

Butterfly Safari in South Africa



Holiday Report 14 - 27 April 2017 Led by Steve Woodhall & Callan Cohen

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Introduction

The main focus of this spring tour was to enjoy butterflies but also mammals, birds, reptiles and other interesting wildlife. South Africa is home to almost 700 species of butterfly, as diverse in size and colour as they are in number, from the smallest blues and coppers to the largest swallowtails and emperors or charaxes.

Our holiday was led by Steve Woodhall, President of the Lepidopterists' Society of South Africa and Callan Cohen, a renowned birder and top wildlife guide. Steve and Callan are admired for their published work too, having written at least two field guides each, so we could not have hoped for better guiding and indeed this proved to be the case. Steve and Callan's extensive knowledge and passion for wildlife took us to some exquisite places where 151 species for the main tour, plus 65 for the extension (165 in total) were seen, representing the major butterfly families.

The following is an outline of the week with a daily diary, followed by a gallery and species list.



Day 1: Friday 14th April - the Road North

Early morning flights out of Durban Airport are something I'm used to, but it made a nice change to be leaving on an exciting Greenwings tour this time! As usual I struggled to sleep and ended up arriving way too early for the flight, but I had a good ziz on the flight. Arrived fresh and ready and as I approached the baggage carousel there was my case to meet me!

And as I went to the rendezvous at OR Tambo international arrivals, there was Dave Corfield walking straight to my 'Greenwings' sign. So far, so smooth... and the rest of the crew arrived fairly quickly afterwards — Callan, Nick Baelz, Dean and Sally Jue, and Maurice and Barbara Higginbotham.

One sad note was that John Maddocks, who had been on last year's trip, had to cancel at the last minute with a back injury. We missed you, mate!

The main target butterfly on this trip was – lots of 'em! Dean and Sally were particularly keen on Lycaenids, as befits members of the Hairstreak Chapter NABA. Off we went to pick up the vehicles, and get on the Great North Road out of Joburg and Pretoria. The Weather Gods had detected Lepsters on safari, and served up an unseasonal Antarctic cold front with rain. As we drove north it got colder and wetter, and by Mookgopong it was like a June day in England... 16°C, grey and miserable. We stopped for lunch and munched burgers looking out at the rain. Oh well, we did promise our guests the 'typical South African butterfly safari'.

Our next stop was the Mall of the North at Polokwane, where we picked up essential 'Lepster' supplies. Bananas and pineapple for butterfly bait, a plastic box to make it in, road nibbles, etc.

By the time we left the rain had stopped and I had made the 'mistake' of following the Google Maps route to Haenertsburg. As it turned out, this was a happy error and we found ourselves on a dirt road linking the Munnik road with the Haenertsburg one. At one point Callan called out an interesting bird, so we scrunched to a halt to get out and look. And lo and behold, there were nectar plants – *Lippia javanica* and *Vernonia centauroides*. And butterflies! The first Grass Yellows of the trip (Broad-bordered, *Eurema brigitta*) and Common Dotted Border, *Mylothris agathina*. Plus some Lycaenids hiding in the *Lippia* bushes. Fun was had sticking macro lenses into the bush. The adventure had officially started.

Eventually we realised that if we continued like this we'd arrive at Bramasole by midnight, we set off along the road into the Wolkberg. We spotted a village called 'Nobody' which had a Total petrol station — with a sign saying 'Total Nobody'! This tickled us and a photo call was made — and the group became, inevitably, the TOTAL NOBODIES!

We passed the amazing crowds at the Zion Christian Church of Moria (in South Africa it's a church, not a cave full of orcs) and eventually (in a good old Magoebaskloof Pea-Souper) got to the comfortable haven that is Bramasole. After a quick bait brewing session in Callan's room, a fine supper awaited us (the cook is particularly good at desserts) and cold beers, wine, and a welcome early night.

Day 2: Saturday 15th April – Politsi, Buffelsberg and the road to 'She'.

A grey and wet day, and although there were birds around, precious few butterflies were flying in the misty gloom the next morning. Dave found an enormous Walker's Owl moth (*Erebus macrops*), our biggest Noctuid and relative to the huge *Thysania* species of South America, in his room. Which everyone invaded to take photos. With Lepidoptera, there is always something!

We set off down Magoebaskloof Pass to the town of Tzaneen, in search of essential Lepster supplies like wine, beer, vodka for the bait, and not forgetting Allerverloren Port. As we drove up the rain shadow of the Magoebaskloof hills we got to Politsi River, a lowland riverine forest that has produced the goods in the past. Even though the weather was dull, the warm subtropical heat brought out the butterflies. Dozens of Soldier Pansies *Junonia terea*, as well as various skippers, Leopards (*Lachnoptera ayresi* and *Phalanta phalantha*) and Grass Yellows – to begin with, Broadbordered *E. brigitta* and Angled *E. desjardinsii*, but later on, the larger Malagasy *E. floricola*. This has only recently been recognised as being separate from the widespread *E. hecabe solifera* in SA, so a lot of close examination was done. And very many Dancing Acraea, *Telchinia serena*, which eventually became the 'trash butterfly' of the trip.

Common Sailers – *Neptis laeta* – were in abundance with the occasional Spotted Sailer, *Neptis saclava marpessa*.

There were some Forest Fever-trees *Anthocleista grandiflora* along the road, and knowing that Mother-of-Pearls like to roost in these, I gave one a shake. To our joy out one popped — Common Mother-of-Pearl, *Protogoniomorpha parhassus*. The first big flashy butterfly of the trip, and he posed nicely for photos. We wandered down the road, eventually getting to the river where Mocker Swallowtails *Papilio dardanus cenea* were flying. There were some good Odonata including the spectacular Dancing Jewel, *Platycypha caligata*.

Wandering further on, we found our first Hoppers, *Platylesches galesa*, the White-tail Hopper. These were whizzing around the forest edge at the upper part of the riverine forest. And here, we saw some other special butterflies. Ant-heap Small White, *Dixeia pigea*, is a common forest butterfly in SA but the orange female form *luteola* is not – and we found one. Plus the first *Charaxes* of the trip – a female Blue-spotted, *C. cithaeron cithaeron*, on *Spathodea* flowers. And some spectacular lycaenids – Natal Bar, *Cigaritis natalensis*, and Purple-Brown Hairstreak, *Hypolycaena philippus*.

But the weather eventually won and it started to rain. Off we went to another dry-area standby, the Buffelsberg peak near Munnik. It was pretty grey and dull, but I got one of my target butterflies near the summit. Grizzled Bush Brown, *Bicyclus ena*, which I've been trying to photograph on digital for years. I have to admit, there didn't seem to be a lot of enthusiasm for an LBJ in the gloom!

Our last attempt was the Koedoes River valley, which I had found to be good years earlier, but we found it to have been ruined by tomato farming. So we drove on, until we found a turning to Modjadjiskloof. This is a storied part of Africa; the second Rain Queen Modjadji having been the inspiration for H Rider Haggard's book 'She'. We found some *Vernonia* flowers, and even though it was dull we stopped and succeeded in finding several species of Pieridae including the spectacular Scarlet Tip, *Colotis annae annae*. After a while it got too dark, so we went back to Bramasole. The mist was even thicker...

Bramasole was again a haven of good food and restfulness. We were spoiled rotten here by the Two Tristans, and their cook, who was doing her best to stuff us like turkeys.

