METAMORPHOSIS

JOURNAL OF THE LEPIDOPTERISTS' SOCIETY OF AFRICA

THE LEPIDOPTERISTS' SOCIETY OF AFRICA

Volume 17 Number 2 • June 2006 • www.lepsoc.org.za

ISSN 10186490

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METAMORPHOSIS

ISSN 1018-6490

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Notes on scent marking by means of an androconial brush organ in the skipper *Coeliades forestan* (Stoll, [1782]) (Lepidoptera: Hesperiidae: Coeliadinae)

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Abstract
Scent marking behaviour by males of the skipper *Coeliades forestan* (Stoll, [1782]) (Hesperiidae: Coeliadinae) is described for the first time. Putative pheromone is deposited on the leaves of shrubs and trees by males, in a linear territory while patrolling, by means of a black, brush-like organ which is exserted from the anal end of the abdomen. Scent marking by male Lepidoptera appears not to have been reported before.

Introduction

The males of many insect species occupy territories in order to acquire mates. In addition to defending these territories, males may also produce visual, acoustic and olfactory signals in order to attract females. In regard to the latter, pheromones are usually released directly into the air (Shelly, 2004). Deposition of chemicals onto a substrate (scent marking) by male insects, on the other hand, appears to be rare. So far, scent marking has been documented in only a few taxa belonging to two insect orders, namely Hymenoptera and Diptera. These reports include bumblebees (Hymentoptera: Apidae, *Bombus*) (Kindl *et al*., 1999), beewolves (Hymenoptera: Sphecidae, *Philanthus*) (Strohm & Lechner, 2000), *Drosophila grimshawi* (Diptera: Drosophilidae) (Droney & Hock, 1998), and tephritid flies (Diptera: Tephritidae) (Sivinski *et al*., 1994; Shelly, 2004). Scent marking by male Lepidoptera appears not to have been reported.

Coeliades forestan (Stoll, [1782]) is a large skipper belonging to the subfamily Coeliadinae of the family Hesperiidae. It is an ecologically tolerant species, being absent only from dense rainforest and desert habitats, and is common throughout the Afrotropical Region (Williams, 2006). Mate-locating and courtship behaviours in this species have not been systematically investigated. However, it has been noted that males do not show pronounced hilltopping behaviour, seldom remaining on hilltops for any length of time (Pringle *et al*, 1994). Males also sometimes establish territories in flat areas, which they patrol in a linear fashion (Pringle *et al*, 1994; Henning *et al*. 1997).

This paper reports scent marking behaviour by males of *Coeliades forestan* in Limpopo Province and KwaZulu-Natal, South Africa.

Field observations

Observations on the behaviours of a male *Coliades forestan* were made by one of us (MCW) on a hilltop three kilometres west of Gundani, situated in the north-eastern corner of Limpopo Province, South Africa. On the 30th April, 2006 Jeremy and Chris Dobson and I, after an early morning visit to the Miombo woodland patch at Gundani, decided to investigate the hilltop a few kilometres to the west. We arrived at the summit at about 10h00 in hot, cloudless and windless weather to find the males of a number of butterfly species hilltopping. These included a number of males of the skippers *Abantis paradisea*, *A. venosa* and *Netrobalane canopus*.

While watching these skippers, a male *Coeliades forestan* was seen flying backwards and forwards along the 50m length of the summit ridge, briefly alighting every now and then on the leaves of various shrubs and small trees, a metre to two metres above the ground. This clearly did not constitute typical perching behaviour and territorial defence since the duration of rests on leaves lasted less than 30 seconds. It was also apparent that this male did not chase any other butterflies or insects that were on the ridge.

At one point the male alighted on a leaf about a metre above the ground and about two metres from where I was standing. Seconds after it had landed on the leaf the abdomen was curved downwards, while the wings were held in the closed position. For an instant I thought that the specimen must be a female about to oviposit but this notion was immediately dispelled when a large, black, brush-like organ was extruded from the anal end of the abdomen. This brush remained exserted for about 10 seconds and was held in contact with the upper surface of the leaf on which the male was perched. It was then rapidly withdrawn, whereupon the male immediately flew away. The male *C. forestan* was then followed, captured and killed.

On the 14th of May, 2006 one of us (SEW) noted a specimen of *C. forestan* patrolling open woodland along a road in the Shongweni Nature Reserve, KwaZulu-Natal. Every so often it would alight on a leaf and appear to oviposit. On one such occasion the specimen was photographed while evidencing this behaviour (Fig. 1).

Figure 1. *Coeliades forestan* male. Note extruded, black, androconial brush at distal end of abdomen, which appears to be applied to the leaf surface. [Photograph by S.E. Woodhall]

When the male taken near Gundani was subsequently examined under a dissecting microscope it was found that the black colour of the brush organ was due to the presence of a dense tuft of long, black scales on the dorsal and dorso-lateral aspects of the terminal abdominal segment. By applying pressure to the abdomen with a pair of blunt-ended forceps the brush organ could be extruded and the modified scales were found to be embedded in a papilla-like structure on the dorsal surface of the last abdominal segment.

Discussion

The genus *Coeliades* Hübner, 1818 contains 17 species and has an Afrotropical distribution. We could find no reference in the literature to an abdominal brush organ in any species in this genus, nor in the other 7 genera in the Palaeotropical subfamily Coeliadinae Evans, 1937. It seems likely that the function of this androconial brush is the dissemination of pheromones, either directly in the air or, more likely, by sublimation from the surface of the leaf to which they have been applied. If the putative pheromone is, in fact, applied to the leaf then this behaviour by males of *Coeliades forestan* would constitute scent marking of its territory. As far as we know territorial scent marking by males is unrecorded in Lepidoptera. If a pheromone is involved it will be interesting to establish its chemical composition and whether it acts as an attracting substance for females or as a male deterrent, or both.

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The female of *Iolaus coelestis* Bethune-Baker, 1926 (Lepidoptera: Lycaenidae)

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Abstract

The neallotype female of *Iolaus coelestis* Bethune-Baker, from western Democratic Republic of Congo, is suggested to represent a specimen of *Iolaus (Argiolaus) poecilaon* (Riley). A female referable to true *I. coelestis* is described from the Ikelenge district in north-western Zambia. The *I. laon* group of species is suggested to be more closely related to species placed in subgenus *Iolaus* Hübner than to those in subgenus *Epamera* Druce.

Introduction

Some confusion exists over the identity of *Iolaus coelestis* Bethune-Baker, described from Bitje, Cameroon (Bethune-Baker, 1926) and suggested by D'Abrera (1980) to be a synonym of *I. laon* Hewitson, despite the differences shown by Stempffer (1957) and Stempffer & Bennett (1959). It was regarded as distinct by Ackery *et al.* (1995), and included within subgenus *Epamera* Druce. Part of the confusion seems to result from an incorrect original diagnosis of the female, the neallotype being described and illustrated from 'Leopoldville-Binza' [= Kinshasa] in western Democratic Republic of Congo (Stempffer & Bennett, 1959).

The neallotype female, however, is clearly a specimen of *I. (Argiolaus) poecilaon* (Riley). It has only two tails, lacks the distinct, broad apical projection of the hind wing, and has the marginal brown area of the hind wing upper side extending broadly to the base below the costa, all unlike the condition seen in other females in the *laon* group of species (*I. laon*, *I. moyambina* (Stempffer & Bennett), *I. banco* Stempffer, *I. coelestis* and *I. stenogrammica* (Riley)). Females in the *laon* group are noted for their filamentous tails to veins 1A+2A (very long), CuA_2 (long) and CuA_1 (short); there is also a distinct tooth to vein M_3.

A female (Fig. 1) in the Natural History Museum, Bulawayo, collected in extreme north-western Zambia (Zambezi Bridge, NW of Ikelenge, 13.v.1983, D.L.

Hancock), appears to be a true female of *I. coelestis* although, in the absence of males, this placement must be considered provisional. On the underside it agrees more closely with the description of the type male by Bethune-Baker (1926), and the illustration of Stempffer (1957), than with any other species in the *laon* group.

Description of female

Pattern as illustrated in Fig. 1. Above, the wings are bright blue with a slight violet tint at certain angles, and with broad black apical and marginal areas; that on the hind wing is distinctly broadened and produced apically. On the forewing, the apex of the blue area is white in spaces M_3 and CuA_1, with a few blue scales present. On the hind wing, the area between the submarginal black spots and marginal line from the tornus to vein CuA_1 is white, while the black spot at the tornus is bordered with orange. A narrow, black inner line, interrupted at vein CuA_1, extends from vein 1A+2A to vein M_3. Below, the wings are white with a broad, pale brown apical area on the forewing, margined by a line of elongate, brown spots. The hind wing has the tornal black spot broadly surrounded with orange, which connects to a similar black spot in space CuA_1 partly surrounded with orange-yellow; some carmine scales are present in these orange markings. From the spot in space CuA_1, a narrow submarginal line extends to the wing apex, becoming broader and orange-yellow between veins M_1 and M_3. A further narrow brown line extends from the spot in space CuA_1 to the costal margin, diverging strongly from the submarginal line. This inner line continues posteriorly as a series of broken brown streaks above the orange markings to the anal margin. The outer wing margin has a marginal dark brown line and white cilia. The area between the submarginal orange line in spaces M_1 to M_3 and the wing margin is weakly shaded with brown. The hind wing tails to veins 1A+2A are broken off in the specimen at hand.

