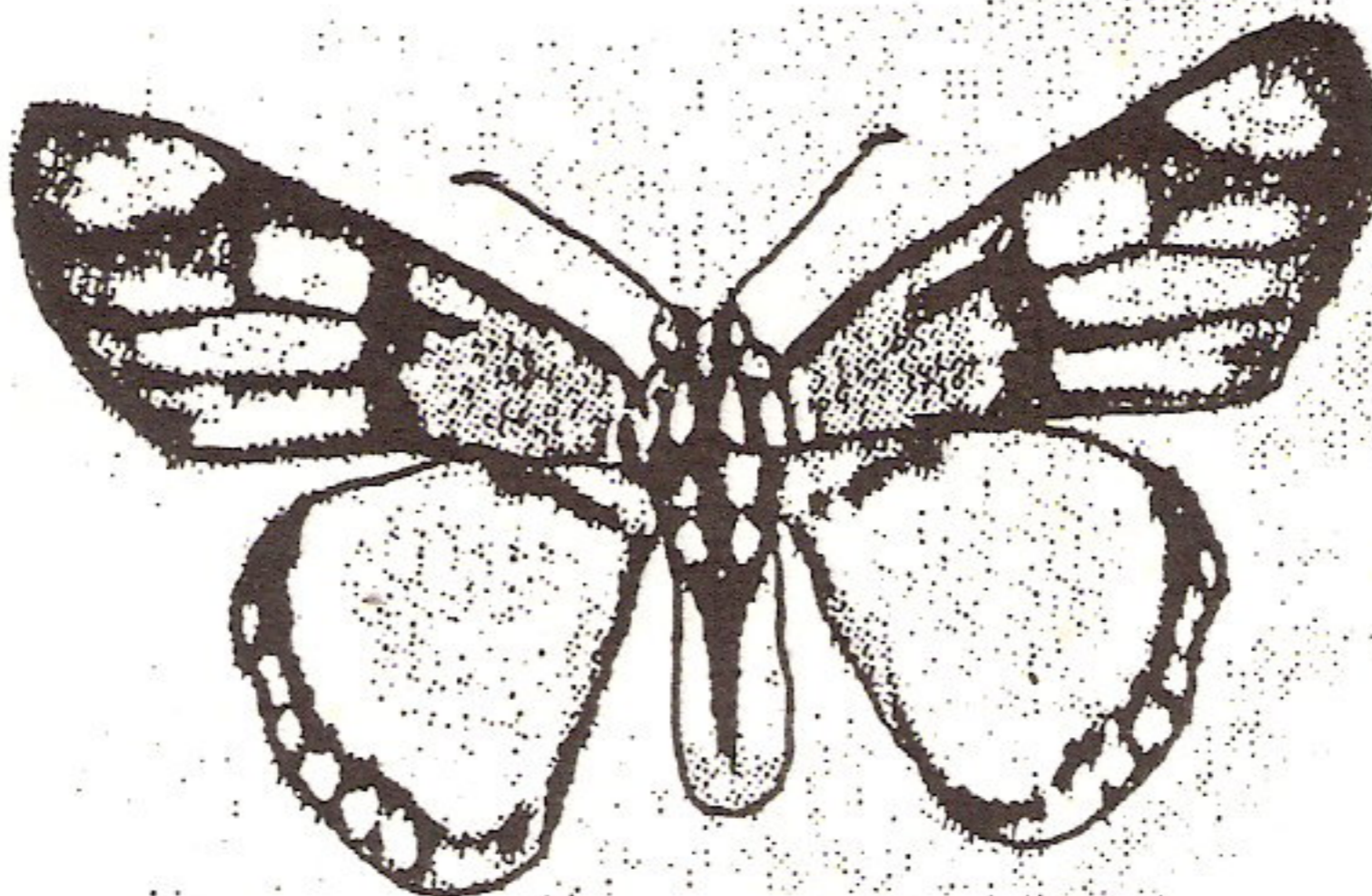


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Garden inspector

Jeff Huntly

The following piece is from a newspaper clipping. It is from Jeff Huntly's column entitled "Veld Sketchbook".

"One June day a large butterfly sailed gracefully through my doorway and, after circling around the studio in search of a resting place, settled upon a bottle of drawing ink. It promptly went to sleep and remained there for the next 10 days. An alternative bottle of ink had to be used meantime so that nothing disturbed his rest. From the slim shape of his body he was recognisable as a male. All female butterflies, apart from being much scarcer than the males, are fatter-bodied.

