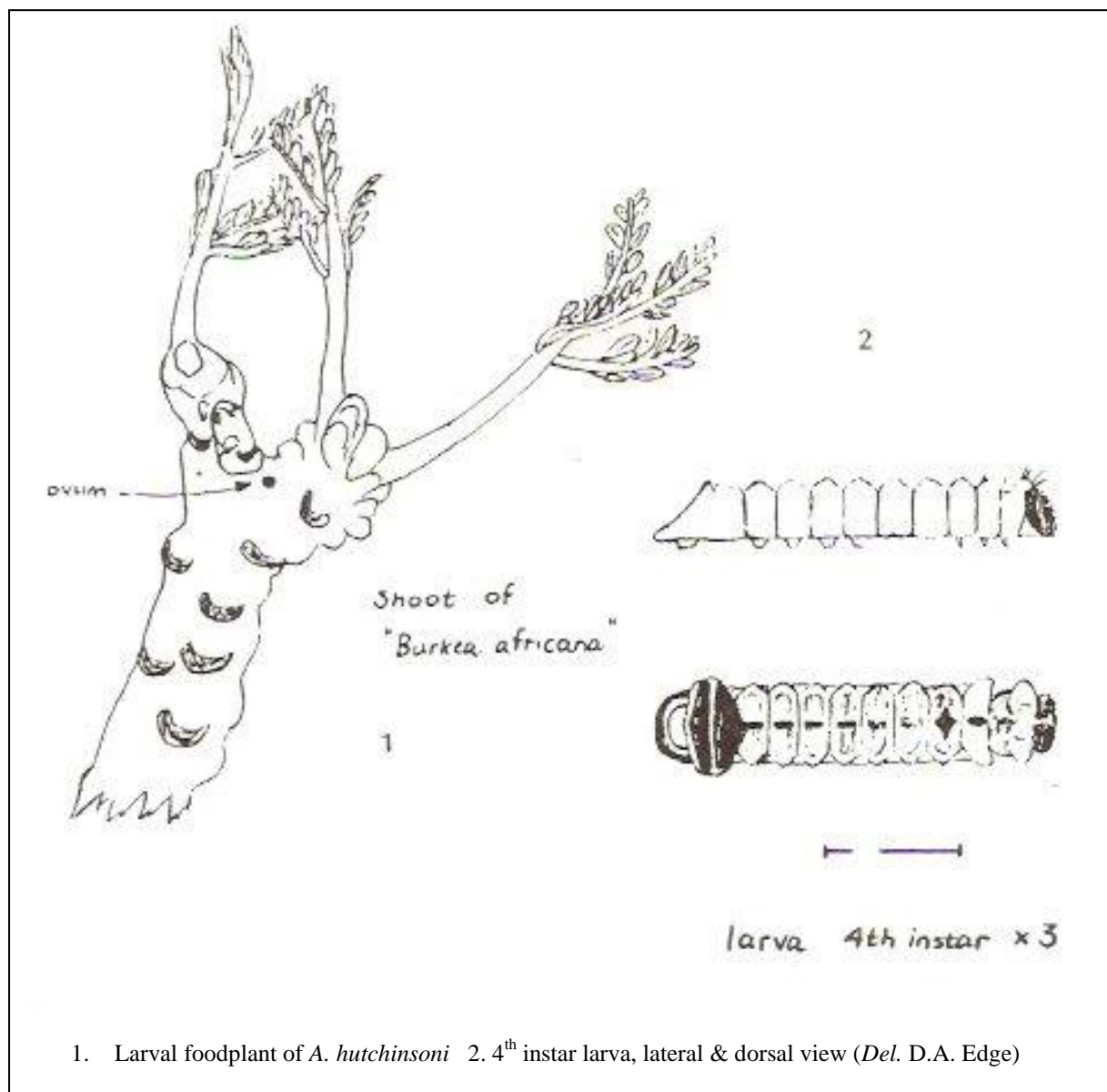
The larvae are gregarious and during the day hide in grooves they have eaten out of the soft part of the twig at the base of the leaf shoots. In the 2nd instar they spin a light cocoon over their sheltering place. They are constantly attended by the ants, which imbibe the fluid secreted by the honey glands. At night they emerge from their hiding places and climb the leaf shoots to feed, either on the young leaves or on the flower buds. They have also been observed feeding during the day.

Parasites

A very high mortality rate was experienced in captivity with some kind of small fly (presumably) which lays eggs on the larva which later emerge as a swarm of small maggots devouring the larva.

Pupation

The larvae bore holes into the tree trunk to prepare for pupation. Unfortunately all the larvae died before pupation could be effected.