The female upper side of *I. banco* (illustrated by Collins *et al*., 2003) is very similar but the hind wing in that species has the inner line broader posteriorly and the white submarginal markings less extensive, both characters also seen in *I. laon* and *I. moyambina*. In *I. coelestis* and *I. stenogrammica* the inner line on the upper side of the hind wing is uniformly narrow throughout its length and the white submarginal markings are relatively broad. Females of *I. stenogrammica* from the same locality (illustrated by Heath *et al*., 2002) have the dark upper side markings on the hind wing less extensive than in *I. coelestis*, particularly subapically.

Discussion

Bearing the characters of the above female in mind, it would appear that neither of the females illustrated by D'Abrera (1980) belong to *I. coelestis*; both probably belong to *I. laon*. Other *Iolaus* Hübner misidentifications in D'Abrera (1980) include '*Epamera*' *obscura* (Aurivillius) [actually *I. mimosae pamelae* (Dickson)], '*Iolaphilus*' *julus* (Hewitson) female [probably *I. calisto* (Westwood)] and '*Iolaphilus*' *laonides* (Aurivillius) female [probably *I. banco*]. Similarly, the female illustrated as *I. stenogrammica* in Berger (1981) appears to belong to *I. catori cottoni* Bethune-Baker.

A feature of the *laon* group is the colour of the frons, being white with a black medial stripe and not orange as is normally the case in subgenus *Epamera*. In this respect they resemble species included in the other subgenera of *Iolaus*. That character, together with the presence of three distinct filamentous tails, suggest a closer affinity with species currently placed in subgenus *Iolaus* than with other species of *Epamera*.

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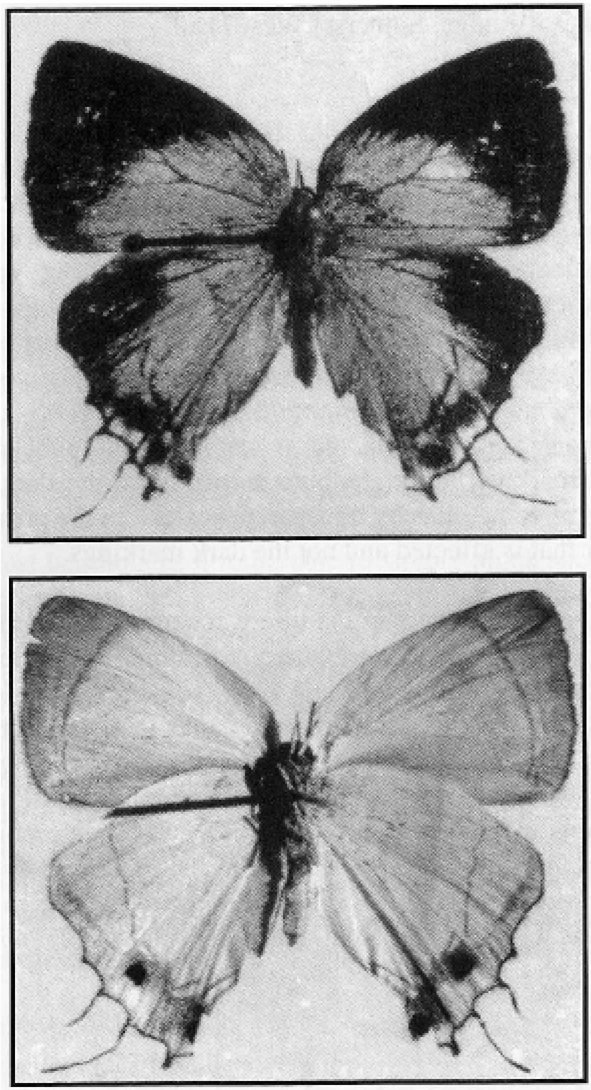

Fig. 1. *Iolaus coelestis* female, upper and undersides of specimen from Zambezi Bridge near Ikelenge, NW Zambia.

An aberration of *Chrysoritis pan* (Pennington, 1962) (Lepidoptera: Lycaenidae)

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While collecting butterflies with Alan Heath at Leipoldtville, Western Cape Province, on 8th October 2005, a nice aberration of *Chrysoritis pan* (Pennington, 1962) was taken by myself, which showed the orange-red ground colour replaced by yellow. The name 'luteus' is proposed for this aberration. The slightly damaged male specimen is illustrated on the back cover of this issue of *Metamorphosis*, together with a typical male taken on the same day at the same locality. Yellow and white forms of several species of the genus *Chrysoritis* are known and some have been illustrated, e.g. *C. chrysaor* (Trimen) in the second edition of *Pennington's butterflies of Southern Africa* (1994). It should be noted that these specimens are not albinistic as stated in this publication. Albinism affects the black markings only. Albino forms show the dark or black scales replaced by white or sometimes by transparent scales. In the present example it is the ground colour that is affected and not the dark markings.

The day was further memorable by the discovery of an unrecorded foodplant for the species. This will be reported elsewhere. Specimens of *C. pan* were observed flitting from plant to plant laying single eggs, sometimes on dead wood. One plant in particular appeared to attract more females than would be expected. On further investigation, a large nest of the ant *Crematogaster liengmei* was seen in the branches. It was obvious that the butterflies could more easily detect the presence of the ants in this aerial nest than the ants living amongst the roots of similar plants which did not have aerial ant nests. The root systems of several plants were examined and samples of scale insects (Homoptera) were taken for future identification together with small numbers of the ant *C. liengmei*.

The dark green fleece

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Prelude

Thirty-five years ago, a young Ivan Bampton broke his fourth (perhaps fifth?) commandment *"Thou shalt not catch flies by night"*. However, being sure that the Great Lepidopterist who lives on top of Kilimanjaro would understand, and in the interests of good parenting, he proceeded to fill a couple of shoe boxes with moths for his son. Bureaucracy sadly put paid to the younger Bampton's interest and the shoe boxes remained shut until one day, years later, Ivan arrived and presented them to me. The moths were from the sawmills in Uganda's Budongo Forest. A multitude of things unknown, wondrous to behold and generators of such greed for more, that I made that girl Pandora look silly.

What a place it must be, thought I, to be able to simply pluck such beauties at the lights of one's accommodation. And this image began to develop, and in my mind's eye, I endowed the forest with attributes limited only by the extent of an imagination. It was remote and majestic, mile high trees brooding, dominating all below their canopy. Cool, damp silence shrouding the understorey, and making it eerie and mysterious. But never oppressive, there is no sense of foreboding, only a constant state of peace and tranquillity. The protective nearness of the forest gods, tangible and ever present, permeates the gloom and it is serene and ethereal, almost temple-like. And all the while, wonderful, scaled wings grace its spaces. Saucer-size Swallowtails and brilliant Nymphs criss-cross dappled paths by day and all manner of furry wings flap silently down its avenues by night. No place on Earth should carry such a burden of expectation.

Yet, for all that, the Budongo Forest would remain distant. It never entered my mind to research the logistics and arrange a trip. Perhaps, subconsciously, I didn't want to risk spoiling that misty image I carried in my mind – who knows? Anyway, this magic forest remained a figment of the imagination, exotic and unattainable, until one day I asked "How far is it from here?"

Ugandan odyssey

That infamous German/Greek combination of moth men, Staude and Joannou, once promised themselves, and each other, an African trip every year. Towards the end of a long and trying 2005, when it was looking as though the promise would be broken, Hermann came up with a brilliant plan. His company had just sold safari vehicles to an outfit in Uganda who, for a price, would organise batteries and rent us a 4x4 and guide. With the new moon approaching and business obligations still to be finalised before year's end, the time frame was tight. But, we argued, it would be nothing elaborate, a simple, four day reconnaissance trip. We would find some bugs in the forests around Entebbe and then try out those at nearby Jinja, which supposedly harboured a cycad colony. A few calls to Nairobi to Steve Collins, who would be joining us, and in a couple of days, (literally!) on the 23rd of November, Hermann, his son Heiku and I found ourselves with some fellow Argonauts on a flight to Entebbe.