Day 3: Sunday 16th April - Buffelsberg produces the goods

As we woke to another misty Magoebaskloof morning, and another superb Bramasole breakfast, we found the first real Afromontane forest butterfly. A single White-banded Swallowtail, *Papilio echerioides* echerioides, was disturbed in the garden just before breakfast, which went off down into a thick patch of bush and sat coyly just in view, challenging camera and binoculars. But it was

still cool and misty and we knew that sun was forecast on the dry side of the hills. So off we went down the pass again. We had a brief stop at Politsi River, and again we saw some good butterflies, but we could see that the sun was out on the uplands so we were soon back at the Buffelsberg. This time, as we climbed the hill, there were many more butterflies about. Spotted Jokers *Byblia ilithyia* were everywhere, and of course so were the Dancing Acraeas. As we got to the top, the good stuff started to show up.

On the way up we found a female Bushveld Charaxes, Charaxes achaemenes achaemenes, ovipositing on the host plant, Round-leafed Kiaat, Pterocarpus rotundifolius. This was a first for me – and we were amazed at her likeness to the Foxy Charaxes, Charaxes saturnus saturnus, which Dave was keen to see, having seen its cousin Charaxes jasius jasius in Europe. And we were soon to see these, sunning themselves on the first hilltop. Wings wide open, which is not usually the case. Glorious. And soon we started seeing the other hilltop specialists. Male Charaxes achaemenes and the smaller Pearl-spotted, Charaxes jahlusa rex. Small black male Charaxes, probably Demon Charaxes, C. phaeus. And Barbara was waxing lyrical about a big orange and white butterfly she'd seen. I kept thinking of Large Vagrant Nepheronia argia, but then we saw it – Pearl Charaxes, C. varanes. Of all the sights of the African bush, the flashing orange and white of this butterfly against the dark green bush is one of the most iconic – and Barbara had spotted it first.

I'm reminded of Redland O'Hanlon's words – '...that sudden, passing, *incandescent* moment when you are not even sure if the something that is flying across the river in front of you is a bat or a bird or a butterfly.' When the world seems fresh and newly made. And for an instant, you are returned to childhood.

When we got to the top of the Buffelsberg, it was performing. We found the first *Abantis* skipper of the trip, Veined Skipper *A. venosa*. Grizzled Bush Browns were out again, as were more of the Charaxes and some Bars – not only Natal, but Ella's, *Cigaritis ella*. A Straight-line Sapphire *Iolaus silarus* put in an appearance. And all around there were African Monarchs *Danaus chrysippus orientis*, African Migrants *Catopsilia florella*, and lots of sundry Jokers, Acraeas, Pansies and Commodores. As I have found before with this place, it proved difficult to leave.

Back at Bramasole, the trap we'd hung was empty. No matter. Supper was tasty, the beers (and G'n'Ts) were cold, and I think we all had that pleasant ache we feel after a really good day walking in the African bush.

Day 4: Monday 17th April - Afrotemperate forest in the sun at last!

The morning dawned cool and misty but we could see it was going to clear. And it did – around breakfast-time, which caused mixed feelings. Northern Bush Beauty *Paralethe dendrophilus junodi* was spotted in the bush outside Dave's room, as well as Gold-spotted Sylph *Metisella metis paris* and Large Sprite, *Apallaga mokeezi seperata*. Eventually we got everyone fed and loaded into the cars, and we set off for the deep forest. First order of the day was to put up Charaxes traps – the bait by this time was beginning to ferment nicely.

At the first stop we found several Bush Beauties as well as Dead-leaf Commodores, *Precis tugela tugela*. Gold-spotted Sylphs and Large Sprites were everywhere. We slowly wended our way up the steep road, eventually finding the cool forest Charaxes specials like Forest-king *C. xiphares kenwayi* and Silver-barred, *C. druceanus moerens*. The black males of Satyr Charaxes *C. ethalion ethalion* were also out. Mocker Swallowtails *Papilio dardanus cenea*, were everywhere, mostly males with the odd female, and both sexes of White-barred Swallowtail.

A single male Emperor Swallowtail Papilio ophidicephalus transvaalensis was seen flying up the

road, its huge wings beating like the Fell Beast in the Lord of the Rings. And Battling Gliders *Cymothoë alcimeda transvaalica* were contesting territories in the canopy.

Nick and I went off in the Hyundai ahead of the rest to hang a high trap, and at one point we both saw something black and orange settle in the bush to the left. Stealthily we left the car, and Nick got a good sighting of Long-tailed Admiral *Antanartia schaeneia* schaeneia. This got my blood racing as well, because I needed good digital shots of this for the new edition of the *Field Guide*.

By lunchtime it became evident that our old friend the cloud cover was making itself felt. We decided to head to the higher altitude part of the forest on the other side of the wetlands. We had lunch and then walked into the marshes.

I had an idea we might find some interesting marsh butterflies here, but there was little on the wing. Callan did find a nice damselfly, the Mountain Malachite *Cholorolestes fasciatus*. He had been hoping for the rarer Elegant Malachite, but we were denied this - at least for today. Coming back to the car, Barbara found a beautiful female Black-tipped Acraea, *A. caldarena*, in the grasses at the edge of the wetlands. This is more of a dry country butterfly and the specimen was unusually dark, with an almost bluish hue to the grey wing bases. After a bit of a chase we all managed to get good photographs.

We then went back down the forest road, checking the traps as we went. I think the bait was a little too fresh, because all we got were loads of Common Bush Brown *Bicyclus safitza*, and only one good Charaxes – a nice male Silver-barred, who posed nicely after a drink of bait.

As we drove out of the forest we noticed there were a lot of Acraeas along the roadside near a clear-cut area of pine plantation. We found the place to be alive with them, getting ready to roost – not only the Dancing Acraeas we'd seen everywhere, but also Natal *A, natalensis,* Window *A. oncaea,* Garden *A. horta,* and Clear-spotted *A. aglaonice.* And Barbara started to cement her position of lucky devil of the trip. She and Maurice found a male Long-tailed Admiral and got some great shots of it.

Day 5: Tuesday 18th April - De Hoek forest and drive to Lekgalameetse

This was to be our last day in Magoebaskloof and it dawned clear and beautiful. There was another Owl Moth hanging around Bramasole – this time a Cream-striped Owl, *Cyligramma latona*. Before breakfast we were photographing Bush Beauties and Gold-spotted Sylphs in the garden, so it proved a bit difficult to get everyone focused on food, and getting out on the road.

We'd decided to go down the De Hoek road, which was marked '4x4 only' but it's been like that for years. It winds its way down a steep forest-covered mountainside and there's always a chance of wash aways in a place like that – but the attractions were worth the risk! I remembered a stunning roadside waterfall that was always a good spot for butterflies. Slowly we made our way down the road, which to our relief only had a couple of sticky places.

Admirals started making themselves evident. At one spot we had two or three of them whizzing about, and I got the definitive upper side digital shot I've been wanting for years. Everyone got good shots, then Dean spotted one flying a bit differently to the others. It turned out to be Northern Short-tailed Admiral, *Vanessa dimorphica*, which was fantastic. I'd given up on finding this because in my experience it was only found in the high forest. Another species to add to the list!

