

REGUA 2019

a phototour

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Led by Phil Benstead.

Summary

This was a first foray into the South American fauna for all concerned, including, rather stressfully, Phil! We set out to photograph as many species as we could and we were largely successful in this, securing some fantastic images. Unfortunately the tour was hampered by poor weather and we did not see our shadows on five days; this certainly affected results but we came away with a creditable 132 species. This area has been well-worked by Tom Kompier so there were predictably few surprises in our haul but we may well have photographed the rarely observed female of *Tramea rustica*. I look forward to returning in the future with Tom for a good old thrash in January, if you are interested please get in touch and I will put your name on the list. Once we get nine names we go.

Acknowledgements

Our thanks to Nicholas Locke and all the staff at the Guapi Assu Lodge for looking after us so well during our stay at REGUA. Special thanks go to our splendid driver Alcenir, we could not have done it without his detailed knowledge of the best spots in the area.

Daily diary

3/2 REGUA

Having arrived at the lodge in the dark the night before our first day started predictably enough in the garden straight after breakfast. Our first ode was a female *Anatya januarina* which had us scratching our heads for a while. A slightly simpler and much more widespread *Erythrodiplax fusca* perched nearby. Our first red libellulid appeared too in the shape of *Erythrodiplax castanea*, true to form it was hugging a leaf. I think it is fair to say that male *Micrathyria* often confused us throughout the tour but the females (though scarcer) were much easier to identify. Two female *Micrathyria hesperis* were spotted perched at the tips of bare twigs.

As our eyes adjusted to the bright sunlight and we started to wake up we spotted some damselflies too. *Acanthagrion temporale* with its stylish wrap-round postoculars was to prove commonplace during the tour but was first seen here.

Walking off we quickly found a swamp that was to be a regular site to search during our 12 days here – the tapir swamp. No tapirs but more *Anatya januarina* and our first *Acanthagrion lancea*. The whole swamp looked a shoe-in for *Lestes* and so it proved later.

Walking on to the start of the yellow trail and out into the sun things started to hot up. We walked anti-clockwise and picked up new odes immediately as you would expect. *Micrathyria atra* seemed to like the water-filled plastic bins of an ongoing University research experiment. Each bin had a jealous male guarding it. Along the edge of the wetland we flushed capybara and found our first male *Micrathyria hesperis*. Before long we were sorting our *Planiplax* from our *peruvianas* among a host of other red libellulids. One of these proved to be our first *Brachymesia furcata*, a species that was to be frequently encountered at the wetland and often seen hanging on the moth wall at night.

Walking on we found the pin-tailed *Erythemis plebeja* and we started to get seriously confused by male *Micrathyria*. We photographed *Ischnura fluviatilis*, it was to prove a scarce species for us on this trip. Our first majestic *Rhodopygia cardinalis* hung vertically from lakeside bushes. Careful searching revealed our first *Telebasis – corallina* and the tiny *Ischnura capreolus*. A small swamp by the trail had our first *Erythrodiplax avittata* – we were excited but the species eventually proved very common and widespread which devalued it somewhat.

Searching lakeside perches produced our first *Cacoides latro* – a big gomphid. At the outflow stream we had a brief contact with our first *Argia modesta*. Following the stream a short way through the woods allowed Phil to record the first of many *Triacanthagyna caribbea*, a snazzy little duskhawker. Never really common we found *Erythemis haematogastra* next. Looking out over the lake we also found our first *Tramea binotata* (a blue *Tramea*!) and on emergent vegetation in the middle a few *Idiataphe amazonica* and *Perithemis mooma*. In an area of waterlilies close to shore our only *Coryphaeschna adnexa* – an egg-laying female. Further examination of the swamp produced *Telebasis filiola* and *Tauriphila argo* as we slowly drifted back through the oppressive heat for a big cooked lunch back at the lodge.

After lunch we took it easy mostly. Eventually things cooled and we headed out again down the brown trail. Roy found a short trail down the power lines which produced our first *Erythrodiplax umbrata*, a snazzy libellulid. Jörg went one better by finding a female *Heteragrion* – our first flatwing. Wandering down to the brown trail we found two nice libellulids perched on the edge of the garden, our first *Pantala* and the always impressive and very green *Erythemis vesiculosa*. Nearby along the track came our first *Rhodopygia pruinosum*.