After a few hours flying, the brown and tan of the savannah landscape below us gave way to the blues and greens of the Great Lakes and their surrounding forests. Breathtaking stuff. A stop-over at Rwanda's Kigali Airport to pick up more passengers revealed a land destitute of trees. Green certainly, but only rice paddies and fields of stunted maize – no trees. Kigali has a pathetic air to it where the most populous vehicles to be seen were UN helicopters. We took off again and to our relief the blue and green returned. We flew over Lake Victoria in all its greatness, papyrus-fringed forests growing right down to the water's edge, and landed at Entebbe.

Our guide was still away on another safari but had arranged for Jeffery, a local taxi operator driving a clapped out station wagon, to meet us. He took us through to Wild Frontiers' offices where, because of insurance restrictions, we were declined the use of the 4x4 without the guide. Undaunted, we packed Jeffery's already groaning cab with the four batteries and proceeded to pick up Steve and his baggage. We would have made any Combi driver proud.

Entebbe is interesting to say the least. An assemblage of rudimentary houses and shacks built along roads desperately in need of repair and carrying an inordinate amount of chaotic traffic. I will not drive a vehicle under the conditions we experienced there. Right of way, apparently, is determined by a combination of vehicle weight and the size of the driver's heart!

Entebbe's forest legacy is still evident even in the heart of the town. In between the ubiquitous Mango and Jackfruit trees, indigenous giants still stand proud and host congregations of White Pelicans, Hooded Vultures and Marabou Storks. Fish Eagle's flutes still pierce the afternoon sky and noisy Black and White Casqued Hornbills try to out-scream the African Grey Parrots. The Ugandan's themselves are wonderful people. Jovial, energetic and an ever-ready smile to accompany the answer to any posed question – in perfect English to boot.

We dropped off all but umbrellas and batteries at Sophie's Motel, where we had been booked in for the night, and headed off for the forests. Wild Frontiers had advised a visit to Ziika Forest near the village of Kisubi, some 15km out of Entebbe. As we drove along, the patches of forest grew larger, but still, I wondered where we would put up our lights in this densely inhabited place. Needless concern, for sure enough, 15km along the road was a little sign advertising the presence of the Ziika Forest. We turned off and wound our way through the residences of the local community and ended up at the Forester's hut. The greeting process with the grey-bearded keeper was genuinely warm but the welcome he gave us once Steve broke into Swahili was more reminiscent of a family reunion. A quick explanation and the promise of further news of the long-lost relatives in the morning before carting our gear down the forest path. It was getting dark by now so we quickly put up the four lights and sat on a convenient fallen trunk just to drink in the atmosphere. What a day! Krugersdorp coffee in the morning and equatorial rain forest ambrosia in the evening.

Sophie's is basic but comfortable enough, and after a welcome shower and cold beer, (and here I can recommend Bells) the first opportunity to catch up with Steve's news. Hermann can't wait for morning and convinces Steve to join him in visiting the moth lights at about ten o'clock. For me, restless sleep wondering what the morning will bring.

The next morning, it was past six o'clock and already dawning when Jeffery arrived, but no worries. We were sure he would pitch up because we hadn't paid yesterday's fare. Uncharitable, I know, but we weren't there to establish how easy, or otherwise, it would be to round up an Entebbe taxi at that time of morning. We drove through the now awakening town, and on to Ziika. First things first, clear the lights. I could prattle on about what and how many but it would mean little to most of you, so I refrain. Suffice to say that it was good mothing. Then, time to admire the forest in daylight – and there is much to admire. For those that made it to the Nairobi conference, Ziika is not too different from Kakamega, but much, much smaller. Like much of the rest of the continent, Uganda has not had its usual rains and by equatorial rain forest standards, the Ziika is dry. By ours, wet enough thank you. Paradoxically, in order to really appreciate the forest, it needs to be viewed from the outside – its simply too dense otherwise. Once inside, the thick trunks and thicker undergrowth of unfamiliar plants ensure only restricted views.

A tower erected for canopy birding appeals to Heiku, but less than a third of the way up, its height and state of disrepair convinces him to come back down. Great Blue Turacos, the size of small Turkeys, bounce from branch to branch and Vervet Monkeys, as much a nuisance as their southern brothers, are everywhere. We pack our gear into Jeffery's cab and make our farewells with the Forester. Jeffery, not expecting things to run so late, had made arrangements for another fare to Kampala and regrettably, or so he said, would have to palm us off on one of his mates. We got some strange looks, unloading batteries and umbrellas from one taxi to another in a busy Kisubi street.

Back at Sophie's, our transport and appointed guide, Medi, had arrived and we went to the dining room to breakfast and decide what we should do next. Steve reckoned that butterfly-wise, Ziika was represented by some 70% of species having affinities with Kakamega in the east and 30% with the Congo Basin to the west. At this latitude, all the easterly forests fringing the lake, including those at Jinja, would not only be similar to Ziika, but have an ever increasing affinity with the Kakamega fauna. So, according to Steve, if we wanted something different, we should go west to the Fort Portal forests, or perhaps north to something like the Budongo. And I asked "How far is it from here?"

The Argus sails

About six hours was the reply – a typically African answer, giving time, and not distance, as the unit of measure. Is it safe I asked, for I knew there were rebels in the Democratic Republic of Congo to the west and insurgents penetrating the country from Sudan in the north. Medi assured us that Lake Rudolf was too broad for the Congolese to cross, and the most southerly point the Sudanese had penetrated to was still more than 80km north of Budongo. Think for a bit – how broad is broad and how far is 80km – broad enough and far enough apparently because consensus is reached in seconds and we check out of Sophie's and pack for Budongo.

Getting past Kampala is a nightmare. Medi decides the direct route through town will take longer due to morning traffic, so we skirt around the suburbs – it still takes us an hour to get to the other side. In the centre we could see multi-storied buildings but the areas we went through were simply a more congested and somewhat more squalid version of Entebbe. Once we were past the capital's outskirts, the forests gave way to woodlands. The species are unknown, but the genera are recognisable. The vegetation is dense with the occasional 12 to 15 metre tall tree sticking out of the otherwise uniform thicket of 7 or 8 metres. I recognise *Terminalia, Combretum, Bauhinia, Euphorbia* and *Acacia*, but much of this habitat – apparently known as Sudano-Guineaian Savannah – is unfamiliar.

Further north we go and into the land of the Nubians, their ancestry evident in their lighter skin and more elongated faces. We see Nubian cattle, reminiscent of the images in Egyptian hieroglyphs, and we marvel at the size of their horns. They fascinate us but its all old hat to Medi and he ignores Hermann's requests to stop for a photo. Some toys get thrown out, hierarchy is established, photos get taken and we drive on in silence for the next half hour. For hour after hour we drive through similar habitat punctuated by small towns – villages really, and in all of them, the one thing that really stands out, is the fact that everybody is doing something. Selling goods, welding, grinding, shaping pots, packing charcoal, fixing vehicles – all doing something constructive. Nobody sits around doing nothing. What an amazing attitude towards work. Finally, we reach Masindi, the district capital and 30km from Budongo. Steve points out the old hotel where, in colonial times, the old entomologists would stay when working Budongo. Too far away for us, but we stop to buy water because Butiaba, on the outskirts of the forest, is but a little village. Disconcertingly, still no forests, the savannah continues until we go over the mountains.

The Fleece found

And there, on the other side, lying before us is the dark green fleece of my dreams. As was the case with Ziika, the forest is best appreciated from the outside. Cane farmers have usurped large tracts of forest and although sad to see, the abrupt end

created by their fields shows off the layers of this wonderful gallery in all its glory. I asked Heiku (to whom I am indebted for all the photos) to take a picture but I knew it was a tall order. A gallery forest's beauty simply cannot be captured in one single image. How do you convey the magnitude? Can you see that it stretches for miles, or that the uniform canopy is actually at a height of 50 or more metres? How do you smell that forest smell or feel the cool dampness on your skin. Better to leave it un-illustrated than to do it the injustice of not conveying all that this forest is.

Having rearranged our scrambled marbles, we realised we better start looking for somewhere to stay. Steve knew of an agricultural college nearby so we drove off to find it and see if they could put us up in their hostel. The usual, smiling directions in good English enabled us to locate the college quite easily, but to our dismay, a large banner pronouncing the next day to be graduation day adorned the entrance gates. At any other time they would be happy to put us up, but unfortunately tonight was out of the question – parents had taken up all beds. Was there anywhere else they could recommend? Certainly, they replied, a few kilometres hence, tucked away in the forest was an education centre which had a couple of rondawels that people could stay in. Sure enough, we found the education centre with its two rondawels and decided that, under the circumstances, the accommodation was 5 star. A roof, beds, blankets, pillows and mosquito nets

made for perfectly adequate sleeping quarters.