Eventually we got to the waterfall, which was teeming with Swallowtails – all Mocker and Whitebanded. Callan put his wellies on and squelched to the bottom of the falls, where to his joy, there

was an Elegant Malachite, *Chlorolestes elegans*, literally 'hanging out' on a mossy wall. It sat still whilst all the group risked soggy feet for a photo opportunity. This was a lifer for me as well. A spectacular damselfly indeed.

With this we decided we needed to get our skates on, because we needed to stock up on supplies in Tzaneen and get to Lekgalameetse by 5:30 pm. The main mall in the town had a really confusing parking system and we ended up parking in the bus station instead... which earned me a lot of ribbing for the rest of the trip.

The drive from Tzaneen to Lekgalameetse culminates in an approach to the eastern wall of the Wolkberg mountains. Scenically spectacular, and we got to the gate at exactly the time we planned. It's a 12km dirt road to the main camp at the base of one of the valleys, and we got there at dusk. Colleen and Samjee, our caterers, had a superb spread awaiting us. And the accommodation, whilst not being as five-star as Bramasole, was comfortable and clean.

Day 6: Wednesday 19th April - Lekgalameetse with Johan Greyling, and the road to the cottage

We decided to go out for an early drive to the spot where I'd photographed Juanita's Hairtail *Anthene crawshayi juanitae* a couple of years ago, then come back for breakfast before meeting up with Johan. He's one of my oldest friends and an expert on the area. And of course as we got up, it was cool and misty. We walked along the road, and the most interesting things we found were several lepidoptera that had met an untimely end. Most at the fangs of Crab Spiders (Thomisidae) but there was one strange moth, Wavy Shades *Cortyta canescens*, that seemed to have impaled itself on an Acacia thorn!

As it was looking like it might clear in an hour or two, we decided to go back for an early breakfast. Thus fortified, the sun started to break through, so we set off for the vehicles. On the way, someone found a 'skipper with a gold band' sitting on the ground. It turned out to be a freshly emerged female Banded Hopper, *Platylesches picanini*. One of Lekgalameetse's renowned rarities, right in the middle of camp! We thought she was a cripple at first, but after a while she expanded her wings and posed beautifully. We got a great shot of her posing on Dean's finger. 'Finger' shots of rare butterflies are a local Lepster fetish, so Dean was duly initiated...

And nearby were some Mobola Plum bushes *Parinari curatellifolia*, the host plant of all the local *Platylesches* skippers. There were a couple of fat final instar examples to be found. At the time I thought they were Banded Hoppers, but when I got the pix home and compared them with my records, turned out they were White-tail Hoppers.

We spent some time at the *juanitae* spot, and to our delight a fresh male showed up on the wet sand — with several other species of lycaenid. A couple of Cambridge Vagrants *Nepheronia* thalassina sinalata turned up — one of our biggest 'blues' although they are actually Pierids. We hung a trap at this spot, which looked very promising.

Driving along the road, we eventually met up with Johan. He suggested we hot foot it to the valley he knows, where lots of rare things had been turning up. I hadn't been to this spot before — and it turned out to be really good. As we walked along the road, Friars Amauris niavius dominicanus kept coming in to suck alkaloids from injured plants along the road. Lots of Grass Yellows — a few Broadbordered, but also some Malagasy and a few Common, Eurema hecabe solifera. 'Common' is a bit of a misnomer since it was split from Malagasy — it is definitely the rarer of the two and being very active, almost impossible to photograph. We were reduced to netting them and looking at the black forewing tips, which are the best identification features.

Johan then showed us his 'pièce de résistance' — a colony of Pennington's Buffs, *Cnodontes penningtoni*, high up in an Acacia. They were performing their strange 'wing waggling' dance as they sucked honeydew from a group of scale insects. Definitely a type of Lycaenid no-one had ever seen before.

Eventually we came to a ford across a stream, surrounded by the invasive American scrambler 'Cherry Pie' *Lantana camara*. This is a very attractive nectar plant and the area was pullulating with butterflies. Lots of Pierids, Swallowtails and various Nymphalids of the kinds we'd seen before, as well as several species of Blues on the mud next to the stream. People spent a lot of time loitering near that mud. Occasionally something unusual would come down. There was a perfect Veined Skipper *Abantis venosa*, a single Robust Hopper *Platylesches robustus*, which didn't stay for long; and occasional Purple-brown Hairstreaks *Hypolycaena philippus philippus*. And the Cherry Pie was producing the goods as well.

I was thrilled to get my first ever decent digitals of Paradise Skipper *Abantis paradisea*. A nice female Macomo Ranger, *Kedestes macomo*, put in an appearance, as did several specimens of Banded Hopper. Honey Hopper, *Platylesches moritili*, which is usually the commonest Hopper in this area, did show up, but only one or two.

We spent such a long time at this productive spot that we didn't leave ourselves much time at the waterfall in the main forest. We paid a visit and hung a trap, and saw occasional Emperor Swallowtails among the numerous Mocker Swallowtails and Green-banded Swallowtails, *Papilio nireus lyaeus*. Eventually the shadows started to lengthen and we drove up to the top of the forest to enjoy the late afternoon light, and put up a trap. We then went back to the spot along the road back to camp and found that a male Blue-spotted Charaxes, *C. cithaeron cithaeron*, had taken up residence. He refused to sit still on some bait smeared on a rock, but at least everyone got a look at the glorious blue upper side. The trap we'd hung back at camp produced a few Common Bush Browns, *Bicyclus safitza safitza*, but nothing else.

We were able to give our guests a taste of what a genuine LepSoc Africa bush evening is like. Johan has a repertoire of tales second to none, and as the level of Allesverloren Port went down, we all joined in. Stories like the Elusive Phosphor got told... we didn't stay up as late as is customary at a LepSoc session, but I know a couple of people were surprised to see Johan and me up with the lark the next morning...

Day 7: Thursday 20th – the ruined farmstead and the waterfall

Johan had told us of a secret spot he knew, where we might get some special Lycaenidae. It was a little down the road from camp, and without his memory, we would never have found it. An old abandoned farmstead, with some mysterious shiny leaved bushes that had clearly been planted in a regular array. These were interspersed with a riot of *Lippia* bushes in flower, and at first not many butterflies. But as we watched, both sexes of Juanita's Hairtail started to arrive. There were several other species of blue around, but these were the main attraction.

Our next stop was the main waterfall section, where we spent the rest of the day chasing butterflies up and down the road and river. There were plenty of swallowtails including the ever-restless Emperors, and Sally found a solitary Veined Swordtail *Graphium leonidas*. There were lots of Cambridge Blues, including some females, one of which obliged by nectaring at a glorious Barberton Daisy, *Gerbera* sp. And a real excitement – Albatross Whites, *Appias sabina phoebe*. This butterfly used to be confined to this forest and Woodbush, but of late it has spread all the way south to Durban and beyond. There was one spectacular dry season female. Cries of 'Albatross' rang out through the forest like a surreal 'Monty Python' sketch!

The Blonde Glider, *Cymothoë coranus*, was seen high up in the canopy, and the False Chief, *Pseudacraea lucretia expansa*. We even saw the rare orange form *heliogenes*, but it didn't hang around for photos. Then Johan called out when he saw a Boisduval's False Acraea, *Pseudacraea boisduvali trimeni*, Unfortunately it had departed by the time the team caught up with him, never to return. I was sad we'd missed this, a big butterfly with fiery red wings; one of the more spectacular forest species.