At the start of the brown trail we found our first wandering *Telagrion* (a big hit) and by the bridge a female *Heteragrion aurantiacum*. Dropping into the stream bed netted us plenty of males of the latter species but surprisingly nothing else. We took the short cut up to the wetlands and although we saw very few invertebrates we did watch the two recently-introduced tapirs getting outside of a jack fruit. The female occasionally clubbing the male with the large fruit in a not very playful way. The wetland outflow had a single *Argia modesta* again and this time the concrete spillway supported a few territorial *Heteragrion aurantiacum* that were easier to photograph out in the light of day. Checking the swamp again on the way back to the lodge was a good idea with *Micrathyria laevigata* and *Lestes pictus* being found.

4/2 Vecchi and the forest fragment

It was into the van with our driver Alcenir this morning for a trip out to the ponds at Vecchi. The weather had taken a turn for the worst unfortunately and we suffered from overcast conditions for the next four days with occasional rain. A big weather system was upon us but we soldiered on.

On the road we stopped pretty quickly to look at a swampy forested roadside pool but found nothing novel. The lake at Vecchi was interesting despite the poor weather and we saw our first *Erythrodiplax ochracea* as we exited the van. Nearby the first of two *Diastatops* dazzled us. Walking into the tall emergent vegetation on the edge of the pond produced our first *Erythemis credula*. Walking the trail behind the pond in scrub produced a huge number of *Erythrodiplax avittata* and both *Nephepeltia* species. Back on the road by the van we found our first *Tramea abdominalis* and another *Cacoides latro*.

We moved a short distance to some a splendid collection of small former fishponds. Here we wandered about and picked up a nice variety of libellulids despite the poor weather. The first ode through the fence was a find *Zenithoptera lanei* – easily the most photogenic libellulid of the tour – just stunning. Also here *Micrathyria catenata*, *Erythrodiplax paraguayensis* and *juliana*. We had excellent photo opportunities with *Tramea binotata* and *calverti* in the cool conditions. Hartwig and Gunther also photographed a nice male *Tramea rustica* here [check your photos, I didn't get it...]. Phil photographed a single female *Micrathyria spuria*.

Dodging rain we headed back towards the lodge and stopped for our first look at the rainforest fragment. This looked fantastic but we experienced a fair amount of rain during our afternoon session... Despite this we did see some great odes. Perched on snags around the agricultural clearing in the forest were our first *Orthemis schmidtii* and *cultriformis*. The small ditch along the edge had the beautiful *Perithemis thais*. Nearby snags had our first *Orthemis attenuata*. A single female *Hetaerina* perched two metres above the ditch still looks good for *auripennis* I think.

Leaving the clearing and walking deeper into the forest the rain started in earnest and despite low light levels we managed to spot a single *Epigomphus paludosus*. Getting decent photos in the low light was next to impossible sadly and we called it a day shortly after a recce up the track. It was to be a site we were to be drawn back to again and again.

5/2

the old REGUA wetland and the forest fragment

Phil and Roy dutifully checked the moth wall pre-dawn and were rewarded with many fantastic moths plus a *Brachymesia furcata* and our first *Oligoclada laetitia*. On the noticeboard a nice perched *Tramea cophysa* – our only record during the tour. Dawn arrived and Roy and Phil hunted crepuscular odes with the nets and Roy bagged us a nice *Gynacantha bifida* – again the only record of the tour. Many crepuscular odes escaped our efforts...

After breakfast the weather looked rather gloomy but we decided to take a look at the old wetland towards Nicolas' house. Walking in we photographed perched *Pantala* and looked at some great habitat en route to the small man-made wetland at the end of the track. This patch of water failed to turn up anything of interest and we all slowly moved back to the Guapi Assu river which produced our first *Argia modesta*.

Back at the Lodge for lunch we sheltered from the weather until someone spotted a recently emerged bromeliad-guard (*Leptagrion elongatum*) near the captive bromeliads in the garden. Closer inspection of the garden revealed our first *Micrathyria laevigata*.

Our afternoon was spent again searching the nearby forest fragment. Here we had another nice encounter with the snazzy *Telagrion* and another *laevigata*. We had a further two encounters with *Epigomphus* (our last, we never saw one in the sun I think). Michael may have got a decent photo too but may well have been the only member of the team to do so. Eventually the rain got the better of us and we headed back to the lodge.

During the evening crepuscular ode hunt in the garden, it was Phil's turn to come up trumps with our only *Gynacantha nervosa* in the back of the net and displayed for all.