The dining quarters too, were well appointed – thatch over concrete slab and elegantly furnished with combination table and bench in Pine. What more could you ask for? Well, perhaps something to eat, we politely enquired? Was there perhaps one of the local villagers who, for some financial consideration, could cook something up for us? Of course there was, and a friendly and jovial Joylene became our house-keeper for the duration of our stay. With some sun still left after putting up the moth lights, we wandered about the forest near the camp with net in hand. I'm afraid the focus was more on plants, birds and animals than on day-flying lepidoptera. I can hear the butterfly boys mumbling "those bloody mothers". I give them the benefit of the doubt and will continue to try and get them to pronounce it "moth-ers".

The monster trees housed monkeys and birds and were festooned with Stag-horn Ferns. Their branches drooped under the weight of *Loranthus*. What Sapphires would fly here at their appointed time? Where were the *Hypolimnas* and *Salamis* whose larvae surely fed on the *Urera cameroonensis* that literally covered entire trees? We saw Colobus Monkeys and heard the Chimpanzees arguing. But the latter sounded too distant, so when the Forester offered to take us there, nobody seemed too keen.

Dusk arrived quickly and it was time to sit, drink a couple of Bells and reflect before enquiring of Joylene what she planned for dinner. The menu was steamed, green banana mash, with seasoned tomato and jungle spinach relish. Was there any meat to go with that? Yes there was, and Joylene disappeared back to her village to return with a fine, plump cockerel. She gave its comb a few tweaks, which produced the necessary squawks, to indicate to us that the fowl was alive, and therefore fresh, and then off with its head.

The single unpleasant incident of our trip occurred a couple of beers later when a truckfull of drunk militia drove into our camp. Joylene up and gapped it into the forest which didn't make me too comfortable. Suddenly, 80km wasn't that far away, but thankfully they turned out to be Ugandan and were probably down from the front looking for women and alcohol. They eventually left and Joylene returned to finish cooking. On that note, I must say that the consommé she turned out using the giblet, liver and heart of the cockerel, was truly the finest I have ever had.

Hermann and I visited the lights at dawn but left the equipment standing and returned to join the others for breakfast of Paw-paw, Mango and hard boiled eggs. I gave the beverage they call tea a miss. Then back into the forest for one last scrutiny before packing the lights away. The Forester arrived as we were heading off and volunteered to bring the batteries back. For a fee, of course, but well worth it and much appreciated. While Hermann was combing the umbrella folds, I sat and shared smoke with the Forester who regaled me with stories of his military days. He was a commander, or so he said, and the glee expressed when telling me of the massacre of some encampment or other gave me fresh insight into why an Idi Amin could get away with what he had. If the Foresters attitude of "I am happy and jovial and will remain so even as I kill you" represents the Ugandan psyche, then life here is truly cheap.

Our departure was delayed somewhat by the arrival of an Aussie and a Brit attached to the Jane Goodall Institute. It was rather nice to see some pale skin again. We had an interesting conversation and eventually they departed and allowed us to finish our packing up. We couldn't leave Budongo without seeing where Ivan had taken those moths so many years ago. We drove around for some forty minutes to get to the other side of the forest where the sawmills were and approached the place via the Royal Mile. So named because Her Royal Highness Liz had once been driven down this road and in honour of this visit, they cleared the undergrowth on either side of the road to improve the perspective. A practice strangely continued to this day.

It is truly a majestic forest. Looking down the Mile is perhaps the second best way of viewing the Budongo Forest. It captures the density, the essence, of the forest but it still still doesn't convey the immensity of the trees. So we stop at one of the larger specimens and stand amongst its buttresses while Medi takes a picture.

The sawmill itself had long ago closed down. We drive past a ghost-town to inexplicably find the original accommodation not only standing, but operating. Who would visit this remote hostel with manicured lawns? Not locals at US$30 a day surely? It was good for me to see this spot. It somehow capped the experience.

With hindsight, we should have stayed on longer in the Budongo, spent a night at the sawmills, but the cycad feeders were calling Hermann. For myself, I didn't mind. I had experienced my dream, was happy with the results, and couldn't give a rat's bum where we went to from here. Heiku was a little disappointed, because there hadn't been any opportunity to fish – his primary passion. On the long road back Hermann decided that maybe the cycads could wait for another occasion and consequently, instead of going to Jinja, we headed back towards Entebbe. Just past the Ziika, on the lake side of the road we had seen some good looking forest and a little sign that read Nabinoonya Beach Resort. We could do some bugging, have somewhere close-by to spend the night and Heiku could throw a line. Both forest and accommodation proved disappointing. Too many lights competed with our own and too many weekend visitors abused the ablution facilities – they were really shockers. Even the fishing didn't pan out for Heiku. The waters around the resort were too shallow.

We decided to spend the last day doing some proper fishing and booked ourselves back in at Sophie's for an early getaway the next morning. The day started grey and raining but cleared by 9 o'clock – just in time to get under way. Our skipper took us to the fishing grounds around some islands about 25km out before we started trolling. On the way Hermann pointed out plumes of smoke on the horizon

and wondered what that was all about. I said that it was probably the papyrus burning as I had seen something similar in the Okavango. No says Steve, that's Lake Fly. It is simply impossible to conceive the numbers that would blacken the skies over such a large area. Anyway, we sailed, we ate, we drank and we got burnt on the open water – but that was OK because the fishing was good. Heiku was happy and Sophie's guests all had Nile Perch for dinner.

It was over so soon. Farewell to Steve and Medi the next morning and back to the airport. With fleece tucked firmly under arm (as a bank-full of wonderful memories) we board the plane to Johannesburg to sort out those business obligations still needing finalisation before year's end.

Epilogue

Not twenty years, but four days to find that fleece. Who says you can't do much with a long weekend? Not me.

Butterflies of Utopia Resort, North-West Province, South Africa

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I was interested to read the article by Mark and Mathilde Williams, regarding their checklist of Rustenburg Nature reserve. My dad and I have been collecting butterflies for about five years and a lot of this time has been spent at Utopia and the surrounding areas. Despite traveling far and wide in search of new species, Utopia remains one of my favorite haunts.

Utopia lies on the Tonquani River, directly to the north of Mountain Sanctuary Park. The area takes in a variety of habitats, but it is primarily bushveld with tracts of grassland and also riverine forest within the Tonquani kloof.

Not surprisingly, my list is similar to Mark's, although it is larger (114 species recorded, compared to 84 at Rustenburg) and contains a few surprising records.

FAMILY PAPILIONIDAE	
Subfamily Papilioninae	
Large Striped Swordtail (*Graphium antheus*)	Scarce. Occasional sightings
Citrus Swallowtail (*Papilio demodocus demodocus*)	Common and widespread
Greenbanded Swallowtail (*Papilio nireus lyaeus*)	Common and widespread

FAMILY PIERIDAE	
Subfamily Pierinae	
Brownveined White (*Belenois aurota aurota*)	Common and widespread
African Common White (*Belenois creona severina*)	Common and widespread
Forest White (*Belenois zochalia zochalia*)	Found in wooded areas. Commonest in winter
Red Tip (*Colotis antevippe gavisa*)	Fairly common in bushveld
Common Orange Tip (*Colotis evenina evenina*)	Fairly common in bushveld
Smoky Orange Tip (*Colotis euippe omphale*)	Common and widespread
Small Orange Tip (*Colotis evagore antigone*)	Common and widespread
Lemon Traveller (*Colotis subfasciatus subfasciatus*)	Scarce
Zebra White (*Pinacopteryx eriphia eriphia*)	Fairly common in bushveld
Meadow White (*Pontia helice helice*)	Fairly common
Common Dotted Border (*Mylothris agathina agathina*)	Fairly common

Twin Dotted Border (*Mylothris rueppellii haemus*)	Fairly common
Subfamily Coliadinae	
African Clouded Yellow (*Colias electo electo*)	Fairly common
African Migrant (*Catopsilia florella*)	Common and widespread
Broad-bordered Grass Yellow (*Eurema brigitta brigitta*)	Common and widespread

FAMILY NYMPHALIDAE	
Subfamily Danainae	
African Monarch (*Danaus chrysippus aegyptius*)	Common and widespread
Subfamily Satyrinae	
Eyed Bush Brown (*Henotesia perspicua perspicua*)	Fairly common in densely wooded areas
Evening Brown (*Melanitis leda*)	Rare (single record)
Wichgraf's Brown (*Sygonympha wichgrafi wichgrafi*)	Only in rocky / grassy areas
Spotted-eye Brown (*Paternympha narycia*)	Only in rocky / grassy areas
Bushveld Ringlet (*Ypthima impura paupera*)	Fairly common
Subfamily Heliconiinae	
Garden Acraea (*Acraea horta*)	Common and widespread
Wandering Donkey Acraea (*Acraea neobule neobule*)	Fairly common
Natal Acraea (*Acraea natalica*)	Scarce
Little Acraea (*Acraea axina*)	Rare (single record)
Orange Acraea (*Hyalites anacreon*)	Normally scarce. Sometimes swarms along the river
Marsh Acraea (*Acraea rahira rahira*)	Fairly common in marshy areas
Small Orange Acraea (*Acraea serena*)	Common and widespread
White-barred Acraea (*Acraea encedon encedon*)	Fairly common
African Leopard (*Phalanta phalantha aethiopica*)	Common and widespread
Subfamily Charaxinae	
Bushveld Emperor (*Charaxes achaemenes achaemenes*)	Scarce
Greenveined Emperor (*Charaxes candiope*)	Common and widespread
Pearl-spotted Emperor (*Charaxes jahlusa rex*)	Common and widespread
Foxy Emperor (*Charaxes jasius saturnus*)	Common and widespread