Eventually we bade Johan farewell and spent the rest of the afternoon following the road out of the forest. Even quite late on there were some good butterflies around – Chief *Amauris echeria echeria*, and some Friars *A. niavius dominicanus* performing their mating flight high up. I at first thought these were the smaller Novice *A. ochlea*, but my mistake became clear when Callan managed to grab a photo. And to our joy, a trap at the waterfall up a female Blue-spotted Charaxes, who obliged by posing for a few photos.

After another hearty supper, we went to bed, tired after a full day out in the bush. Ominously we could hear thunder echoing in the mountains above us.

Day 8: Friday 21st April- rain at Lekgalameetse, Abel Erasmus Pass, Kruger night drive

Friday dawned really wet and misty, and we could see it was not going to clear quickly like it had on previous mornings. After a slow breakfast we decided to pack up and head for the forest, to see if it did clear – and retrieve the traps. As it turned out they were empty and wet, so we made a call to start out early for the Kruger National Park, and see if we could find anything at the Olifants River near Abel Erasmus Pass.

Eventually we got to the pass, where a major road threads through spectacular mountain scenery. It was not as pristine as Lekgalameetse, and there was a lot of traffic, but as we walked down to the riverine forest, what should turn up but a spectacular fresh female Boisduval's False Acraea. She was sucking sap from a wounded branch right next to the path. And that was not the only good butterfly we found there. Golden Piper, *Eurytela dryope angulata*, put in an appearance, as well as an admittedly tatty female Club-tailed Charaxes, *C. zoolina zoolina*, ovipositing on the host plant *Senegalia schweinfurthi*. We also found a lot of Pieridae including Vine-leaf Vagrant *Eronia cleodora*, another new record. This turned out to be a fruitful stop, but we were mindful of the still long drive to Satara in the Kruger, with its strict closing times. So off we went, stopping to grab photos of the spectacular Blyde River Canyon on the way.

We got to Orpen Gate by early afternoon, in time to spend lunchtime exploring the grounds at Orpen Camp. Here, Maurice and Barb spotted a definite female Demon Charaxes *C. phaeus* on a sucking tree. This was good, because we had only seen males of the black Charaxes at the Buffelsberg and one cannot tell them apart from those of *C. vansoni*. With the females one can be sure. Dean and Sally found the first Veined Tips *Colotis vesta* of the trip, as well as the first male Bushveld Purple Tip, *Colotis ione*. Purple Tips are iconic African butterflies, so it was good to show him to everyone.

Then it was time for the drive to Satara, and butterflies took a back seat to mammals and birds. We were in two vehicles, Callan driving a Toyota Quantum minibus with three passengers, me in a Hyundai SUV, also three passengers. This allowed all to have a window seat, and we were in touch via 2-way radio. Callan went in front as his vehicle was higher (and he's better at spotting birds and mammals than I am, I have to admit!) Butterfly-wise we could see that there was a major emergence of Jokers (*Byblia* spp.) but we couldn't tell if they were Spotted *B. ilithyia*, or Common *B. anvatara acheloia* from the vehicles. There were also large numbers of African Monarch *Danaus chrysippus orientis*, African Migrant *Catopsilia florella*, and of course our old friend the Dancing

Acraea. Numerous unidentifiable small Pierids were all over, but again no identification could be made from the cars without weaving all over the place!

Eventually we got to Satara, and after a hasty supper we went off on the night drive Callan had organised. We had hoped to see lots of carnivore activity, but all we saw were a few elephant, the inevitable Impala and Gnu, and some nice owl sightings including a Spotted Eagle Owl.

Day 9: Saturday 22nd April - all day in Kruger, Tshokwane, Nkumbe View Site

We set off at dawn to one of the most beautiful sunrises I've ever seen, and I had the right lens on to get the quintessential 'squashed sun' effect – the 300mm f4 with a 1.4x extender. Setting off down the road to Tshokwane, we almost immediately got into a family herd of elephant – one bull had huge tusks. Not long after that we found a large troop of Baboons following the road, mamas with babies, big males, and lots of casual sex in the road. These are engaging animals, it's difficult to stop watching them!

We saw lots of mammals and birds on the way to Tshokwane, where we stopped for a leisurely bush breakfast. There were plenty of flowers around the perimeter of the camp, and on these we found plenty of Pierids, blues and skippers. Orange Tips, Babul Blues, Black-striped Hairtails – all the typical bushveld species. We then drove up to the spectacular Nkumbe View Site, which is on a foothill of the Lebombos looking west over the plains. It is the closest SA gets to Ngorongoro Crater, and across the river and into the trees, we could see a White Rhino in the distance. The weather was perfect, and as this was on a hilltop, butterflies were active. There were surprisingly few Charaxes – some small black ones (probably male Demons) and one Pearl. There were lots of *Colotis* Tips – we saw Bushveld Purple Tips *C. ione* as well as Smoky *C. euippe omphale*, Small *C. evagore antigone*, Bushveld *C. pallene*, and Common *C. evenina* Orange Tips, Red Tip *C. antevippe gavisa*, Scarlet Tip *C. annae annae*, and Banded Gold Tip, *Teracolus eris*. Zebra Whites *Pinacopteryx eriphia* were about, but all these Pierids were very much turbocharged and never sat for long. Everyone enjoyed this place and it was difficult to leave, but we had to think of the long drive back to Satara.

We went back to Tshokwane to get drinks and biltong for the road, and again there were butterflies to see. There was a very nice male Brown Playboy *Virachola antalus* posing low down on a bush, and several Twin Swifts, *Larsenia gemella*. But soon it was time to get back on the road. On the way back to Satara, the route follows a river. At one point, Callan spotted a leopard (sorry!) and we stopped to get a good look – it had walked off down a bend in the river and wasn't so easy to spot by the time we got there. We also encountered a family of Spotted Hyena, and these performed beautifully for the cameras. There was some debate as to whether they are 'cute'...

We got back to Satara as the sun was going down. A real dawn till dusk day, and we were all very tired. Never mind, for some of us it was the last night of the trip, so we enjoyed a few beers at supper. We did the species list and found ourselves to be on 149. Oh no! We'd wanted a nice round number.

Day 10: Sunday 23rd - Orpen Gate - no. 150 - Dullstroom and ORTIA again, then Zaagkuilsdrift

Setting off after breakfast the next day, the first thing we came to was two young elephant bulls having a playful wrestle in the water at the nearby dam. There were also some hippo in attendance. But we saw no new butterflies as we drove on.

Eventually we got to Orpen Gate, and a leg stretch. Almost immediately, no. 150 put in an appearance – the first confirmed Common Jokers *Byblia anvatara acheloia* of the trip. So it was

with happy hearts that we set off back over Abel Erasmus Pass and on the long drive to Johannesburg via Dullstroom. At Dullstroom we stopped for a pancake lunch, and had a group photo taken. The Total Nobodies had come a long way since Polokwane!

Nothing much happened on the long leg from Dullstroom to Johannesburg across the Mpumalanga coalfields. Apart from some new birds, like Sacred Ibis, Grey-headed Gull and Black-shouldered Kites – all Highveld lovers that seem to thrive near human activities.

And so it was time to say goodbye to Dean and Sally, and Nick. We dropped off the Hyundai, and proceeded with Maurice and Barb, Dave, Callan and me in the bus.

The next leg was a little drive to Zaagkuilsdrift, just the other side of Pretoria. It was fully dark by the time we got to the road across the floodplain to the accommodation — and we saw more wildlife along that road than we did on the Kruger night drive! I lost count of the number of Marsh Owls we saw, and Scrub Hares. Callan suddenly braked hard, having seen a Porcupine — but it eluded us as we reversed back.