If a room with an open door and an accommodating human is not available, then the butterfly would seek a shelter in some natural hollow out in the veld, perhaps a cave entrance or hollow stump or even an ant-bear hole.

The studio sleeper *Precis archesia* has the common name of 'Garden Inspector' for its habit of cruising languidly along garden walks and settling among flowers, often sunning itself happily on flagstones. It combines three unlikely colours with pleasing effectiveness: rich coffee brown, some ornate splashes of light blue and a line of brick-red ovals along both wings. Butterflies of this species are more richly coloured in certain parts of Africa than in others, although wing markings are identical. A parallel can be instanced among sable antelope, those of the Kruger National Park being more richly coloured, glossier and heavier than those around Wankie and Botswana.

Dr William Beebe, the American conservant, once found a sleeping butterfly and lifted it from its perch, where it had been hanging upside down. After examining it he replaced it without waking it and its feet gripped the twig as before. He records that some Burmese guides accompanying him on an expedition would not kill a butterfly and when the party walked through a swarm of golden butterflies, many of which settled upon the men's clothing, they were lifted off gently and made to fly away. These people believed that the golden butterflies were the wandering spirits of men who were asleep!

An interesting phenomenon concerning the 'Garden Inspector' is that the species appears in two forms: a summer form and a more gorgeous winter form, the latter showing a leaf pattern in the undersides of the wings - the only parts visible to the outside world when the butterfly goes into hibernation. The Gaudy Commodore, *Precis octavia*, close relatives of our sleeper, exhibit even greater contrasts in seasonal colours and wing patterns, so much so that for many years the summer and the winter forms were believed to be different species.

An interesting butterfly spot in Venda

Steve Woodhall

On the long weekend 28 May – 1 June 1987 my wife Jayne and I paid a winter visit to the Soutpansberg. Not having a permit to collect in Hanglip and Entabeni forest reserves, we spent a couple of days abortively searching for *Colotis celimene* in the Waterpoort and Saltpan areas. For a change of scene from dry bushveld, baobabs and millions (literally) of pierids, we decided to take an exploratory drive into Venda. The vague object of this was to see how far into the Pafuri-type riverine bush we could get without being stopped by the SADF!

We took the Punda Maria road from Louis Trichardt and turned off left into Thohoyandou. We then followed the road through Thohoyandou until we met a T-junction. We took the right turn towards Sibasa and drove along until we spotted an interesting-looking dirt road signposted to the left, to a place called Tshatshingo Potholes.

This road led through lush sandveld towards low hills at the Eastern end of the Soutpansberg. We never got as far as the Limpopo, because we were immediately struck by the richness of the forests alongside this wonderful road!

This being the end of May, and a walk through Hanglip a day earlier having been butterfly-free, we were amazed to see butterflies along this road in numbers reminiscent of Woodbush in January. Below is a list of the more interesting species taken or seen:

Amauris ochlea – in large numbers. I counted fifty flying around a flowering creeper and up and down the road.

Amauris echeria – specimens with forewing spots the same ochreous colour as the hindwing patch.

Acraea zetes acara – very dark specimen taken, similar to form *barberina*.

Charaxes candiope – very large winter forms with brick red undersides.

Charaxes bohemani – a large male was seen to fly to the top of a *Combretum* tree, and sat looking at us!

Charaxes ethalion – a male was seen inspecting some banana bait we put down.

Charaxes xiphares – several males were seen ‘tree topping’, but were out of range of nets.

Libythea labdaca laius – on a mud puddle.

Pseudacraea boisduvalii trimenii – very large females taken, with very dark forewings.

Pseudacraea lucretia tarquinea – very abundant. All were forms *expansa* and *heliogenes*. The latter was commoner – about 75% of specimens seen were orange or ochreous in colour.

Sallya natalensis.

Hypolimnas dubius wahlbergi form *mima*.

Salamis parhassus aethiops form *modestus*.

Precis terea elgiva.

Precis tugela.

Precis octavia sesamus – both wet and dry season forms together.

Junonia orithya madagascariensis.

Lachnoptera ayresii.

Eicochrysops hippocrates.

Dixeia pigea form *rubrobasalis* – females with very pronounced yellow colouring – no white on them at all.

Papilio dardanus cenea.

Papilio ophidicephalus entabeni.

Artitropa erinnys – with a white hindwing underside, similar to subspecies *nyasae*.

Platylesches robustus – very fine specimens with undersides almost a violet colour.