6/2

Locke's pond, Green trail and REGUA

Poor weather continued for us again this morning and we elected to check out the start of the Green trail, a hotspot for many species we had yet to encounter. The weather in the early morning was more conducive to walking so we marched up to the waterfall. Here despite the poor conditions we found our first *Hetaerina brightwelli*. Dropping down the day became a bit more productive as things 'heated' up. A boggy seep producing our first *Heteragrion consors* and *Forcepsineura regua*. Where the trail opened out and bromeliads became commonplace we bumped into more *Leptagrion elongatum* and better still our first *perlongum* – a real beast. Phil spotted our first *Dasythemis venosa*. A late lunch beckoned today and we headed back to the lodge.

After lunch we stayed close to home. The tapir swamp had a nice selection of species including *Erythrodiplax ochracea* and *Triacanthagyna caribbea*. The wetland itself produced excellent photographic opportunities with *Micrathyria atra* and the Swedish birders found us our first three-toed sloth.

7/2

REGUA and the old REGUA wetland

More poor weather for us today, would it ever end? The moth wall had *Brachymesia furcata* and *Triacanthagyna* for us this morning before breakfast. We stayed close to home at the REGUA wetland this morning and tried to catch up on things we had missed. Roy took the team on a *Telebasis griffini* safari which failed to produce the goods but at least we knew where to look. Highlights here though were photographable perched *Miathyria simplex*.

After lunch we headed back to the old wetland site for a couple of hours picking up *Heteragrion consors* in the dam seepage area but little else of note. Back at REGUA the weather stayed poor but a thorough search of the tapir swamp produced both *Lestes pictus* and *tricolor*, as well as a nice *Leptagrion macrurum* – our first.

Spotlighting in the rain after dinner with a young Aussie herpetologist produced a colourful array of amphibians (all of which remain to be identified) for Roy and Phil.

8/2

Forest fragment, the start of the Green trail and REGUA

Another *Triacanthagyna* at the moth wall pre-dawn. At first light we could see blue sky at last! After breakfast we headed off to do the rainforest fragment in good weather. The site did not disappoint us. The open area at the back of the forest was humming in the early morning sun and we started to bag our first *Macrothemis* species at last – *declivata* and *hemichlora* being really appreciated after so many lean days in the field for this genus. Dragging ourselves away we walked back through the forest to be held spellbound by the sight of our first *Mecistogaster amalia* helicoptering through the trees. It perched nicely for us several times leading us eventually into some slightly damp forest and a small group of our only *Epileoneura* of the tour. Double bonus!

The clearing was excellent this morning with countless photographic opportunities and we spent some time here. *Orthemis cultriformis* and *attenuata* put on a show. *Dasythemis venosa* appeared for all. Michael found *Forcepsineura regua* here. Phil dug out *Erythrodiplax laurentia* and *media* here but dragging the team away from their photographic subjects proved very difficult... Rumours started to circulate the clearing of a large gomphid and eventually it was pinned down – a superb *Zonophora campanulata*. As the heat built Nicolas arrived with a jug of iced guava juice and gave us a lift back to the lodge for lunch.

After lunch most of us headed up to look at the start of the Green trail to have a proper go at this fabulous location. Getting out of the van we almost immediately fell in with a huge rat snake (*Spilotes pullatus*) and spent some time photographing this amazing creature as it hung at head height in a nearby tree. Phil and Roy worked the stream together picking up our first and only *Heteragrion triangulare* and our first *Elasmothemis cannacriodes*. Moving along up the trail the wide portion again produced abundant chances to photograph the very photogenic *Leptagrions*. Later Phil bagged poor images of the only (?) *Argia croceipennis* of the tour perched on a rock midstream.

Eventually the afternoon started to cool and we headed lower down for a quick look around the REGUA wetland. We all potted about. Phil was pleased to finally find the single *Telebasis griffini*, still in the same place where Michael had found it at the beginning of the tour. *Miathyria simplex* seemed to be abundant in the late afternoon today.

9/2

Campestre de Salinas

We had to pick the best day weatherwise for our first assault on the high ground and the weather held fair for our day up at Salinas which was nice. The three hour van drive was a bit onerous but we left early and breakfasted en route in a small shop-cum-cafe. A toco toucan appeared at impossibly long range on a distant ridgetop tree.

Driving on we entered the ranch at Salinas and started to work the stream and lower areas. Here we bumped into new *Micrathyria* species (*starwarskii* and the undescribed one). Gunther pointed out our first *Oxyagrion (pavidum)* and nearby we found a high *Leptagrion macrurum*. Working the river produced *Argia sordida* and *modesta* and Phil had a brief encounter with *Oxyagrion hempeli*.