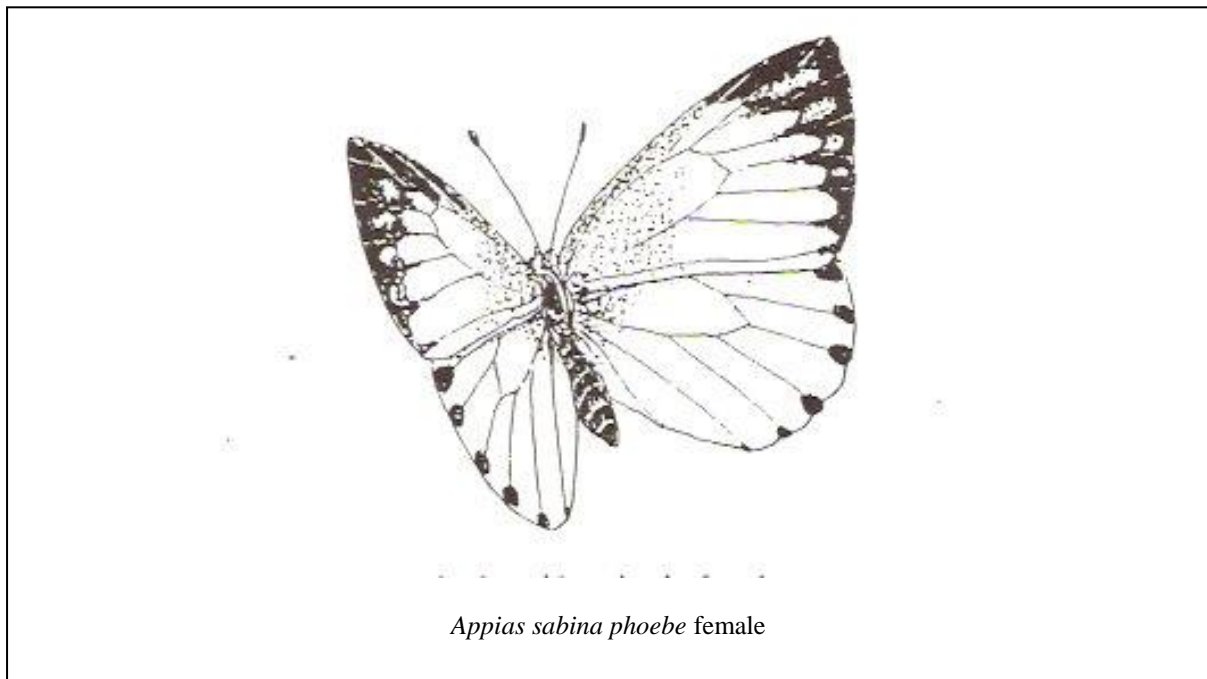
1. Larval foodplant of *A. hutchinsoni* 2. 4th instar larva, lateral & dorsal view (Del. D.A. Edge)

Our first encounter with *Appias sabina phoebe* (Butler)

Paul & Gerty Krüger
P.O. Box 4181, Pietersburg 0700

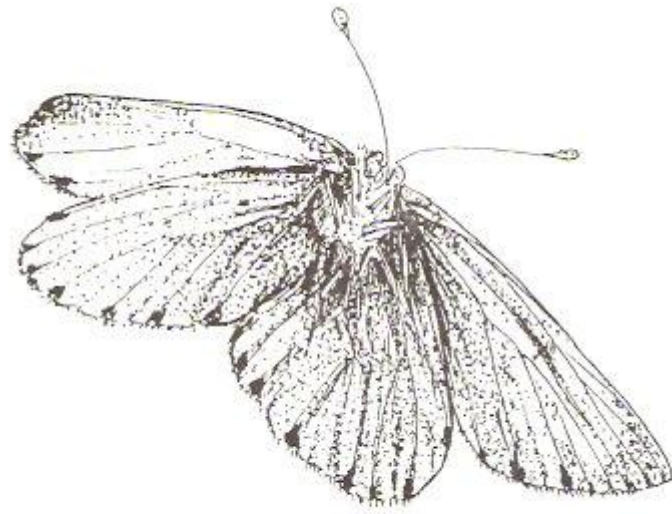
On the 23rd of April 1989 we were on our way home from Letsitele. It was early and we decided that we were going to take the Forest Drive through Woodbush. It was an overcast day and not the best for netting butterflies. Near the Debegeni Falls we netted some lovely *Acraea zetes* and *A. anemosa*. At approximately 1.30 pm we arrived at a spot just past waterfall no. 6. There is a huge Red Stinkwood tree on the right where a road turns off to the right crossing a stream.

Suddenly, in a burst of sunshine, a horde of whites came storming down the road and also shooting up amongst the trees chasing one another just to disappear when the sun clouded over. I could not make up my mind to what I had caught – it looked like a black *thalassina*. However, with every burst of sunshine we netted a few. All seemed to be males. The females were high up amongst the trees and when the sun came through some males zoomed up to chase them. The females had a lot of yellow on the hindwings. This really made me think we had come upon a colony of weird *thalassina*. There were hundreds of them coming down the road.