Subfamily Limenitinae	
Small Spotted Sailor (*Neptis saclava marpessa*)	Fairly common
Guineafowl (*Hamanumida daedalus*)	Common and widespread. Year-round
Subfamily Nymphalinae	
Yellow Pansy (*Junonia hierta cebrene*)	Common and widespread
Blue Pansy (*Junonia oenone oenone*)	Fairly common
Eyed Pansy (*Junonia orithya madagascariensis*)	Scarce
Garden Commodore (*Precis archesia archesia*)	Fairly common
Pirate (*Catacroptera cloanthe cloanthe*)	Fairly common
Common Diadem (*Hypolimnas missippus*)	Scarce
Marsh Commodore (*Precis ceryne ceryne*)	Fairly common, especially in autumn
Painted Lady (*Vanessa cardui*)	Fairly common
Subfamily Biblidinae	
Spotted Joker (*Byblia ilithyia*)	Common and widespread. Year-round
Golden Piper (*Eurytela dryope angulata*)	Generally scarce, although occasionally common

FAMILY LYCAENIDAE	
Subfamily Miletinae	
D'Urban's Woolly Legs (*Lachnocnema durbani*)	Uncommon
Common Woolly Legs (*Lachnocnema bibulus*)	Common and widespread
Subfamily Poritiinae	
Pennington's Buff (*Cnodontes penningtoni*)	Fairly common (September / October only)
Subfamily Theclinae	
Dusky Copper (*Aloeides taikosama*)	Rare (two records only)
Hutchinson's Highflyer (*Aphnaeus hutchinsonii*)	Fairly common (September / October only)
Common Scarlet (*Axiocerces tjoane tjoane*)	Fairly common
Russet Protea (*Capys disjunctus disjunctus*)	Males fairly common on hilltops
Ella's Bar (*Cigaritis ella*)	Scarce
Natal Bar (*Cigaritis natalensis*)	Fairly common
Mozambique Bar (*Cigaritis mozambica*)	Uncommon. Only in grassy areas

Brown Playboy (*Deudorix antalus*)	Fairly common
Apricot Playboy (*Deudorix dinochares*)	Widespread. Commonest in spring and late autumn
Brown-line Sapphire (*Iolaus alienus alienus*)	Fairly common (September only)
Mimosa Sapphire (*Iolaus mimosae rhodosense*)	Fairly common
Bowker's Sapphire (*Iolaus bowkeri tearei*)	Fairly common
Saffron Sapphire (*Iolus pallene*)	Fairly scarce (September only)
Trimen’s Sapphire (*Iolaus trimeni*)	Fairly common
Purple-brown Hairstreak(*Hypolycaena philippus philippus*)	Common and widespread. Year-round
Henning’s Black Eye (*Leptomyrina henningi*)	Locally common
Common Figtree Butterfly (*Myrina silenus ficedula*)	Fairly common
Subfamily Polyommatinae	
Rayed Blue (*Actizera lucida*)	Fairly common
Black-striped Hairtail (*Anthene amarah amarah*)	Common and widespread
Pale Hairtail (*Anthene butleri livida*)	Fairly common in spring
Common Hairtail (*Anthene definita definita*)	Common and widespread. Frequently mud-puddles
Velvet Spotted Blue (*Azanus ubaldus*)	Fairly common
Thorn-tree Blue (*Azanus moriqua*)	Fairly common. Often mud-puddles
Topaz Spotted Blue (*Azanus jesous jesous*)	Common and widespread
Geranium Bronze (*Cacyreus marshalli*)	Common and widespread
Water Bronze (*Cacyreus tespis tespis*)	Scarce. Occasionally found along the river
Mocker Bronze (*Cacyreus virilis*)	Scarce
Grass-jewel Blue (*Chilades trochylus*)	Fairly common
Common Meadow Blue (*Cupidopsis cissus cissus*)	Scarce
Cupreous Blue (*Eicochrysops messapus mahallakoaena*)	Common and widespread
Sabie Smokey Blue (*Euchrysops dolorosa)*	Scarce
Common Smoky Blue (*Euchrysops malathana*)	Fairly common
Longtailed Pea Blue (*Lampides boeticus*)	Common and widespread
Patrician Blue (*Lepidochrysops patricia*)	Fairly scarce
Common Pea Blue (*Leptotes pirithous pirithous*)	Common and widespread
Dusky Blue (*Pseudonacaduba sichela sichela*)	Fairly common in spring
Common Dotted Blue (*Tarucus sybaris sybaris*)	Fairly common
Black Pie (*Tuxentius melaena melaena*)	Common. Often mud-puddles

White Pie (*Tuxentius calice calice*)	Scarce
Black Heart (*Uranothauma nubifer nubifer*)	Fairly scarce
Hintza Pie (*Zintha hintza hintza*)	Fairly common
Sooty Blue (*Zizeeria knysna*)	Common and widespread
Gaika Blue (*Zizula hylax*)	Common and widespread

FAMILY HESPERIIDAE	
Subfamily Coeliadinae	
Striped Policemen (*Coeliades forestan forestan*)	Fairly scarce
Two-pip Policemen (*Coeliades pisistratus*)	Fairly common
Subfamily Pyrginae	
Ragged Skipper (*Caprona pillaana*)	Rare (single record)
Small Marbled Elf (*Eretis umbra umbra*)	Fairly common
Dark Elfin (*Sarangesa seineri seineri*)	Fairly scarce
Forest Elfin (*Sarangesa motozi*)	Fairly common in wooded areas
Bushveld Sandman (*Spialia mafa mafa*)	Fairly common
Common Sandman (*Spialia diomus ferax*)	Common and widespread
Subfamily Hesperiinae	
Wallengren's Ranger (*Kedestes wallengrenii wallengrenii*)	Rare (only two records)
Flower-Girl Hopper (*Platylesches neba*)	Common and widespread, especially in winter
Peppered Hopper (*Platylesches ayresii*)	Common and widespread. Only August / September
Morant's Orange (*Parasmodes morantii morantii*)	Common hill-topper. Occasionally mud-puddles
Dark Hottentot (*Gegenes pumilio gambica*)	Fairly common
Common Hottentot (*Gegenes niso niso*)	Fairly common
White-banded Swift (*Pelopidas thrax inconspicua*)	Fairly common along the river
Black-banded Swift (*Pelopidas mathias*)	Fairly common, especially in winter
Subfamily Heteropterinae	
Dismal Sylph (*Tsitana tsita*)	Fairly scarce
Netted Sylph (*Metisella willemi*)	Scarce

Comparison of the Utopia and Rustenburg checklists

Thirty-nine species have been recorded from Utopia, but are not on the Rustenburg checklist. There are ten species that have been recorded from Rustenburg, but not from Utopia.

The following species have been recorded from Utopia, and not Rustenburg:

Graphium antheus, Colitis antevippe gavisa, Colitis evenina evenina, Colitis evagore antigone, Mylothris rueppellii haemus, Stygionympha wichgrafi wichgrafi, Ypthima impura paupera, Acraea natalica, Acraea axina, Charaxes achaemenes achaemenes, Precis ceryne ceryne, Eurytela dryope angulata, Cnodontes penningtoni, Aphnaeus hutchinsonii, Capys disjunctus disjunctus, Cigaritis ella, Cigaritis mozambica, Deudorix antalus, Iolaus alienus alienus, Iolaus mimosae rhodosense, Leptomyrina henningi, Anthene butleri livida, Azanus ubaldus, Cacyreus marshalli, Cacyreus tespis tespis, Cacyreus virilis, Cupidopsis cissus cissus, Lepidochrysops patricia, Pseudonacaduba sichela sichela, Uranothauma nubifer, Coeliades forestan forestan, Caprona pillaana, Eretis umbra, Sarangesa seineri seineri, Sarangesa motozi, Spialia mafa mafa, Spialia diomus ferax, Pelopidas thrax inconspicua, Pelopidas mathias.

The following species were recorded from Rustenburg, but have not been found at Utopia:

Colotis danae annae, Colotis eris eris, Acraea anemosa, Acraea obeira burni, Ypthima asterope asterope, Byblia anvatara acheloia, Anthene talboti, Lepidochrysops glauca glauca, Gomalia elma elma, Borbo fallax.