The road in had several large pools of water, with Callan taking a deep breath as he tackled the bigger ones. Fortunately the road is well made and all except one had grippy, gravelly bottoms. There WAS one muddy one that required second gear and a fast approach... but soon we were at Zaagkuilsdrift Lodge, where Gerrie Botha had massive braaied steaks waiting for us — and cold beers.

Day 11: Monday 24th April - Zaagkuilsdrift Lodge, Bela Bela mall, Lindani The Loft

As we woke, the cloud we'd got used to on the trip was still around – but it cleared during breakfast. We'd planned to drive slowly along the road, looking out for some species I'd seen on a previous visit to the Zaagkuilsdrift flood plain. But we soon realised that the grounds of the lodge were seriously good. They were full of Pierids, which unlike the ones in Kruger, were sitting still and nectaring. We found the awesome Queen Purple Tip, *Colotis regina*. Zebra Whites were cooperative. There were some good blues around, and Barb found a really good little butterfly – Tailed Black-eye, *Leptomyrina hirundo*. There were a few of these around patches of their host plant, *Kalanchoe rotundifolia*.

We then set off for the floodplain itself. We didn't see much that was new along the road, but we did get Topaz Babul Blue, *Azanus jesous*, a female ovipositing on some low *Vachellias* on the edge of the marshes. Deciding it was time to get off towards the Waterberg and Lindani, we turned back towards the Great North Road and stopped off whenever we saw purple *Vernonia centauroides* flowers blooming. There was nothing really new on these, just the usual Painted Ladies, Jokers and African Monarchs.

We stopped off at a mall in Bela Bela to lay in essential supplies. Lindani being a self-catering operation, Callan had arranged catering for dinners but we needed to take care of our own breakfasts and lunches. So we laid in bacon, sausages, eggs and cheese. I had made the mistake of eulogising butterfly safari breakfasts in LepSoc, so I had volunteered to be the chef.

Driving north-west from Bela Bela we entered the Waterberg, going past the iconic Seven Sisters peaks in the main massif. My absolute favourite bushveld tree, Wild Syringa *Burkea africana*, was everywhere in this area, which has very different vegetation to the Kruger. I resisted the temptation to keep stopping to photograph them, since I knew Lindani was next door to my old stamping grounds at Lapalala, and there would be some good ones with a better background than a road. When we got to Vaalwater, I tried to buy ice in case there wasn't any at Lindani, but all I got

was a proposition!

When we got to The Loft at Lindani, we found ice in the freezer! So we lit a camp fire and absorbed ice cold gin and tonics around it as the sun went down. As Hemingway wrote – 'the first of the day, the best there is!' There was total peace and quiet, and a clear sky. As we ate supper and did the list, roll on tomorrow, we all thought!

Day 12: Tuesday 25th April – Lindani hilltop in afternoon; successful!

And of course the next day dawned grey and cloudy. I got into breakfast mode. The kitchen at The Loft was really well equipped, so I had a great time rustling up bacon, sausages, poached eggs, fried tomatoes, fried mushrooms and toast. There was HP Sauce for the sausages, or English Mustard if you wanted it – I had been doing the shopping after all. The Loft even had a dishwasher, so we were spared the hassle of washing up. It being still grey after breakfast, we set a couple of traps and set off for the nearby river valley. The plan was to kick butterflies out of the grass again, but truth be told we didn't find much apart from Geometrid moths until gaps in the cloud appeared and the sun shone fitfully. We set up another trap and headed off.

One of the nice things about Lindani is that two of its hilltops have good roads most of the way to the top, with clear paths up them. The hills tend to be low and rolling with the peaks not very prominent, and without a path a lot of time can be wasted bashing the bush looking for a way to the top. We found our way up one hilltop, but it was still very cloudy and nothing really new was on the wing on the way up, apart from the odd Joker, Painted Lady, Dancing Acraea etc. We eventually did find a new one, Little Acraea, *A. axina*, as well as a male Black-tipped Acraea, *A. caldarena*. Guinea Fowl butterflies, *Hamanumida daedalus*, were flitting along the path in front of us, settling wings-open and challenging us to creep up on them stealthily enough to grab a long lens shot before they flew off, to settle again a few metres further on.

There then followed a time honoured LepSoc Africa tradition – sitting atop a *koppie*, willing a gap in the clouds to interpose itself between us and the sun. Eventually, this was the case –then things started happening!

The first butterflies we noticed were black male *Charaxes*. As this was sourveld with no *Vachellia nigrescens* around, I deemed it safe to mark these as Van Son's Charaxes, *C. vansoni*. I hoped we'd find a female later, which is very different to that of Demon Charaxes, so we could confirm it. And then other Charaxes started to arrive. Foxy, Pearl-spotted, Pearl, and Bushveld. Finally a lovely fresh Green-veined Charaxes, *C. candiope*, arrived and started dogfighting with a Foxy.

In the midst of all this I noticed something whizzing about at very high speed. *Abantis!* I thought, but was I surprised when it turned out to be *paradisea* and not the *A. tettensis* I'd been expecting. So this was amazing – a butterfly that has always been a bogey for me with digital camera in hand, turning up twice on the same safari. Yes it's nice to see them nectaring or on mud, as they were at Lekgalameetse, but for me, the alert and aggressive posture of a perching male on a hilltop is the essence of Paradise Skippers. They are the Jack Russell terriers of the butterfly world, willing to chase Charaxes ten times or more their size.

As well as this, we found a very obliging Morant's Orange, *Parosmodes morantii* on the same bush. In fact, there was one shiny-leaved bush atop this hill that seemed to be attracting all the butterflies. We saw Natal Bar, Straight-line Sapphire and Apricot Playboy there – and Callan spotted a rarity as well – Millar's Hairtail, *Anthene millari*.

We lurked balefully on that hilltop until it was clear the sun was going down the sky and activities

were coming to a close. We walked back down – there were only Jokers in a trap we'd set near the bus. But the trap at the river produced a happily inebriated female Bushveld Charaxes, who gave us all nice upper side shots. And the trap at the camp had a sleepy Foxy who wouldn't open his wings, but we got great underside shots.

Day 13: Wednesday 26 April – long drive looking for elusive butterflies!

The next day I rang the changes and made cheese omelettes to go with the rest of the fry-up. And of course the weather was the same – dull and cloudy, looking even more so than the previous days. Callan suggested we try to find some sun, so a mental coin was tossed – north to Marken or south to Thabazimbi? Marken won, and of course the cloud followed us all the way to the town of Lephalale where it started to lift at midday – again! We stopped at a promising looking pass where the Riet Spruit goes through a small gorge. Game fencing prevented us getting away from the road reserve, but we did find some butterflies, and a couple of interesting Odonata, there.

We then spotted a side road going off to a dam, so we followed it as far as a place where the rains had washed it away and there was a lot of mud. There were some butterflies there – nothing new, but there were some more Topaz Babul Blues and of course, loads of Jokers and Guinea Fowls. There were some Mountain Sandmen *Spialia spio*, as well. But the road was clearly not in good condition so we drove back to Lindani via a southern route to Vaalwater. At The Loft, nothing had come to the traps and it was still chilly. As we had our sundowners, we ruefully reflected that butterflying is like that sometimes – frustrating! As we did this, the wind died to a dead calm and swung around from the north-easter to a southerly wind – a harbinger of change.