I walked up the road about 100 m when I realised that they came out of the forest and charged down the road to the spot where we found them. There they shot up into the forest again while some turned off to the right over an opening in the bush also to go into the forest again.

Although there were many they were very difficult to net as they seemed to anticipate every move we made and only when the sun clouded over and they suddenly sat on the ground or a leaf did we net them. Many were torn and worn. We netted a few more and went home. After setting 12 good specimens I phoned Graham H. [Henning] and told him of our catch and exactly where they could be found. By that time we had established that it was *A. [Appias] sabina* in Pennington's book. Although we were not aware that it was listed in the Red Data Book. Graham and Co went down the weekend after. Gerty and I went down 2 weeks later and I netted a perfect female about 1 km above the spot. Gerty also caught a perfect female at the turnoff. None of them had yellow hindwings. We gave one to the Hennings.



Appias sabina phoebe male in flight

Don't believe me!

D.A. Swanepoel

The numerous koppies and hills flung across Tzaneen's eastern horizon are not very impressive. They lack the magical allurements of the Wolkberg looming in the west. Initially butterfly life on them, however, stimulates a desire to go there again and again. I am inclined to boast that I have seen everything there except Morphos.

On one such koppie in March one year there was red all over. I could hardly believe my eyes when I came to the summit. A dozen or more beautiful specimens of *Pseudacraea boisduvalii trimenii* were sporting about the trees. Gee, boy oh boy, they were there like flies on a dead cow - to quote Ken Pennington's expression he often voiced when encountering things in unusual numbers. Some were chasing one another like mad with the onlookers getting warmed up and becoming enticed to start a melée. One brave-bold and foolhardy chap chanced to alight on the stick of my net pulled faces at me and even stuck his tongue out. I was wondering whether he was the incarnation of Dingaan.

Anyone who tells me this is a common species does not know what he is talking about. I have more than sixty years experience with it in the RSA and will always maintain it's a rare butterfly. But let's go to a small forest east of Malelane in the eastern lowveld. There, in June 1954, a road builder decided it was time the road through the forest needed a scraping. On that memorable day, still alive then, Pennington would have been overjoyed if he could have witnessed the unusual and enthralling spectacle. They did swarm over the road like flies on a dead cow. The smell of the fresh earth uncovered by the scraper attracted them like a magnet. I cannot remember how many of all the beauties that fell to my net there on that day I gave away to friends.

What entices this rainforest dweller to follow dry river courses to hell and gone into deserts? I am not the only one that had come across it many miles from its classical habitat. There was a perfect one feeding on flowers of a shrub along the Sand River near Pietesburg. Many have been seen under the trees along the Sand River north of the Soutpansberg. One was seen playing on a koppie in the dry

bushveld miles and miles away from the nearest rainforest. Are they explorers? Shall we ever uncover their secrets?

On very rare occasions I have come across one feeding on flowers. More often than not on damp places on roads or along streams. One collector got so wild waiting for them to come down from the tree tops where they usually float about during the morning that he started to throw stones at them. They accepted the challenge and dive-bombed the stones – much to the delight of the collector who quickly netted them.

During his annual holidays, he spent along the Natal south coast, H.E. Irving was rewarded with many fine examples of this butterfly. His daughter (was it Margaret?) had to sit for many hours watching them so that she could inform her father when they came down from the tree-tops. Much of the lush bush the species inhabited in those days has since been cut down. *P. boisduvalii* is on the wing throughout the year. Its best time is from December onwards.

***Acraea rahira* still flies in the Worcester district, Western Cape**

Mike Schlosz

Maybe it isn't news? I don't know when last a report for the butterfly in this area was received. I also don't know exactly where *Acraea rahira* was originally found in the Worcester district, however it seems conceivable that if it is found at Swellendam, situated fairly close to the Breede River mouth and at Worcester, much further inland, but still on the Breede River, that it could be found at numerous, suitable places along this watercourse. On 17 March 1990 while visiting a farm that I had visited for some twenty years during my birding days, on this occasion in the company of A.K. Brinkman, *Acraea rahira* was seen in fair numbers, covering a wide area.

The farm is situated in the shadow of the Riviersonderend mountains approximately 20 km south east of the town of Worcester. *Acraea rahira* was seen throughout the day in a variety of situations, mostly overflying vineyards, up to a kilometre from the river, appearing to alight on the grasses which were growing in abundance between the rows of vines. *Polygonum pulchrum*, one of its foodplants, could not positively be identified, but must certainly be growing in the area, judging by the fresh condition of the butterflies. The butterflies were also seen and captured, about 3 km inland of the vineyards, flying over arid Karoo-type ground. In this same area *Poecilmitis brooksi* and an *Aloeides* species very similar in appearance to *A. lutescens* were found in fair numbers.