Driving on we eventually ended up working a very interesting high altitude wet grassland area that started to produce a steady stream of new and exciting species. First up was *Erythrodiplax melanorubra* but this was quickly eclipsed when Roy found our first *Minagrion waltheri*. Our first *Macrothemis tenuis* appeared and Phil tried unsuccessfully to catch a high-flying emerald patrolling the edge of the clearing.

We took lunch where the track dived in to the forest before going in to explore. Here we found our first *Heteragrion rogeri* and Gunther found us *Limnetron debile* which Phil then managed to net along the stream. Back outside some of the team were getting stuck into some very rapid *Coryphaeschna castor* along the stream and when we finally tracked down Gunther we found him enjoying a superb *Oxyagrion simile* in a small roadside pool. Nearby *Minagrion waltheri* also demanded attention.

Dropping back down to our morning start point we searched again for *hempeli*. Roy found a dead one in a spiders web so we knew we were close. Eventually by walking away from the river and into the grassland we started to find some, both males and females. Whilst we did this though Bill was elsewhere downstream and bagged our only *Remartinia luteipennis* of the tour... A nice end to a splendid day.

10/2 REGUA and the Guapi Assu river

The moth wall had *Tramea binotata* this morning and dawn saw blue skies again. This morning many of us walked right round the wetland trail and this paid off delivering a number of novel species. We walked clockwise attacking the very hot open sunny side first. First up for most of us was an encounter with the splendid gomphid *Aphylla theodorina*, exactly where Bill had found it a few days earlier. Next came both species of *Oligoclada*, one in the stream, the other on the wetland. More *theodorina* appeared and then a single *Aphylla molossus*, a dark brute of a gomphid that was much appreciated. Walking into the more shaded areas we worked the forest/wetland edge hard for little return. The trail sides did produce a few *Rhodopygia pruinosum*, scarce so far. We also recorded two *Mecistogaster amalia*, one of which posed nicely for photos. Breaking back out for the forest and back on the edge we found *Perithemis mooma*, *Dythemis nigra* and even a few *Diastatops*.

After lunch at the lodge we headed out to the Guapi Assu and walked and waded upstream for a bit. We expected to find some gomphids but left empty-handed on that front in the end. A highlight here was our second and last *Elasmothemis cannacriodes*. Checking the tapir marsh back at the lodge we had more opportunities to photograph the excellent *Lestes pictus*.

11/2 Tres Picos SP

The long drive uphill and around the back of the mountains was punctuated again by breakfast at the same coffee shop as the other day. Breakfast birds included Aplomado falcon today. Although the forecast was for good weather we were slightly concerned on arrival at Tres Picos but after a dicey first hour the sun appeared. We worked an excellent high meadow with a small stream, a boggy seepage and a great area of laminar flow across a gentle grassy slope. How could we resist? We climbed through the fence and got stuck in, the sun turning up just as we started to explore the more interesting habitats available.

The boggy ditch along the fenceline produced *Forcepsineura sancta* and emerging *Argia lilacina*. As the sun started to come out Roy found us another *Limnetron* and *Dasythemis mincki* appeared in numbers. Searching further we found *Macrothemis tenuis* again and even more exciting a couple of *Macrothemis capitata*. The stream here produced *Hetaerina longipes*, an egg-laying *Brechmorhoga nubecula* and a patrolling male *Rhionaeschna itatiaia*. Great stuff.

Lunching by the van we checked the small stream for more *rogertaylori* before heading lower down for *Oxyagrion pavidum* and *simile*. Michael scored a disobligning *Bryoplathanon* here too before it was time to head down the hill.

12/2 Vecchi

Another scorcher this morning and so we headed out to Vecchi to check out this site in the sun. We stopped at a small stream en route and found several teneral *Brechmorhoga praedatrix*. We also stopped by a muddy seep and Michael found us a superb *Progomphus intricatus* and whilst we enjoyed this *Macrothemis musiva* was found. Nearby Phil caught a *Miathyria marcella* out of a swarm of small gliders. Driving on we stopped at a different set of fishponds this time and got stuck in. This was a great site and we wandered happily snapping away. Phil was pleased to finally catch up with *Acanthagrion cuyabae*. *Diastatops* were everywhere today. New things appeared too with *Anax concolor* appearing briefly and Michael found a solo *Tauriphila xiphia*. Finally the heat drove us into the shade for a packed lunch.