Day 14: Thursday 27th April – second Lindani hill – Fig Tree Blues, back to ORTIA

This was the final day of the safari, with a drive back to Johannesburg in the offing, and limited time. And of course it was a glorious clear morning! Scrambled eggs were on the menu this morning in the interests of speed. We packed the bus, and set off for the second of the two hilltops on Lindani – after stopping to say hello to Glynis Brown, the reserve manager, whom I remembered from the days she used to work at Lapalala.

There were some stunning *Burkea* trees on the lengthy path to the top, so we all got good photo opportunities. This hilltop had a sharper peak than the other one, which I thought looked promising – until Callan discovered that all the activity was happening on another of those shiny-leafed bushes, off to one side of the hilltop proper.

There was a very nice male Bushveld Charaxes, Straight-line Sapphires flying high, and Natal Bars. But then something really good turned up — Fig-tree Blue, *Myrina silenus ficedula*! These are not rare, but usually sparsely distributed. He was a bit scruffy and didn't want to give us a clear wingsopen shot. But never mind — species no 165 and a good looking one as well.

With this, we had to acknowledge that the clock was ticking and we had to allow for possible traffic near the airport, so we set off down just after noon. On the way down, Barb did her lucky thing again and found another Fig-tree Blue, this time a nicer specimen and more willing to pose.

That as it turned out was the finale of the trip. The drive back via Pretoria to Johannesburg was uneventful and we got to the airport in good time. It seemed strange to be saying farewells again, this time to Maurice, Barbara and Dave, and of course Callan. We two had a couple of gin and tonics in the lounge before catching our flights home.

And of course there was a long weekend, so I got stuck into post processing all the photos, and transcribing the species list onto a spreadsheet.

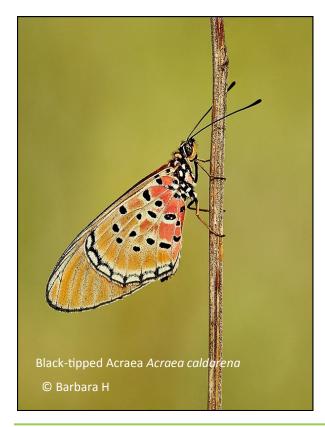
Thanks to Callan and Marje of Birding Africa, and the Greenwings crew, for all the meticulous planning that went into this safari. And to our guests for being such good company, good sports and great African butterfly spotters...