On the way back to Cape Town, 10 km from Worcester, *A. rahira* was once more seen close to vineyards, overflying the road, and in another case, in dry Karoo land. A pleasant experience indeed when one considers that the only other *Acraea* likely to be encountered anywhere close to Cape Town would be *A. horta*.

Checklist of butterflies of the Goldfields area in the Orange Free State

Martin Lunderstedt

The Goldfields area includes the towns of Virginia, Welkom, Allanridge and Odendaalsrus. Also included in the study area is Kroonstad.

Family DANAIIDAE

Danaus chrysippus aegyptius (Schreber)

Family SATYRIDAE

Melanitis leda helena (Westwood)

Aeropetes tulbaghia (Linnaeus)

Family ACRAEIDAE

- Acraea neobule neobule* Doubleday
Acraea rahira Boisduval
Acraea eponina Cramer
Acraea stenobea Wallengren
Acraea lygus Druce
Acraea oncaea Hopffer (observed 1986 migration)
Acraea zetes trimeni Aurivillius (observed 1986 migration)

Family NYMPHALIDAE

- Byblia ilithyia ilithyia* (Drury)
Hypolimnas misippus (Linnaeus)
Catacroptera cloanthe cloanthe (Stoll) (Kroonstad)
Junonia archesia (Cramer)
Junonia hierta cebrene (Trimen)
Junonia oenone oenone (Linnaeus)
Junonia orithya madagascariensis (Guenee) (Kroonstad)
Vanessa (Cynthia) cardui (Linnaeus)
Phalanta phalantha aethiopica (Rothschild & Jordan)
Charaxes jasius saturnus Butler

Family LYCAENIDAE

- Thestor protumnus aridus* Clark & Dickson (Allanridge)
Thestor basutus basutus (Wallengren)
Gonatomyrina henningi (Dickson)
Aloeides damarensis damarensis (Trimen)
Aloeides pierus (Cramer)
Aloeides henningi Tite & Dickson
Crudaria leroma (Wallengren)
Lycaena clarki Dickson
Anthene butleri livida (Trimen)
Cacyreus marshalli Butler
Zintha hintza hintza (Trimen)
Tarucus sybaris linearis (Aurivillius)
Lampides boeticus (Linnaeus)
Cyclus pithous (Linnaeus)
Lepidochrysops letsea (Trimen)
Lepidochrysops plebeia plebeia (Butler)
Lepidochrysops patricia (Trimen)
Freyeria trochylus (Freyer)
Azanus ubaldus (Stoll)
Azanus jesous (Guerin-Meneville)
Azanus moriqua (Wallengren)
Oraidium barberae (Trimen)
Zizeeria knysna (Trimen)
Zizula hylax hylax (Fabricius)

Family PIERIDAE

- Pinacopteryx eriphia eriphia* (Godart)
Colias electo electo (Linnaeus)
Catopsilia florella (Fabricius)
Eurema brigitta brigitta (Cramer)

Colotis danae annae (Wallengren) (observed 1986 migration)

Colotis evenina evenina (Wallengren)

Colotis agoys bowkeri (Trimen)

Colotis subfasciatus subfasciatus (Swainson)

Belenois aurota (Fabricius)

Pontia helice helice (Linnaeus)

Mylothris agathina (Cramer)

Family PAPILIONIDAE

Papilio demodocus demodocus Esper

Family HESPERIIDAE

Coeliades forestan forestan (Stoll)

Spialia spio (Linnaeus)

Spialia mafa mafa (Trimen)

Spialia dromus (Plötz)

Spialia diomus ferax (Wallengren)

Kedestes lepenula (Wallengren) (Kroonstad)

There is a total of at least 62 species for this area. Some are exceedingly scarce while others are only observed in migrations like the one in 1986-87.

Observations on butterflies: Golden Gate, 15 September 1990

R.F. Terblanche

Locality: From the 'old gate' to the top of Generaalskop.

Weather conditions: Cloudless sky, strong westerly wind prevailed.

General: The grass appeared to be dry and had not been burnt.

Methods: Walked along the northern ridge of the mountain and back (14:00) on nearly the same line making observations or collecting butterflies when necessary.

Results: Butterflies recorded:

Satyridae: *Pseudonympha poetula*

Nymphalidae: *Vanessa cardui*

Lycaenidae: *Aloeides rileyi*

Gonatomyrina lara

Lampides boeticus

Pieridae: *Colias electo*

Hesperiidae: *Spialia asterodia*

Observations: On almost every rocky outcrop along the northern ridge of the mountain one or more *Aloeides rileyi* could be seen flying close to the ground in its erratic manner. Some of them were seen flying together where the strong wind was partly shielded off. It amazed me how many of this peculiar butterfly were on the wing despite the windy conditions. On my way back from the top of the mountain to the 'old gate' (14:00) I counted twenty five at random.