Aphnaeus hutchinsonii - image by S. Woodhall

Comments on a few selected species

Certain species found on the list may surprise some of you. I have commented on some of these:

Eurytela dryope angulata
This species is normally not found, or is very scarce, at Utopia. In May, 2004, however, well over 20 specimens were observed, within thickly wooded areas along the Tonquani River. Its appearance here is perhaps not that surprising: The species has been recorded from near Hartbeespoort Dam and my dad caught a single specimen in Randburg in August, 2001!

Sarangesa motozi
Although not abundant, *Sarangesa motozi* is frequently encountered in densely wooded areas, typically in late summer. It flies with *Sarangesa seineri seineri* and is usually the more common of the two species. I am not aware of other records of this species from Gauteng or North West Province, although "Butterflies of South Africa" by Steve Woodhall lists the Waterberg as a locality.

Neptis saclava marpessa
Similarly to *Euyrtela dryope*, this species has been recorded from elsewhere in the Magaliesberg. This species is fairly common in autumn.

Precis ceryne ceryne
Another species whose presence at Utopia is not that surprising, however, I have found few better localities for this butterfly anywhere else in South Africa.

Belenois zochalia zochalia
Although this species would be expected within the wooded kloof at Utopia, this population is the only one, to my knowledge, where the yellow hind-wing female variety of form immaculata occurs regularly. My dad and I believe the local population represents a subspecies rather than a regional form.

Hyalites anacreon
This species is usually scarce at Utopia, although it can be found in most months of the year. It occasionally swarms in *Cliffortia linearifolia* bushes (the larval foodplant), which are common along the banks of the Tonquani River.

Conclusion

Utopia is a butterfly locality with both an abundance of butterflies and a relatively impressive diversity of species. The area remains relatively unspoiled and includes a variety of habitats. Only 90 minutes from Johannesburg, the area is a firm favorite of mine!

Charaxes jasius saturnus - Image by S. Woodhall

Catacroptera cloanthe cloanthe - Image by A. Mayer

A year in KwaZulu-Natal

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Life has changed an awful lot in the last year. First of all a move down to KZN, a province I've been visiting via very long car journeys for a very long time, most often to be 'foiled by the fickle finger of fate' (to paraphrase Alf Curle) with rotten weather. Living down here HAS to be a better way to hunt butterflies…

Then there is the Field Guide. Eventually, last May, I saw it in its final form, seven years after I began it. Strange feeling, holding it in my hands. Struik really did a good job, I think – the paper and print quality are really good and to produce a book with over 1800 images that sells for only R200 is amazing. OK, commercial over. What *has* been a lot of fun is the promotion of the book. Lots of new contacts and friends made, and some new lepidopterists discovered.

One thing I have noticed about KZN is how strong the Conservancies movement is. I was kindly asked to join the council of the Kloof Conservancy where I have been putting together a 'Butterfly Interest Group' which will eventually segue into the KZN Branch of Lepsoc. We have quite a few new members getting involved with Lepsoc. The atlassing project is creating a lot of interest. Many of our new people are birdwatchers – some have been butterfly watching or even collecting for many years and hadn't thought of joining Lepsoc – or didn't even know we existed. There is a big demand for Lepidoptera education and to this end I'm working on a 'Butterfly Appreciation Course' showing people how to ID them. Also a lot of life history stuff, and butterfly gardening. Also, *Metamorphosis* editor please note, none of them are comfortable with scientific names. That's why I've put common names into this article [Editors comment: If Mr Woodhall would take a moment to scratch around in his memory banks he will recall that said 'editor' has for some time implored contributors of popular articles to use common names, followed by the scientific names in parenthesis].

Talking of butterfly gardening, what a pleasure to be able to plant such useful vegetables as Pod Mahogany (*Afzelia quanzensis*) and Forest Peach (*Rawsonia lucida*), and not have to pamper them only to see them 'vrek' at the first frost. Frost, what's that? Next time I pick up Giant Emperor (*Charaxes castor*) larvae at Ndumu River Lodge, I'll have a home for them. And I found I have Wild Laurel (*Cryptocarya woodii*) growing wild in the garden. Oh ho, I thought… wonder if a Kite Swallowtail (*Papilio euphranor*) would lay on that?

On 6th Feb, 2005 I fired up the diesel Jetta and headed for Linwood. Brutus may be no more but his spirit lives on in the oil burning roller skate. Johan Greyling once said you could teach a Jetta to make a good 4x4 and he was spot on with that observation. Despite appearing to have the ground clearance of a low-slung skateboard, Jetta can get up the hill at Linwood as well as some other rough bits I've tried. Well there is the odd scrape from underneath but she has a nice plastic shield protecting the sensitive bits. Only problem is a name. Brutus was white and black so that was an easy choice… Kevin Cockburn has had his 'Zizula' Hi-Lux and recently 'Zoolina' has carried on the tradition. A silver Jetta? 'Barklyi' doesn't really cut it, so I'm still thinking. Suggestions on the back of an envelope please…

Anyway back to Linwood. There were clouds of pale blue flowers along the road to the favoured hilltop and female *Papilio* were everywhere – including Kite Swallowtail (*Papilio euphranor*). I got a couple of mint specimens then a couple of scruffy ones to sleeve on the Wild Laurel. This I did, and kept feeding them honey water. Every day I anxiously searched the branch for eggs, and one day I found one. Jubilation! It hatched and one day Dave McDermott was visiting and I went to show off my prize. He found another larva I'd missed, and we then found another – I had three. My happiness overcame my embarrassment. I managed to get the entire life history on film, and a week ago I had three pupae. I had to visit JHB on business and stayed with Dave, so I took them with me. One, a beautiful female, emerged whilst I was at work – Dave photographed her doing it. I think the reason I only got three eggs is that my foodplant is in 90% shade and I had to hand feed the butterflies. I know that swallowtails like sun and fresh nectar, so I've planted another *Cryptocarya* with some *Impatiens* next to it – so I can put a bell cage over them and shove in a couple of females. Watch this space.

We had a very dry second half to the summer, and in 'winter' there were hardly any butterflies about. Even Shongweni was dead. Fortunately though, the rains got going (usually at the weekend!!!) and the Midlands spring lycaenids were out in good numbers. We've had a couple of good Society meets, although the weather hasn't always played ball. Barbara Chedzey, who runs the Mtunzini conservancy, had arranged for me to do a slide show and book-signing in this delightful little town. We arranged a crew of lepidopterists and some of our new KZN converts to visit Mandawe and see such wonderful sights as Hutchinson's Highflyer (*Aphnaeus hutchinsonii*). Well… it rained. And rained. And rained. Never mind, a lot of new contacts were made and old friendships renewed.

Birdwatcher Jenny Norman has a love of butterflies and has built up a large database of observations and photos. She's been on several trips with me, as well as another new lepidopterist, John-Paul Brouard (oh yes, another J-P!). We've been trying to get away on several trips but nearly all of them have been ruined by the weather – including the Mtunzini one. We had another trip to the Midlands, in search of blues and other fabled beasties. Jenny and her companion Lynn had booked to go to Tembe and were hoping to see Emperors (*Charaxes* spp.). They missed a party of note (young JP Brouard getting introduced to Tequila Omelettes) and didn't get the *Charaxes*, whilst we went up to the Midlands and got all the *Lepidochrysops*, but no *Dingana*. This has turned out to be typical of Jenny's luck. If Jenny's around it rains. If not, all the butterflies come out. At least until recently that is. Her luck changed when we went looking for Amakosa Rocksitter (*Durbania amakosa flavida*) at Shongweni Hill. We found out that the main colony isn't on top of the hill as we thought… it's on the southeastern side, quite low down on the rocky steep slopes. Jenny is of traditional build and I admired her pluck as she tackled those boulders. Lots of specimens were seen, and we got some great photos. Jenny thought the females were particularly cute, because they would sit tight when spotted, then s…l…o…w…l…y back downwards into the grass to hide. As soon as she left them alone they would pop back up again to watch out for males.

Then we arranged to meet Jeremy Dobson and family at Linwood, as I'd been up there and found a couple of butterflies the previous week, like my first perfect male specimens of Southern Short Tailed Admiral (*Antanartia hippomene hippomene*). What followed could be called 'Butterflies in the Mist'. The weather on Saturday started grotty in Gillitts but the forecast hinted at less cloud in the afternoon. So off we went, Jenny, another new member Lynn de Beer, JP and I. We got as far as the vlei below the forest where we saw the hilltop was still in the mist. Poking around in the vlei turned up some nice little blues, and we messed around trying to photograph them, in my case with little success. Eventually we saw the hilltop emerge from the murk so we went up there, hanging *Charaxes* traps as we went. As we drove along the dirt road, a vision in blue wafted into the air and settled on the wet grass. A freshly emerged, dewy Star Blue (*Lepidochrysops asteris*).