Photo Gallery



















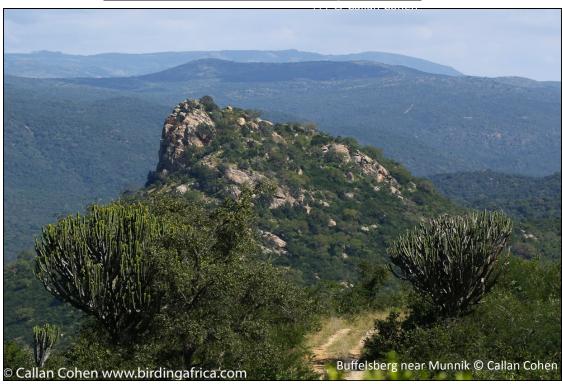






























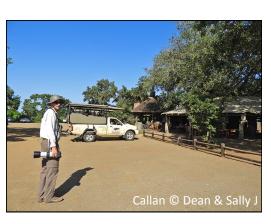


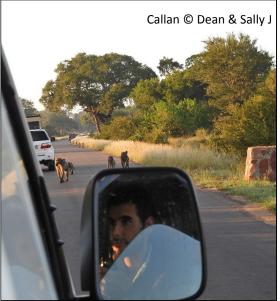








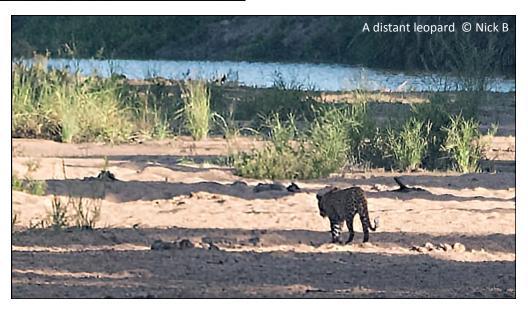






















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93 94	LYCAENIDAE LYCAENIDAE	Aloeides Aloeides	taikosama titei trimeni																0 0 0		0 0 0		0
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104 105	LYCAENIDAE LYCAENIDAE	Anthene Anthene	otacilia princeps talboti																0	1	0		0 0
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162 163	LYCAENIDAE	Lepidochrysops	ignota irvingi																0		0	0
164 165	LYCAENIDAE	Lepidochrysops	jefferyi ketsi	ketsi															0		0	0
166	LYCAENIDAE	Lepidochrysops	letsea	Ketsi															0		0	0
167 168	LYCAENIDAE	Lepidochrysops	lotana patricia																0		0	0
169 170	LYCAENIDAE LYCAENIDAE	Lepidochrysops Lepidochrysops	plebeia procera																0		0	0
171	LYCAENIDAE	Lepidochrysops	rossouwi swanepoeli																0		0	0
173 174	LYCAENIDAE	Lepidochrysops	tantalus vansoni																0		0	0
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177	LYCAENIDAE	Leptomyrina	henningi	gorgias henningi								х			×				1		0	1
178 179	LYCAENIDAE		hirundo babaulti												х				1 0		0	0
180 181	LYCAENIDAE LYCAENIDAE		brevidentatus jeanneli																0	-	0	0
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184 185	LYCAENIDAE	Myrina	dermaptera silenus	dermaptera ficedula														×	0		0	0
186	LYCAENIDAE	Orachrysops	lacrimosa	liceudia														^	0		0	0
187 188	LYCAENIDAE	Orachrysops	regalis violescens																0		0	0
189 190			warreni barberae																0		0	0
191 192	LYCAENIDAE LYCAENIDAE		sichela bowkeri	transvaalensis															0		0	0
193	LYCAENIDAE LYCAENIDAE		sybaris calice	sybaris															0		0	0
195 196	LYCAENIDAE LYCAENIDAE	Tuxentius	melaena nubifer	melaena						x x	х				x				3		2	1 0
197	LYCAENIDAE	Zintha	hintza	hintza			х			х							x		3	=	2	1
199	LYCAENIDAE LYCAENIDAE	Zizina	knysna otis	knysna antanossa			х	х	х	х	×	×			×	х	х	х	10	=	6	4 0
200	LYCAENIDAE LYCAENIDAE	Lachnocnema	hylax bibulus			x	х			х	x			×	x		х		7		5 0	0
202 203	LYCAENIDAE LYCAENIDAE	Lachnocnema Lachnocnema	durbani laches																0		0	0
204	LYCAENIDAE LYCAENIDAE		basutus basutus	basutus capeneri															0	\dashv	0	0
206 207	LYCAENIDAE	Alaena	amazoula margaritacea	ochroma															0		0	0
208	LYCAENIDAE	Baliochila	aslanga																0		0	0
210	LYCAENIDAE	Durbania	penningtoni amakosa	ayresi						х									0	_	0	0
211 212	LYCAENIDAE LYCAENIDAE	Pentila	limbata tropicalis	fuscipunctata															0		0	0
213 214	LYCAENIDAE NYMPHALIDAE	Pentila Byblia	tropicalis anvatara	tropicalis acheloia										×	×				0		0	0
215 216	NYMPHALIDAE NYMPHALIDAE	Byblia	ilithyia dryope	angulata			х	х	х	x	х	x x	х		x	х	х	x	11	\exists	7	4 0
217 218	NYMPHALIDAE	Eurytela	hiarbas	angustata boisduvali				х	х	X X	X X	x							5 2	_	5 2	0
219	NYMPHALIDAE	Sevenia	morantii	Doisdavaii						^	^								0		0	0
221	NYMPHALIDAE	Charaxes		achaemenes			x			х	х				х			х	5		3	2
222	NYMPHALIDAE		bohemani\ brutus	natalensis				х	x	х	x	x							5		5	0
224	NYMPHALIDAE	Charaxes	candiope	candiope flavifasciatus							х				х			х	0	-	0	0
226 227	NYMPHALIDAE NYMPHALIDAE	Charaxes	cithaeron druceanus	cithaeron entabeni			x			х	х								3		3	0
228 229	NYMPHALIDAE	Charaxes	druceanus druceanus	moerens solitarius				х	х										2		2	0
230	NYMPHALIDAE NYMPHALIDAE	Charaxes	etesipe	tavetensis ethalion															0		0	0
232	NYMPHALIDAE	Charaxes	ethalion guderiana							×									0		0	ő
233 234	NYMPHALIDAE NYMPHALIDAE	Charaxes	jahlusa saturnus	rex			X X											X X	2		1	1
236	NYMPHALIDAE		marieps phaeus				x					x							2		2	0
237 238	NYMPHALIDAE NYMPHALIDAE		vansoni varanes	varanes			x			x	×	×	×		×			х		-	4	1
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245 246	NYMPHALIDAE	Cyrestis	camillus					· ·		×									0		0	0
247	NYMPHALIDAE	Amauris	albimaculata echeria	albimaculata echeria				^		x	×								2		2	Ö
249	NYMPHALIDAE NYMPHALIDAE	Amauris	ochlea	dominicanus ochlea						х	×	х							0		0	0
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254 255	NYMPHALIDAE	Acraea	aglaonice anemosa				х	х	х										3	\dashv	3	0
256 257	NYMPHALIDAE	Acraea	axina barberi													х		х	2	=	0	2 0
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262	NYMPHALIDAE	Acraea	lygus macheguena																0	=	0	Ö
264	NYMPHALIDAE	Acraea	natalica neobule	natalica neobule			X X	х	х	х	х				X	х		х	3	=	5	1 2
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273	NYMPHALIDAE	Telchinia	anacreon cabira						x										0	#	0	0
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277	NYMPHALIDAE	Telchinia	serena esebria				X X	X	X	X X	X X	X		X X		X	x	X	4	\Rightarrow	4	0
279	NYMPHALIDAE	Telchinia	igola induna	salmontana															0		0	0
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283	NYMPHALIDAE	Pardopsis	ayresii punctatissima			×	х				х								3 0		3 0	0
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286 287	NYMPHALIDAE NYMPHALIDAE	Libythea	laius alcimeda	laius transvaalensis				х	х										0 2		0 2	0
288	NYMPHALIDAE	Cymothoe	alcimeda	marieps				^	^										0		0	0
290	NYMPHALIDAE	Hamanumida	daedalus			х	х			х	X X	х	х	х	х	х	х	х	11		7	0 4
291 292	NYMPHALIDAE	Neptis	goochi laeta			x	х			х	х	х							0 5		0 5	0
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301	NYMPHALIDAE	Hypolimnas	anthedon	wahlbergi						х									1 0		1 0	0
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334	NYMPHALIDAE	Dira	swanepoeli	swanepoeli															0		0	0
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342	NYMPHALIDAE	Physcaeneura	panda		\Box						\Box				\Box				0		0	0
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377 7 7 7 7 7 7 7 7 7	APPLIJONIDAE APPLIJONIDAE APPLIJONIDAE APPLIJONIDAE APPLIJONIDAE APPLIJONIDAE APPLIJONIDAE HERIDAE	Papilio Papilio Papilio Papilio Papilio Papilio Catopalia Catopalia Catopalia Catopalia Eurema Eurema Eurema Appilias Appilias Belianois Belianois Belianois Belianois Catopalia	nireus ophidicephalus ophidicephalus ophidicephalus ophidicephalus ophidicephalus ophidicephalus florella electro brigitta electro brigitta despardinsi florelosi hecabe esparhis saubra aurota creona aurota creona gledea esparhis saubra aurota creona electro electrona electron	ayresi ertabeni transvaalensis electo brigitta regularis regularis regularis abrigitta regularis contracta phoebe severina abyssinica abyssinica adove bowkeri care auto contracta phoebe electronica abyssinica adove abrigitta auto care a car		x x x		x	x	x x x		x	x x x x		x	x	x	X X X X	0 0 0 3 13 0 5 4 4 2 2 2 1 1 8 6 0 0 0 3 3 13 0 0 0 0 0 0 0 0 0 0 0 0 0		6 0 0 3 9 0 5 5 4 4 4 2 0 2 1 7 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
371 5 4 7 7 8 7 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9	APPLICNIDAE APPLICNIDAE APPLICNIDAE APPLICNIDAE APPLICNIDAE APPLICNIDAE APPLICNIDAE HERDAE	Papilio Papilio Papilio Papilio Papilio Papilio Catopaliia Catopaliia Catopaliia Eurema Eurema Eurema Appilia Appilia Belenois Belenois Belenois Colotis	nireus condicionales condicion	ayresi entabeni transvaalenais electo bristitati bristitati regularis regularis regularis solifera contracta phoebe severina athyseinica adoye bowkeri davisa auto arma arma arma arma antigone antigone		x x x		x	x	x x x		x	x x x x x		x x x	x	x	x	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6 0 0 3 9 0 5 5 4 4 4 2 0 2 1 7 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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STAT	APPLICNIDAE APPLIC	Papilio Papilio Papilio Papilio Papilio Papilio Catopalio Catopalio Eurema Eurema Eurema Eurema Eurema Appias Appias Appias Belencois Belencois Belencois Colotis Colo	nireus considerativa considera	ayresi entabeni transvaalensis electo brigitta programa solitara solitara solitara solitara solitara solitara solitara solitara solitara contracta phoebe severina abyasinica adove bowkeri Gavisa auco arrina annae eris comphale antigone evenina		x x x		x	X X X	x x x		x	x x x x x		x x x	X	X	x	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