Remarks: The relatively few butterfly species encountered may partly be due to the weather conditions (strong wind). It must, however, be kept in mind that it was still quite early in the rainy season.

A 'sound' observation

Mike and Pat Schlosz

I collected a final instar larva and pupa of *P. brooksi* from a species of *Zygophyllum* in the greater Worcester district in August, 1990. After having just reared *P. thysbe*, and having watched how a newly emerged imago struggled to orientate itself while clawing at the unsecured pupa, (I had earlier removed pupae from the various places in which they pupated and placed them in a breeding box) I decided to secure the *P. brooksi* pupa with the tiniest spot of a quick-drying, water based wood adhesive. Inadvertantly a very small amount of adhesive adhered to the rear dorsal surface of the pupa. I dipped a soft, sable haired watercolour brush in water and stroked the rear-end of the pupa lightly, in an effort to remove the adhesive; frequently rinsing the brush in clean water; this continued for less than half a minute, during which time the pupa emitted an audible squeaking sound, which continued for some time after the stroking had stopped. Removal of the adhesive was successful.

A week later, while doing a routine check on pupae and larvae, I heard a similar sound coming from the same pupa. I hurriedly rigged a tape recorder and microphone arrangement that I had formerly used to record bird calls; unfortunately background noises all but drowned the faint sounds made by the pupa. My wife Pat also clearly heard the sounds by turning her ear to the net covered roof of the container in which the pupa was kept. The following day the pupa produced a male imago of the species. Has anyone else 'heard' a similar experience?

A butterfly stand at the Natal Witness Garden Show

Adrian Driver

There was a successful stand at the Natal Witness Garden Show, about butterflies, breeding and foodplants. The plants were provided by the Durban Parks Department (Geoff Nichols) and the stand was arranged by Clive and Natalie Quickelberge, assisted by myself and daughters. There were many foodplants with butterflies pinned to them, so that people could know what foodplants to obtain for their gardens. I provided two large plastic fishbowls, turned upside down to cover *Catopsilia florella* and *Cymothoe alcimeda* larvae feeding on their foodplants. The foodplants were contained in transparent 35 mm film cases, filled with water. Pieces of plant were pushed through holes in the lids.

The *Cymothoe* behaved well - they were originally obtained at Howick Falls. Some were eating, others pupating and some of them actually emerged during the show. The very last larva has finally pupated, after 5 months as a larva.

I ran the stand from 4:30-8 pm daily, and members of the Natal Butterfly Club came from Durban, for the earlier parts of the day. It was a wonderful experience. Mark Shute, the show manager, commented very kindly on the stand, and expressed the hope that it would be there next year.

A few words of appreciation

Rudi Mijburgh

I would like to congratulate my old friend, our amicable editor Bill Henning, on his first edition of *Metamorphosis*. It was superb and I am convinced that all our members have a high regard for the great task that he has tackled especially in view of the fact that he is a senior member. For a number of years I was editor of a banking journal and know about all the attendant trials and tribulations.

But, now that I mention seniors, paging through our membership list I was surprised to see that aside from myself there are at least another twelve members who have passed or nearly reached the seventy year mark. For interest sake they are: L.A.C. Buchanan, Joseph Chitty (he should really write

something for us from Harare), Charlie Dickson (sadly he is not a member but we all have a lot of respect for him and we are saddened that his health is poorly), John Handman (*Orachrysope ariadne* is his 'baby' - we should also hear something from him), Bill Henning, Pine Pienaar (still up and about), Victor Pringle (progressive Angora goat farmer and very active; still climbs high mountains), Lou Schoeman (bowls champion of Pietermaritzburg), Mrs Ruth Southey (Jonathan Ball mentioned a while ago that she is very well), David Swanepoel (judging from the news in *Metamorphosis* he still goes on expeditions and apparently has a good recipe to stay fit), Lajos Vári (still alive - his interest will never wane) and Hans Wagner (we're still waiting for something from his pen).

I notice that subscriptions for seniors have been reduced to only R10 per annum. May I, on behalf of all the seniors, express our thanks and gratitude to the Council for this wise decision. *Metamorphosis* no. 25 was a pleasure to read particularly the editorial which showed good taste as well as the interesting contributions by Graham Henning, Alan Heath, John Joannou, Mervyn Mansell, Etienne Terblanche ('sy artikel was pragtig') and Rolf Oberprieler.

Obituary - Jim Riley

Bill Henning

James Riley was born in Krugersdorp on the 4th January 1908 and died there on the 24th June 1990. His parents came from Ireland and were in the hotel business. Jim went to school at Hilton College in Pietermaritzburg. After finishing school he moved to Durban where he started his trade with the S.A. Railways as a fitter and turner engineer. He later obtained a Geology and a Minerology diploma on the 4th March 1939.