This little trouper stayed around for a long time, settling on rocks and grass stems, wings closed. I got much closer close-ups than ever before, and then the sun started trying to burn its way through the murk. He opened his wings… we all got great shots. Nice to have this happen naturally without recourse to the cold box! And the grasses he sat on were all covered in dewdrops. Wonderful.

Eventually JP bagged the specimen – I always feel sad collecting a butterfly that's performed well for the camera. Seems like a rotten way to thank it for its help! Maybe I'm getting soft in my old age. We went up to the top where we found the sun was still hiding, but there were some perfect Modest Sylph (*Astictopterus inornatus*) on the long grass. Just showed how dull cloudy days are sometimes best for photography. But by this time I was getting some serious uphill from Jenny and Lynn who were expressing their disbelief in this mythical beastie the Kite Swallowtail. Two trips so far and not a sausage. Jeremy swam his Midmar Mile then came up to see us. Chris had a good time with the *inornatus*, but the sun refused to shine. Armed with the knowledge of my previous week's triumph with *hippomene*, we decided to return on the morrow.

It was cloudy the next day and we nearly didn't bother, but I'm glad we did. As we got there the sun came out and Chris already had the first *euphranor*.

Since then all has been action. This year (2005/6) the rains fell on time. First of all we found large numbers of Amakosa Rocksitters (*Durbania amakosa flavida*) and Basuto Skollies (*Thestor basutus basutus*). The hills around Shongweni, Inchanga and Key Ridge harbour several strong colonies of these. Even the old *flavida* colony at Kloof was going well. We spent a lot of time amongst these and took lots of photographs. Then in summer it was the Berg and the Loteni Brown (*Neita lotenia*). JP Brouard and I climbed the hill about five times and finally found a strong colony. There were lots of other things flying there too, such as Bowker's Blue (*Tarucus bowkeri bowkeri*) and another *amakosa* Rocksitter, which Simon Joubert feels might be a new subspecies and I (reluctantly, lumper that I am) tend to agree with him. Dave McDermott, Owen Garvie and I also went up to the Little Switzerland area and found *D. amakosa saggitata* in small numbers.

All in all a good season, but I 'dipped' (a very good birder expression) with the best butterfly of the season. I had a text message from Rob Kyle to say he'd found Rosa's Tree Nymph (*Sevenia rosa*) in numbers near Beira. Then Harald Selb called to say he was near Sodwana and they were there! This was a Wednesday and I was at work, just after Xmas leave. I thought I could leave it to the weekend, but by Saturday they'd moved on. Teach me to be mean with my leave. We went chasing them around Zululand that weekend to no avail. Reports from Rob that they'd turned up at Richards Bay and then (!) Isipingo got us chasing around the south coast the next weekend, also to no avail. I even got a picture and an article into the *Tribune* asking people to keep an eye out for them, but again, no dice. I'll just have to wait another 20 years, that's how long they go between swarms. Jonathan Francis didn't help my peace of mind by finding a newly hatched swarm near Beira and e-mailing pix of freshly hatched ones sitting on the pupae…

In KZN, the late summer butterfly hatch was very good. I have been spending an inordinate amount of time down at a place called Delville Wood, upstream of Shongweni Dam. This is a sadly unappreciated bit of ground; it's owned by Spoornet who seem not to give a damn about exotic alien invaders. It's full of *Lantana, Chromalaena, Bidens,* etc, etc.

The indigenous plants seem to have survived and it is a really good place. Lesser Striped Swordtails (*Graphium policenes policenes*) are common there and, unusually obligingly for this normally turbo-charged species, they often settle on flowers or mudpuddle. I well remember one cool, cloudy November morning when dozens could be seen at 08h00 sitting, wings akimbo, warming themselves. It's also the very best place I know for Coast Purple Tips (*Colotis erone*). There is one area where they are particularly common and you can get the elusive females there too. I remember seeing Quentin Austin get the first orange-tipped summer form *natalensis* I'd ever seen. Over the last couple of seasons several of us have taken specimens of this sought-after form with the dayglo orange wing tips. Even rarer is the winter form *millari*, with reddish tips invaded by a purple sheen. I finally managed to get one this June, and it sat nicely for a photograph before making its acquaintance with my new Watkins & Doncaster Kite Net. These are the Purdeys of butterfly nets and not really that expensive. One word of warning though – that lovely soft netting is quite thorn-proof but it doesn't resist *Acacia kraussiana*…

Today I was down there again with Jenny Norman. We were wandering about with cameras trying to capture *erone* winter forms and golden yellow False Dotted Border (*Belenois thysa*) females on film. Then I spotted a yellowish thing. It was a female *erone* f. *millari* but the ground colour was yellow! Immediate buck fever set in and I rediscovered how impossible it is to get in a good net stroke with a Nikon around one's neck. She flew in Jenny's direction and posed for a photograph. I've noticed this happens often – they seem to know she's netless – but either she also had buck fever or the butterfly was too wary, because off it went again, never to return.

There's always something going on down here and I'll try to keep the articles coming. Remember the AGM and Conference on 11-12 Nov! Why not stay on a while and see what you can find?

Book Review

Steve Woodhall

Title: *Bring Butterflies back to your Garden*

Authors: Charles & Julia Botha

Publishers: KwaZulu-Natal Coastal Branch of the Botanical Society of South Africa

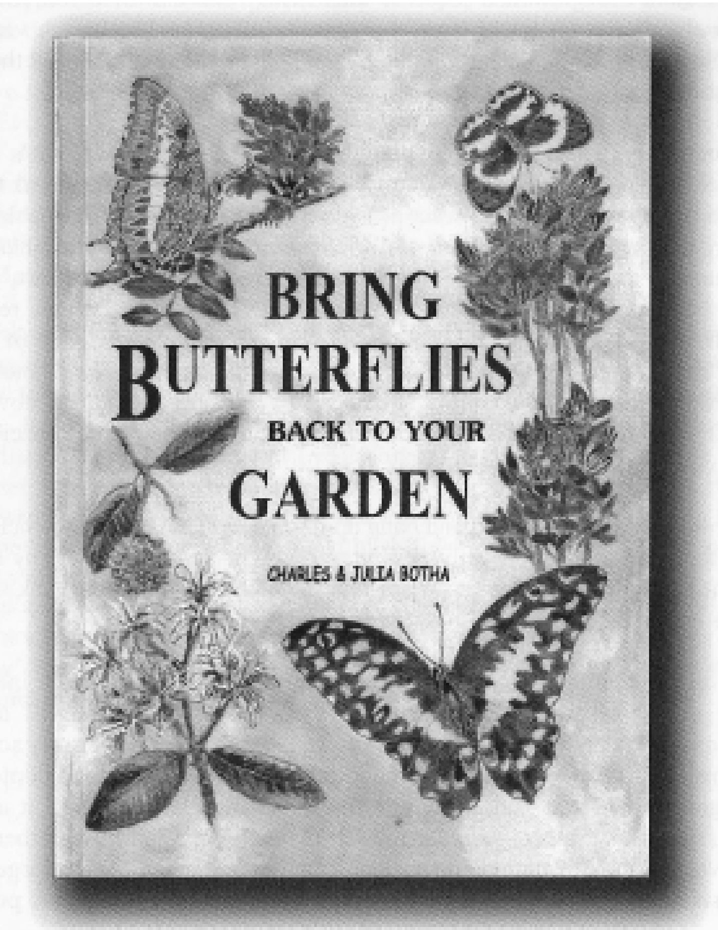
Charles & Julia's long-awaited sequel to their *Bring Nature back to your Garden* has certainly attracted a lot of interest in KwaZulu-Natal. The launch venue – Durban Botanical Gardens Visitor Centre – was packed to the rafters on the 12th August and I have it on reliable authority that over 500 copies were sold.

This is not the first book we've seen on butterfly host plants. It's more authoritative than Jill Reid's *Butterfly Gardening in South Africa*. And to the public, its field guide size and descriptive text make it more approachable than Doug Kroon's *Lepidoptera of southern Africa, host-plants & other associations*, which remains the benchmark for specialist Lepidoptera studies. In fact, Doug was this book's major host plant record source. But it adds many new records from other sources, such as Geoff Nichols, who has a vast knowledge of KZN butterfly host plants. To be fair to the Bothas, if they'd tried to cover moths as well as butterflies their book would have been 700+ pages and not the down-to-earth 250 pages it is! To their credit they *do* mention how many moth species are known to utilise each plant in their book.

It's comprehensively referenced and bang up-to-date with botanical nomenclature. We lepidopterists are not the only ones plagued by name changes. Many of the old scientific plant names we know and love have changed; you can pick up the new ones in this book.