The road on the way to the potholes passes through sandveld, rainforest and hilltop grassland on which much *Selago* was growing and flowering. At the potholes themselves there is deep riverine bush.

The whole area promises to be very productive in summer, and is, I gather, largely unexplored Lepidoptera-wise. Anyone visiting the Northern Transvaal should consider a visit to Tshatshingo. I would not be surprised to hear of such rarities as *Cyrestis camillus* and *Acraea bomba* being found there.

No prizes for guessing where we're going in November!

Life history of *Iolaus pallene* (Wallengren)

Dave Edge

Wing-span: Males 34-39 mm; females 37-42 mm.

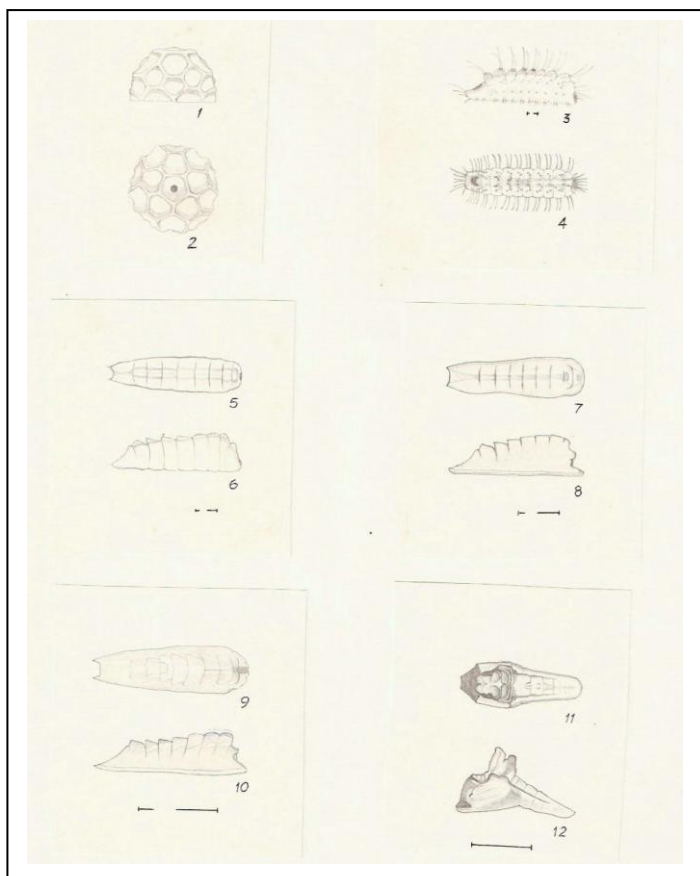
Foodplant: *Ximenia caffra* Sond. Murray (Olacaceae).

Appearance and distribution: Along the northern slopes of the Magaliesberg near Pretoria *Iolaus pallene* appears in favoured places early in September and is most plentiful in this month. It appears to be only single-brooded in this area since later records are scarce. In Zululand it has a more prolonged flight period and can be encountered most months of the year. The writer also has records from near Phalaborwa, along the Olifants River, in December and January.

Description of locality: The life history as described below is recorded from eggs and larvae collected on 14 September 1985 along the northern slopes of the Magaliesberg. The *Ximenia caffra* selected for breeding are mature specimens from 2-4 metres high, which grow lower down the slopes of the mountain and even at the base.

The adult butterflies tend to stay lower down the mountains and fly along the dry stream beds, seeking out blossoms of *Dombeya rotundifolia* upon which to feed. They also seem to be very partial to certain glades in the woodland where they fly slowly around and settle on the dry yellowed leaves of trees where their colouration gives them wonderful protection.

Egg laying: The particular *X. caffra* chosen for oviposition look bare and the old leaves are dry and unappetising. Unlike *Stugeta bowkeri tearei*, which often selects immature *X. caffra* specimens with tender leaves on which to lay, *Iolaus pallene* apparently favours the mature specimens which bear flowers and fruit. At the time the adult *pallene* are emerging, these *X. caffra*



Iolais pallene (Wallengren) Figs. 1 & 2: ovum (x 30); Figs. 3 & 4: larva, 1st instar, after 24 hours (x 25); Figs. 5 & 6: larva, 2nd instar (x 8); Figs. 7 & 8: larva, 3rd instar (x 3); Figs. 9 & 10: larva, final Instar (x 2); Figs. 11 & 12: pupa (x 2)

are producing tiny buds of flowers. It is on these very young buds and shoots of leaves that *pallene* lays her eggs, often carefully hidden in a cluster of buds, most often singly and well distributed.