With the declaration of the Second World War in September 1939 he enlisted in the South African Engineers Corps where he served until he was discharged in 1945. Soon after he was discharged he found employment at Rand Leases Mine, where he carried on with his studies as an electrical and mechanical engineer, graduating on the 22nd April 1954. He worked on several mines in South Africa and was eventually transferred to Tsumeb. Thereafter he went to Star Diamonds in 1960 where he met his future wife Doreen.

Until 1960 he collected butterflies haphazardly. However, after meeting Doreen who was also interested they both started collecting seriously and amassed an impressive collection from all over southern Africa. During the next twenty years or so they travelled extensively in pursuit of their hobby. They collected throughout South Africa, Zimbabwe and Mozambique. Jim spoke with particular fondness of his trips to Dondo and Amatongas and was most distressed when he could no longer visit them after Mozambique obtained their independence.

He passed on his specimens to the Hennings and Nolan Owen-Johnston when he felt he was unable to look after them adequately.

Jim will be missed by all his friends in the butterfly community for his ready wit and good humour.

Getting to know moths - Tussock moths

Stephen Henning

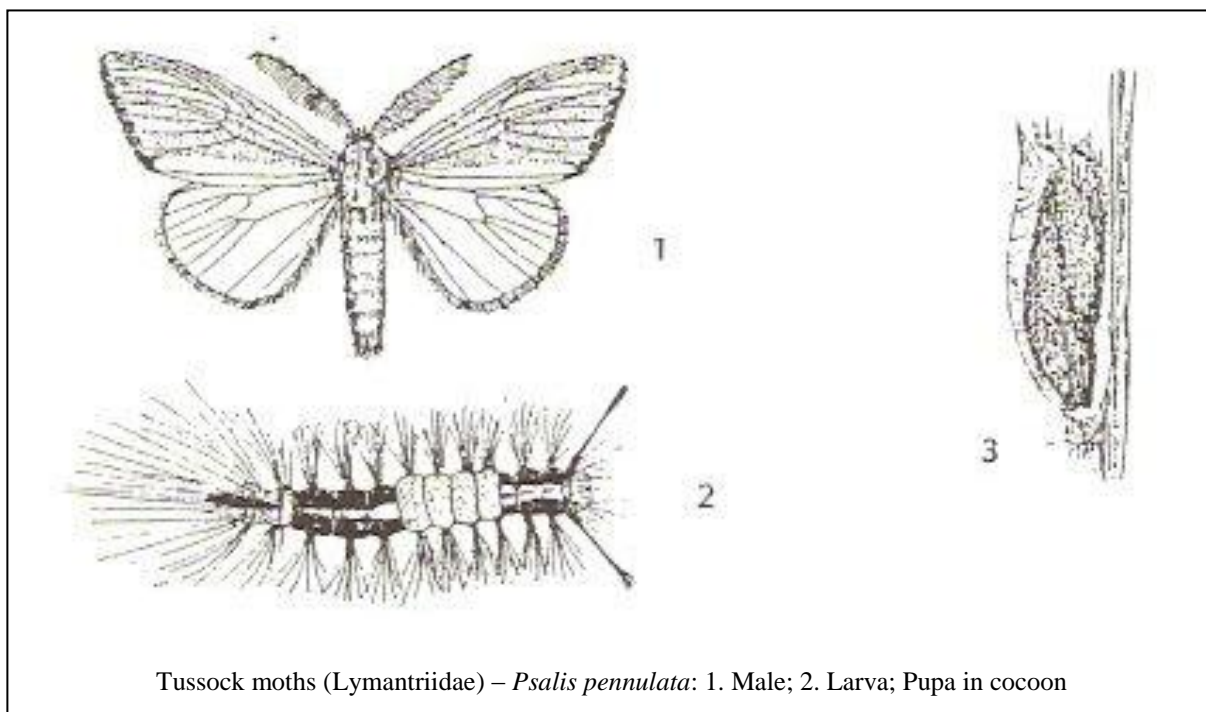
The tussock moths belong to the family Lymantriidae (Superfamily Notodontoidea). They are mostly medium-sized moths with white, cream or yellow wings, rarely brightly coloured. The wings are often more or less translucent but sometimes grey, brown or variegated. The antennae of the males are very prominently bipectinate to the apex and the haustellum (proboscis or tongue) is usually absent. The wings are generally broad. The thorax and abdomen are densely hairy, the latter with a spiracular counter-tympanal hood. The female has a dense anal tuft.

The eggs are often hemispherical, round or subcylindrical. They are laid in clusters and are usually covered with hair scales from the anal tuft. The larvae have dense, tufted secondary setae, often with four long dense dorsal tufts or hair-pencils. Osmeteria are present on abdominal segments six and seven. The pupae are stout and hairy. Pupation occurs in a cocoon incorporating larval hairs.