Bring Butterflies back to your Garden covers all of South Africa, and it includes all food source records – even those of the rarest species, as well as ant association. This is not just a gardeners' book, although they'll probably account for the majority of sales. It's also a good reference book for all lepidopterists, from beginners to those whose interests run to rearing and breeding. It avoids being a field guide, either for butterflies or plants. It's descriptive rather than illustrative, but the illustrations do include some lovely botanical art, largely by Pat Johnstone and the late Eve Gibbs. Innovative use is made of SA postage stamps depicting both plants and butterflies. But as the authors point out, if you want identification, use a specialist field guide. In his Foreword, Dr Eugene Moll calls it a gardener's encyclopaedia of butterfly conservation, which describes it well.

This book will be a valuable addition to any lepidopterist's library. Not everyone is as lucky as I was to spend a lot of my early 'bugging' trips getting food plant advice from experts such as Prof. Mark Williams and Jo Joannou. Buy it, take it with you on safari and let it teach you about your quarry's food preferences. It's fun to read, informative and every so often there's a butterfly cartoon to make you chuckle. Just look at p172 and the picture of Ella's Bar. The artist must have heard about what lepidopterists get up to on safari evenings…



Quo Vadis Lepsoc - Some ideas about the future

Stephen E. W oodhall
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How many of us ever sit down and think: Where is Lepsoc going as a Society? It's the sort of thing that comes up in the evening on a field trip where more than one of us gathers, after several libations. When the gossip and reminiscences have run their course. When we've reached the deep philosophical stage. Most of such conversations I've been involved in move to the subject of permits and how we're going to undo the perceived anti-butterfly-collector prejudices that we feel work against us. This is definitely a major issue going forward and there are some encouraging signs. The planned Butterfly Atlas is very exciting. We all hope that we can persuade the powers-that-be to adopt a similar attitude to collecting to that which exists in Australia.

When I joined Lepsoc it had started out as a study group on Lepidoptera, but in fact was a quite close-knit association of collectors. Their approach covered a spectrum, from professional academics to unabashed stamp-collectors, like I was. I remember the marvellous feeling of being among kindred spirits for the first time and realising I wasn't a lonely nutcase after all. Most, if not all, of my closest friendships over the past 20 years have come through Lepsoc. Joining literally changed my life. Virtually every weekend was spent out in the field with lepidopterist friends; over the years new people joined and my circle of friends grew. Lepsoc grew from a small, perhaps clique-ish bunch of butterfly collectors to a conservation organisation with increasing clout. I developed from a 'stamp collector' to a photographer and author.

All the recent changes in my life have given me some new insights as to the directions we might find ourselves travelling in. When I moved to KwaZuluNatal (KZN) I went from an embarrassment of choices as to with whom I was going collecting with at the weekend, to a rather different existence. Collectors are thin on the ground here and widely separated by geography. At the same time I had already made some friends in KZN's conservancy movement. My MD, who also had friends in this area and perhaps saw it as a way of helping me settle here, encouraged me to develop these links and take them further.

I joined the council of the Kloof Conservancy; a particularly active example of KZN's well-supported conservancy movement. The projects they get involved in are ambitious and successful. A couple of examples are the Indigenous Open Gardens weekend, and the Nl3 alien eradication programme, funded through companies, my own included, through advertising boards along the 'old' motorway that runs through Assagay, Hillcrest, Kloof and Pinetown. These raise tens of thousands of rand and allow the conservancy to support like-minded organisations, fund smaller conservancies and further the cause of conservation awareness among residents.

A major objective is to promote education about wildlife. This is not just in Kloof Conservancy - it runs through all such organisations. One way this is done is to encourage local experts to develop recognition courses. Dave Bishop runs bird courses; Kevin Cockburn and I are working on a butterfly course. I realised a lot of people, who would not necessarily want to join Lepsoc, were interested in butterflies and wanted to be kept informed on developments. So through the conservancies I started a 'butterfly interest group'.

Jeremy Dobson actually started the ball rolling in Gauteng by involving schools and other organisations in field trips. Here in KZN we've adopted the same approach, the difference being that Lepsoc members are often in the minority at out meetings! We have comms with organisations such as BirdLife, the Botanical Society, Ezemvelo KZN Wildlife Honorary Officers, and the umbrella bodies KZN Conservancies Association and Conserve. We have a large circulation list of interested people; every time we do a lecture we let them all know about it. Of course it helps to have the Field Guide on my CV, and as my main objective in writing this was to promote interest in butterflies, it's a thrill to see this being achieved.

Recently I was honoured to be asked by Charles and Julia Botha to give the key address at the launch of their new book, *Bring Butterflies Back to your Garden* (several people didn't recognise me as I wore a tie) and was amazed to see hundreds of people turn up and buy all the books on sale - all 500 of them! Also, Lepsoc had a stand at the very successful Botanical Society plant fair; we gave butterfly gardening advice and helped sell foodplants. We signed up seven new members - not one a collector.

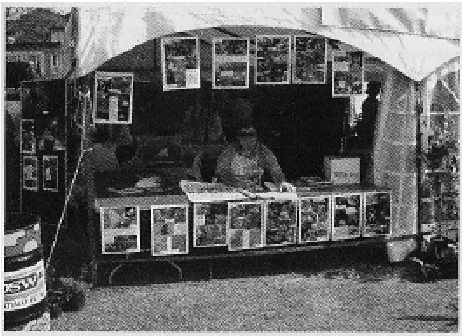
The planned Butterfly Atlas Project is creating a great deal of interest. I believe that this needs the input of the general nature-interested public to be a success, because if we rely on collectors alone - there must be only 50-60 in the country - we'll never finish it. So the answer must be to educate lots of people about butterflies and get them to participate. Just about everybody I've talked to here wants to get involved.

I deliberately did not insist that people in the interest group should join Lepsoc; in fact there is no pressure at all. When people feel ready, they join. Many birders have done so, finding that butterfly watching fits in well with birding. You can bird in the early light, spend the day butterflying, and then fit in the evening birds later. I've had an invaluable ally here in Jenny Norman, very knowledgeable about butterflies with a long life list of these as well as birds. Butterfly gardening is becoming very popular here and we have some horticulturalists on our member list now. Many of our new members are keen photographers, and the competition at photographic competitions is likely to become fiercer!

So I think the way forward for Lepsoc is to broaden our horizons. Get in touch with the local branches ofBotsoc, BirdLife Africa, WESSA, Gardening Societies, etc, etc, and gather names and e-mail addresses. Let these people know when we're holding a field meet. Organise speakers and slide shows for evening meetings and invite all and sundry. We charge members RIO per meet, R20 for non-members.

Metamorphosis is going to have to change, and perhaps become more like, for example, *Veld* & *Flora* - catering for gardeners, watchers and photographers as well as collectors and academics. We must encourage our new members to share their experiences by writing about them. As our membership grows, funds will become available for our Journal to go full colour.

I can feel many collectors feeling threatened as I write this. Seriously, we have nothing to lose but our chains - literally. For a start, as a group our average age is increasing all the time. Unless we do something to get youngsters into the hobby, it'll die out. Some of these new members will start to collect - one already has. I've seen non-collectors realise that we aren't a threat to butterfly populations and are not gratuitously cruel; once this is on board, prejudice disappears. I've had almost no adverse comments when I pull out the net and collecting box. Anything we can do to increase acceptance of butterfly collecting as a sensible hobby can only help. Maybe the authorities will view our requests for fair permit allocation with more sympathy, if they see our hobby (in fact a science) growing in genuine public interest and value.



Lepsoc stand at the Botanical Society Plant Fair, held at Munies Hockey Field on 2/3 September

New member, Grace van Heeswijk at her Class 12 presentation at the Assagay Waldorf School

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Manuscripts dealing with any aspect of the study of Afrotropical Lepidoptera will be considered.

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A hard copy of the manuscript, and the originals of illustrations, and the CD or E-Mail must be submitted to the editor. The text should be printed on A4 paper, with double lined spacing, and a margin of at least 2 cm on each side. The pages should be numbered consecutively, beginning with the title page, and including those carrying references, tables, and legends to figures. All figures and tables and references must be referred to in the text. If a CD is not available, then tables are to be typed on A5 paper, exactly as found in the printed journal. To facilitate proper alignment of tables, or landscape orientation, even if a diskette is used, it would be appreciated if these can be arranged in A5 format (text dimensions having a width of 4,5 inches and length of 6,5 inches (114mm x 165mm).

Figures must be boldly drawn in black waterproof ink, and arranged in clear and logical plates on stiff, white, preferably A4-sized board. All the figures must be numbered in a common sequence in Arabic numerals, irrespective of whether they are line drawings, photographs, diagrams, graphs or maps. Magnifications should be indicated by scale bars on the figures.

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ISBN 1-920187-01-4

ISSN 10186490