Egg description: The eggs are pure white and hemispherical, with deep indentations (Figs 1 & 2). They are 0,8 mm in diameter and 0,45 mm high. Hatching takes place after 7-8 days, and the eggshell is not eaten.

Larval description:

1st instar: 1,2 mm, growing to 2,5 mm in 5-7 days (Figs 3 & 4). Pale cream colour with pink dorsal markings and small silver markings on each segment along the sides.

2nd instar: Growing to 5,5 mm in 4-5 days (Figs 5 & 6). Pale green with yellowish dorsal ridge.

3rd instar: Growing to 9-10 mm in 4-6 days (Figs 7 & 8). Pale green with yellowish dorsal ridge.

4th instar: Growing to 19-20 mm in 7-8 days (Figs 9 & 10). Pale green with yellow dorsal ridge on 4th & 5th segments and with white stripes in a chevron pattern along the sides. Towards pupation the larva becomes

distinctly two-tone with olive green and pink, later white markings. When it stops feeding the colour changes to brown and white, and a 3-day period elapses before actual pupation.

On 5th October 1985, six larvae were discovered on a *Ximения caffra* at the Hartbeespoort Dam locality; ranging from 2nd to 4th instar. They were not difficult to find if one looked for flower buds that had been eaten. A larva of *Stugeta bowkeri* was found on the same tree.

Pupa: 14 mm – 15 mm. The most commonly used place for pupation is on the stems of grass around the base of the foodplant, although in the absence of suitable grass pupation is on the branches or bole of the plant. The pupa is a curious shape (Figs 11 & 12) and generally has a pale buff ground colour, with lighter or heavier brown markings and highlights. The pupal stage can be as little as 14 days, but is mostly 11 months or so.

On the fate of private collections

Rob Toms
Transvaal Museum

Recently, the Transvaal Museum acquired two private collections. The first, the Odonata collection of Prof B.I. Balinsky was well preserved, with only a trace of museum beetles, which have now been eradicated. Our second acquisition was a very good collection of beetles, but by the time we received it about half had been totally destroyed by dermestids. The tragic part of the story is that according to my colleague Dr Endrödy-Younga, the vast majority of private collections reach us in a shocking state, usually because their owners hold onto them for too long, so a vast amount of energy and valuable material is being lost. Apart from the better known butterflies and moths, the taxonomy of most South African insects is in need of extensive revision, and material collected by private collectors can be very useful in this regard.

The only safe place for a good collection, in the long term, is a natural history museum. Even university museums, which are really teaching aids, are not safe repositories since changes in staff or policy can result in the loss of material. Natural history museums will never change their policy about the value of collections. Even when money is scarce, such as now, we go out of our way to find funds to protect our collections from infestation, and regard this as a top priority.

One way of caring for a private collection in the event of death, is to set up a trust, but what happens when the people named in the trust die? A trust can postpone the problem of loss of material but cannot solve it.

I for one would prefer to know what will happen to my collection. In the case of the Balinsky Odonata collection, Professor Balinsky knows his specimens are safe. He is, of course, welcome to refer to them whenever he likes, and he has been made an associate member of the Transvaal Museum.

Dragonflies migrating with *Belenois aurota* in January 1986

Stephen Henning

The migrations of *Belenois aurota* (Fabricius) in December 1985/January 1986 have been larger than they have been for several years. Although not many other butterfly species have been carried with them, a striking feature of this migration is the large number of dragonflies. Examining the reasons for the dragonfly migration may shed some light on the causes of the *B. aurota* migrations at the same time of the year.

These dragonflies all appear to be the large *Pantala flavescens*, which is a noted obligate migrant. These dragonflies breed in temporary pools in a seasonal rainfall area, such as is usually found in semi-arid regions. As one would expect to find in this species, the migrating instinct is the obligatory feature of adult life, and that migrations are directed towards places where fresh breeding sites exist. This means the adults must possess some means of being directed towards regions where rain is falling or about to fall.