The tussock moths are so named from the upright brushes on the backs of the larvae. Some of the white adults are nocturnal, others are diurnal. They can exude a yellow poisonous fluid from the thorax and the white colour probably serves as a warning. In a few species, such as some *Aroa* and *Orgyia*, the female is more or less wingless and is stout and almost grub-like.

Apart from the famous gypsy moth, *Lymantria dispar* of North America, there are a few pine tree pests like the brown tail, *Euproctis terminalis*, and the dusky vapourer, *Aroa melanoleuca*, but otherwise it is not a family of economic importance.

There are roughly 300 species in southern Africa. Collenette (1955) provided a key to the African genera. Janse (1915) dealt with the South African genera and Pinhey (1975) gave a general treatment of the family.



Tussock moths (Lymantriidae) – *Psalis pennulata*: 1. Male; 2. Larva; Pupa in cocoon

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Photographer's corner no. 1

Steve Woodhall

Hello to all our *Metamorphosis* readers. I've been a sporadic contributor to your Journal for some time now. Although my articles have been mostly descriptions of trips to collecting spots, my main

specialty is photography. Your Council has decided to feature regular columns on certain topics, so I hereby present – ta da!!! Photographers' Corner!

In this column I will be giving news and views on what is generally going on in the world of Lepidoptera photography. Obviously I am not clairvoyant, so I need you, the readers, to tell me what you have been doing with your cameras. Anything, from a new piece of equipment that has proved useful to you, to a rewarding photographic experience, will be gratefully received. Please write to me:

Steve Woodhall
Photographers' Corner
P O Box 67317
Bryanston 2021.

In this first column, I'd like to deal with something that struck me at the recent AGM and Conference (no, not a flying bread roll!). We had a section of the schedule reserved for members to show slides of localities they had visited. This stemmed from a previous Conference at which Mark Williams' slides of collecting spots in Namaqualand had gone down very well. This time we had more slides but most came from those who are the most active in life history photography. Why not from those who are not so inclined, but still own cameras?

It's not difficult to shoot good landscape pictures. The most important things to watch are lighting and composition. The main point about lighting is that it is best in the early morning and late afternoon. The low angle of the sun will throw features into relief and create a dramatic mood. At noon all may appear clear and bright but there will be few shadows, giving a flat effect. However, you will probably be trying to exhibit certain specific features in the landscape, for example a rock or tree. If you have too much moody sidelighting, you risk losing the scientific value of the shot. The best time of day for locality shots varies with the season and your longitude. Our continent is a wide one and the sun rises and sets earlier in the east (e.g. Kosi Bay) than in the west (e.g. Hondeklip Bay)! As a rule, the best time is when the sun is halfway to or from its zenith.

In the morning there will be less haze, but the light will be cool and bluish. This is a good time to shoot panoramic views of the far distance. In the afternoon there is more haze, but the light will be warmer. This is a good time to get closer in and shoot details such as crags and trees.

Avoid shooting into the sun, unless you are deliberately shooting a sunset. The resulting lens flare will give a low-contrast, washed out image. The old advice from the Kodak packet is best here – keep the sun behind your shoulder and you will not go far wrong. Of course if the sun is directly behind you, all shadow effect will be lost as if you had taken the shot at noon.

Composition is very much a matter of personal taste, but there are a few useful general guidelines. Firstly, beware of unnatural objects such as powerlines and telegraph lines. They can be useful as pointers to a particular spot in the landscape but are usually simply visual pollution. The most maddening thing I find about telegraph wires is the way they are usually invisible in the viewfinder but stand out like a sore thumb on my photographs! They are most troublesome if you want to take a shot from the roadside. It is often best to climb over the fence and stand directly under the wires where they will not get in the shot.

If you are taking a panoramic shot take care to have a point of interest in the foreground or middle distance. This can be a tree, a rock or perhaps the actual place inhabited by the species of interest at the locality. The National Geographic Magazine used to, and sometimes still does, have a strategically placed figure, clad in a red sweater, to give depth to pictures of distant panoramas.

When shooting specific features, try to make them stand out against the background. Make sure they fill the frame well – get close in. If you can't, consider using a medium telephoto lens instead of the standard to wide angle lens most often used for landscapes.

Never place the centre of interest dead in the centre of a shot. This looks contrived and amateurish, and is such an easily avoided fault that there really is no excuse for it. Unfortunately those of us using 35 mm SLR cameras with split image focusing sometimes fall into the trap of focusing on the centre of interest and then pressing the shutter. All you have to remember is to half focus and then move the centre of interest off centre. Autofocus cameras usually have a focus hold button to allow you to do this.