S71 1 1 1 1 1 1 1 1 1	APPLICNIDAE APPLICNIDAE APPLICNIDAE APPLICNIDAE APPLICNIDAE APPLICNIDAE HERDAE	Papilio Papilio Papilio Papilio Papilio Papilio Catopalia Eurema Eurema Eurema Eurema Eurema Appias Appias Beliencis Beliencis Beliencis Beliencis Colotis Col	nireus control de la control d	ayresi entabeni transvaalenais electo bristitati bristitati regularis regularis regularis solifera contracta phoebe severina athyseinica adoye bowkeri davisa auto arma arma arma arma antigone antigone		x x x		x	x	x x x		x	x x x x x		x x x	x	X	x	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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S71 1 1 1 1 1 1 1 1 1	APPLICANIDAE APPLICANICAE APPLICATICAE APPLI	Papilio Papilio Papilio Papilio Papilio Papilio Papilio Papilio Papilio Coloris Eurema Eurema Eurema Eurema Eurema Belencis Belencis Belencis Belencis Belencis Coloris Colori	nireus control de la control d	oyresi entabeni transvaalensis sleeto brogitta solitera brogitta regularis solitera contracta phoebb severina abyssinica agove bowkeri awas suxo amina annae arina annae evenina arinae		x x x		x	x x x	x x x		x	x x x x x		x x x	x	x	x x x	0 0 0 0 3 13 4 4 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6 0 0 0 0 0 3 3 9 9 0 0 5 5 4 4 4 4 2 2 0 0 2 2 1 7 7 6 6 0 0 0 0 0 0 0 2 2 1 1 3 3 1 1 2 3 3 0 0 1 1 1 2 2	0 0 0 0 0 0 0 4 4 0 0 0 0 0 0 0 0 0 0 0
S71 1 1 1 1 1 1 1 1 1	APPLICANIDAE APPLICANICAE APPLICATICAE APPLI	Papilio Papilio Papilio Papilio Papilio Papilio Catopalia Catopalia Catopalia Catopalia Eurema Eurema Eurema Appilia Appilia Reliencis Bellencis Bellencis Bellencis Colotis C	nireus control de la control d	oyresi entabeni transvaalensis sleeto brogitta solitera brogitta regularis solitera contracta phoebb severina abyssinica agove bowkeri awas suxo amina annae arina annae evenina arinae		x x x		x	x	x x x		x	x x x x x		x x x	X	х	X	0 0 0 3 3 13 4 4 2 0 2 2 1 1 8 6 0 0 0 0 3 3 4 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6 0 0 0 0 0 3 3 9 9 0 0 5 5 4 4 4 4 2 2 0 0 2 2 1 7 7 6 6 0 0 0 0 0 0 0 2 2 1 1 3 3 1 1 2 3 3 0 0 1 1 1 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
S71 1 S71 1 S71 1 S71 1 S71 1 S71 S7	APPLICATIONEAE APPLIC	Papilio Papili	nireus control de la control d	avresi entabeni transvaalensis electo bristlat regularis regularis regularis solifera contracta phoebe severina abvasinica adove bowkeri davos amos eris ornale artisone evenina artisone evenina artisone evenina artisone evenina artisone evenina artisone evenina inalecesta inalecesta		x x x		x	x	x x x x x x x x x x x x x x x x x x x		x	x x x x x		x x x	x	X	X X X	0 0 0 3 13 4 4 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6 0 0 0 0 0 3 3 9 9 0 0 5 5 4 4 4 4 2 2 0 0 2 2 1 7 7 6 6 0 0 0 0 0 0 0 2 2 1 1 3 3 1 1 2 3 3 0 0 1 1 1 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
371 1 372 3 3 3 3 3 3 3 3 3	APPLICATIONE APPLI	Papilio Papilio Papilio Papilio Papilio Papilio Catopalia Catopalia Eurema Eurema Eurema Eurema Eurema Eurema Belienois Belienois Belienois Belienois Belienois Colotis Coloti	nireus considerativa de considerativa de considerativa de considerativa de considerativa de considerativa de considerativa desparticia des	ayresi entabeni transvaalensis electo entabeni transvaalensis electo periodi programa programa solitera contracta phoebs severina abyasinica saloves bowkeri gavia amina annae eris oromenale antispone evenina arigilaceus chafirina parva		x x x		x	X X X X X X X X X X X X X X X X X X X	x x x		x	x x x x x		x x x	x x	X	X X X	0 0 0 3 3 13 4 4 2 0 2 2 1 1 8 6 0 0 0 0 3 3 4 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6 0 0 0 0 0 3 3 9 9 0 0 5 5 4 4 4 4 2 2 0 0 2 2 1 7 7 6 6 0 0 0 0 0 0 0 2 2 1 1 3 3 1 1 2 3 3 0 0 1 1 1 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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SYM	APPLICATIONE APPLI	Papilio Papili	nireus control de cont	avresi entabeni transvaalensis electo brigita regularis regularis regularis regularis regularis solifera contracta phoebe severina abvasinica adove bowkeri davos autos de la compania entabe electronica armia eris compania entabe evenina armia eris compania armia eris parva evenina evenina electronica electron		x x x		x	x	x x x x x x x x x x x x x x x x x x x		x x x	x x x x x		x x x	X X	X	X X X	0 0 0 3 13 4 4 2 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0		6 0 0 0 0 0 3 3 9 9 0 0 5 5 4 4 4 4 2 2 0 0 2 2 1 7 7 6 6 0 0 0 0 0 0 0 2 2 1 1 3 3 1 1 2 3 3 0 0 1 1 1 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
SYM SYM SY	APPLICANIDAE APPLICANICAE APPLICANIDAE APPLICANICAE APPLICATICAE APPLI	Papilio Papilio Papilio Papilio Papilio Papilio Castosisis Eurema Eurema Eurema Eurema Eurema Appiss Appiss Appiss Belenois Belenois Belenois Belenois Colotis	nireus control de la control d	eyresi entabeni transvaalensis slecto brogitta solitera contracta phroabe soverina abyssinica asoove bowkeri asove		x x x		x	x	x x x x x x x x x x x x x x x x x x x		x	x x x x x		x x x	x x x	X	X X X X X X X X X X X X X X X X X X X	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		6 0 0 0 0 0 3 3 9 9 0 0 5 5 4 4 4 4 2 2 0 0 2 2 1 7 7 6 6 0 0 0 0 0 0 0 2 2 1 1 3 3 1 1 2 3 3 0 0 1 1 1 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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S71 1 S72 1 S73 1 S74 1 S75	APPLICATIONE APPLICATION APPLIC	Papilio Papili	nireus control de la control d	eyresi entabeni transvaalensis slecto brogitta solitera contracta phroabe soverina abyssinica asoove bowkeri asove		X X X X X X X X X X X X X X X X X X X	x	X X X X X X X X X X X X X X X X X X X	X	x x x x x x x x x x x x x x x x x x x	X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x	X	X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X	X X X X X X X X X X X X X X X X X X X	0 0 0 3 13 3 4 4 4 2 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
371 6 7 7 7 7 7 7 7 7 7	APPLICATIONE APPLI	Papilio Papili	nireus control de la control d	eyresi entabeni transvaalensis slecto brogitta solitera contracta phroabe soverina abyssinica asoove bowkeri asove	0	x x x		x	x	x x x x x x x x x x x x x x x x x x x		x x x	x x x x x		x x x	X X X X X X X X X X X X X X X X X X X	x x x 14	x x x x x x x 36	0 0 0 3 13 3 4 4 4 2 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
371 6 7 7 7 7 7 7 7 7 7	APPLICATIONE APPLI	Papilio Papili	nireus ophidicophalus	avresi entabeni transvaalensis electo bristlat regularis solifera contracta phoebe severina abvasinica adovasinica adovasinica adovasinica adovasinica adovasinica adovasinica araticone evenina eris comphale artificati antification de regularis parva parva inalcesta agathina varienata buquetii sinalata eriphia		X X X X X X X X X X X X X X X X X X X	x	X X X X X X X X X X X X X X X X X X X	X	x x x x x x x x x x x x x x x x x x x	X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x	X	X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	0 0 0 3 13 3 4 4 4 2 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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