Corbet (1983) believes that an indication of the way they achieve this is provided by studies of the desert locust, an insect which has ecological requirements essentially similar to those of dragonflies inhabiting temporary pools. When ready to migrate, locusts fly persistently upwards, so as to allow themselves to be lifted and then carried by the wind at considerable heights, and over long distances. While being transported they counteract the scattering effects of air turbulence by using visual stimuli to keep together (Kennedy, 1961). As the convergence of wind-currents is an essential feature in the production of large-scale precipitation, the migrating locusts are automatically delivered by winds to the right place at the right time (Rainey, 1951). Corbet (1983) believes that there is reason to suppose that dragonflies of the type we are considering are transported in the same way. He points out that as long ago as 1931, Bartenev noticed that the geographical distribution of *Pantala flavescens* could be defined by the zone where northerly and southerly winds meet in summer. In both western Africa (Gambles, 1960) and eastern and central Africa, the times of arrival of *P. flavescens* and the allied migrant *Tramea basilaris*, coincide with those of the Inter-Tropical Convergence Zone. Thus at Entebbe, Uganda, on the equator, these species appear in numbers only twice annually, in March or April and again in September or October. But in Shinyanga, Tanzania, at 3°40' S, they are most abundant in December and January - a seasonal pattern which corresponds with the transit-times of the Inter-Tropical Convergence Zone in these areas (see Manning, 1956). Similarly, Corbet (1983) noticed large numbers of these two species flying through Beira, Mozambique, in mid-January when the rains were just breaking. A particularly informative record is that reporting the arrival of large numbers of *P. flavescens* at a ship which was 466 km from the nearest land and 1 448 km from the coast of Australia, from whence the dragonflies had probably come (McLachlan, 1896). Their arrival coincided with a heavy fall of rain.

Corbet (1983) therefore suggests that temporary pool-breeders in semi-arid zones fly upwards at emergence and then allow themselves to be transported by the wind to places where rain will later fall. In this sequence of events, the initial action would be made by the dragonflies, whereupon the wind would take over until such time as their flight became appetential again and the insects descended. As Rainey (1951) has pointed out, in such

a scheme we can see a survival value for flight without orientation on the part of the insect.

This possibly could also be the case with *Belenois aurota* and why they always fly north-east every year. They are possibly being transported or guided by the convergence of wind-currents towards the Transvaal and Mozambique, where large scale precipitation is usually occurring in December/January.

This is one possible reason for the north-east flight of *B. aurota*. Do you have any other theories? If so, please share them with us.

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Lapalala Wilderness - visit 13-14 December 1986

Steve Woodhall

Over the weekend of 13-14 Dec. 1986, the following members visited Lapalala Wilderness, situated to the North-West of Vaalwater in the Waterberg:

Mark and June Williams and family
Nolan Owen-Johnston
Graham Henning
Steve and Jayne Woodhall

Several parts of the Reserve were explored, and a total of 69 species of butterfly recorded. A checklist was made and has been communicated to Lapalala. Several foodplant records were made and larvae brought back for rearing and photography. The full list of species recorded is available from myself as there is insufficient space to print it here. Of particular interest were:

Acraea obeira burni - foodplants *Urera tenax* and *Pouzolzia hypoleuca* growing together with the adult insect present in reasonable numbers.

Acraea zetes barberae - a few very fine specimens were taken.

Lachnocnema bibulus – a female pupa was found on a Homoptera-infested *Ximenia caffra*. This is worth further photographic work, pictures of this interesting carnivorous insect's life history being rare.

Iolais pallene – a larva found on *Ximenia caffra*.

Oraidium barberae – one was seen.

Aloeides damarensis mashona – a small colony was found by Mark Williams.

Graphium morania and *G. antheus* – *G. antheus* was abundant, *G. morania* less so. Both of their larvae were found in numbers on *Hexalobus monopetala*, and specimens of these were taken for rearing and photography.

The habitat is typical bushveld, and the plant life, and hence the butterflies, is rich and unspoiled. Further visits are planned, and will be announced in *Metamorphosis*.

Important notice

Mark Williams

A revised edition of *Pennington's butterflies of southern Africa* is in the pipeline. Mr Rex Pennington, in his capacity as chairman of the Pennington Trust, has requested that I urge all the members of the Lepidopterists' Society who have NEW information, to forward this to Ernest Pringle, who is revising and editing the new edition.

This data must add to our knowledge of the southern African species and must be sent to Ernest (E.L. Pringle, Huntly Glen, Bedford 1780) BEFORE THE END OF AUGUST 1987. This early date is due to a manuscript deadline. Ernest assures me that, where practicable, due acknowledgement will be given for data supplied.

I am sure that all of us want to see a 2nd edition of 'Pennington's' that is as up-to-date as possible. So get out your 1st edition, read it through, make a note of your new findings and send them to Ernest before the end of August.

Mark Williams, President.