Landscape photographers have one big advantage over macro or close-up photographers – they always have plenty of light to play with! You must, however, consider what f-stop to use. Small apertures, f/11 or narrower, are best for panoramic shots where you want to keep everything in focus from the foreground to infinity. At these apertures you do not have to focus at infinity – in fact it is better to focus closer to the centre of interest if it is not too close. If your lens has a depth of field scale you will be able to see that it can hold a great depth of field when stopped down. For example my 35-105 mm zoom lens at 35 mm and f/16 holds everything in focus from 1.4 m to infinity. If your camera is an SLR and has a depth of field preview button you can see for yourself.

For shooting specific features it is better to use a larger aperture – f/5.6 or wider – which will give a narrower depth of field. This is a very good way of ensuring that your subject stands out against the background. However, accurate focusing is essential.

The sky is an integral part of all outdoor photography. If it is overcast or plain blue, it is photographically boring. You should attempt to minimise the amount of such skies in your shots. Do this by keeping the horizon high in the frame in panoramas, and getting as close to special features as you can.

On the other hand, beautiful blue skies dotted with clouds add much to landscapes. However, it is best to remember that most colour slide films do not reproduce blue skies well. The way to get those incredibly saturated blue skies with contrasty white clouds that you see in magazines is to use a polarizing filter. This screws into the filter thread on the front of your lens, as does a skylight filter. It consists of a rotating piece of polarizing glass. All you have to do is to compose and focus your shot, and then rotate the filter until you are happy with the darkness of the sky. It will work best when the sun is exactly 90 degrees to the direction you are pointing the camera. The most dramatic effects occur when you use one with an ultraviolet (UV) filter. Polarizing filters are not cheap but are invaluable to the landscape photographer.

Equipment-wise, landscape photography is fairly undemanding. Most 35 mm fixed-lens cameras have a 35 mm lens, which is medium wide-angle and fine for general use. Those who have 35 mm SLRs should consider one of the modern wide- to telephoto lenses. I use a 35-105 mm, which is great for panoramas with the 35 mm setting, and it allows me to get close in with the telephoto setting. Super-wide angle lenses with focal lengths of 28 mm or less can give very dramatic panoramic shots. However, they make foreground details look very small and insignificant.

When you are photographing a locality, please don't be content with only one shot. Start off with a panoramic view of the area, perhaps including a recognizable landmark such as a mountain or road. Then narrow in onto the actual areas where the butterflies fly, and finally show the actual features they inhabit. This may be a ridge, a mountain peak, a tree or perhaps a patch of marshy ground.

Don't scorn the idea of having people in your shots. This can help to bring memories back as well as sometimes being humorous. One of my favourite shots is of the territory of *Lepidochrysoys oosthuizeni* near Clarens. It is a big rock up and down which the males fly. It wouldn't look like much, except I climbed to the top of the rock and took a photograph of Nolan Owen-Johnston, my companion for the day, lurking balefully at the base of the rock for specimens to come his way! He is standing exactly at the spot where the males circle the base of the rock. This makes the shot stand alone, not needing me to use a pointer to the place of interest. Figures often also give a sense of scale to the scene, an effect exploited by the aforementioned National Geographic photographers.

So come on you lot, at the next Conference we would like to see locality slides from more of our membership. A good shot of a locality is every bit as scientifically valuable as a life history. With a little care and attention to detail it will provide an interesting and entertaining topic at the conference. Also, you will also find that every time you privately view your locality slides, the memories of your visit will come flooding back. Isn't that a nice thought for those cold winter days?

Crossword puzzle

John Joannou

The following is the solution to the crossword puzzle that appeared in *Metamorphosis* [Vol. 1] No. 26. The spelling of the scientific names of the butterflies is as per Vári and Kroon's checklist.



Congratulations

To Andrew Upshon, who won a Gold Medal at the GEC Young Scientists Exhibition at the University of Pretoria. There were originally 10, 500 entrants from which 600-700 regional gold and silver medallists were selected for the finals in Pretoria. There were 29 final golds in the various age/scientific categories. Andrew won the only gold in the Animal Sciences section for his work on butterflies.

New members

Nonah du Toit & young son Pierre.
13 Spekboom Street, Kempton Park 1619
Telephone 011 - 975 6969.

Alistair McMaster (Jnr)
P.O. Box 21, Cathcart 5310
New young collector, very keen, already been collecting for years. Interested in contacting other young people who would like to visit Cathcart. Alistair is a nephew of the well-known entomologist Cameron McMaster.

Erik H. Natorp
P.O. Box 373, Duivelskloof 0835
Telephone (01523) 3561 - Age 31 years.
New collector - Would like to contact others.

Bob Diesel
P.O. Box 512, Ladanna 0704
New collector.

Robert K. Richmond
42 Karen Road, Illiondale, Edenvale 1610
Telephone (011) 452-4938 (H) - Age 33 years
New collector - 2 years - butterflies and moths.

Juan Ortiz Salmeron
Avda, Barcelona 217-1^a 08222 Terraisa, Spain
Interests - Emperor moths.

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