Making the effort to work the back of the big pond at Vecchi in the blazing heat was an inspired decision. It seemed very quiet until Michael spotted a small orange damsel in a bush – our first *Tigriagrion*. We noticed several more and incredibly this bush also produced

Minagrion mecistogastrum which as we watched pounced on our only *Idioneura* of the tour and started to eat it. Thus in short order we found three species of damselfly hitherto missing from our trip list! Back at the road later Gunther showed us our first and only *Brachymesia herbida*. We stopped once on the way back to investigate a densely wooded and hitherto unvisited swampy wetland and here we found our only *Erythemis carmelita* of the tour.

13/2 REGUA

As if we had not had enough rain on this tour the heavens opened overnight and carried on through the morning. Most of us elected to stay out of it and go through our photos and identifications... We did get out in the afternoon though and thrashed the wetland in very overcast conditions with light rain to little effect, although the birding was good. A very disappointing day.

14/2 forest fragment, REGUA and transfer to airport

Our last day dawned sunny and we had one last effort in the rainforest fragment. The sunny far side of the forest patch had a selection of *Macrothemis* species again but this time there was at least one *imitans* in the mix. Back in the clearing we enjoyed the presence of the *Zonophora* again and searched for things. We all watched a *Heteragrion* sp (undescribed). A big surprise from here when we got home was the discovery of a male *Orthemis ambinigra* for Hartwig and Gunther (do check your photos you may have it too). But it was time to drag ourselves away for lunch and packing, we were off home.

Rio looked good in the daylight and the harbour area had a multitude of magnificent frigatebirds. Bang on time Alcenir dropped us off at Departures and we thanked him profusely for all his hard work and said our goodbyes. Entering the building we surrendered to the machinery of travel after a difficult tour in many ways, poor weather and a steep learning curve...

Odonata recorded around REGUA between 3rd to 14th February

<i>Bryoplathanon globifer</i>	Giant metallic	Michael photographed one during the Tres Picos day at the last stop...
<i>Hetaerina auripennis</i>	Golden-winged rubyspot	A possible female along the edge of the clearing in the forest fragment on the first visit.
<i>Hetaerina brightwelli</i>	Foothill rubyspot	Noted for the first time at the waterfall on the Green trail (REGUA). Also seen at Campestre de Salinas.
<i>Hetaerina hebe</i>	Purple rubyspot	Only identified on the small stream we stopped at on our second trip to Vecchi.
<i>Hetaerina longipes</i>	Planalto rubyspot	Only recorded at high altitude on the Tres Picos SP visit.
<i>Hetaerina rosea</i>	Rosy rubyspot	Small numbers on the Guapi Assu river and en route to Vecchi on the second visit.
<i>Heteragrion aurantiacum</i>	Orange-striped flatwing	Widespread. Frequently encountered in lowland forested habitats. Also recorded as high as Tres Picos SP.
<i>Heteragrion consors</i>	Orange flatwing	Noted for the first time at the start of the Green trail (REGUA).
<i>Heteragrion robertaylori</i>	Orange-and-black flatwing	Unusual-looking variant at Campestre de Salinas, more typical individuals at Tres Picos. A plan has been hatched to put together a tour to see the remaining Brazilian members of <i>Queen</i> .
<i>Heteragrion</i> sp.	Persimmon flatwing	Recorded in the fragment clearing and probably also at the start of the Green trail (REGUA).

<i>Heteragrion triangulare</i>	Spray-zone flatwing	Just one seen at start of the Green trail (REGUA) when it was sunny.
<i>Lestes pictus</i>	Blue-tipped spreadwing	Small numbers in the tapir wetland by the lodge (REGUA).
<i>Lestes tricolor</i>	Brown-striped spreadwing	Recorded in very small numbers in the tapir wetland by the lodge (REGUA).
<i>Acanthagrion cuyabae</i>	Cuiabá wedgetail	Recorded at Vecchi on both visits.
<i>Acanthagrion gracile</i>	Slender wedgetail	Widespread in lowland wetlands.
<i>Acanthagrion lancea</i>	Celeste wedgetail	Widespread.
<i>Acanthagrion temporale</i>	Blue-sided wedgetail	Widespread.
<i>Argia croceipennis</i>	Blue-wedged dancer	One female photographed on rocks in the stream at the start of the Green trail (REGUA).
<i>Argia lilacina</i>	Lilac dancer	Small numbers on the Campestre de Salinas and Tres Picos outings.
<i>Argia modesta</i>	Purple-striped dancer	REGUA.
<i>Argia sordida</i>	Serra dancer	Recorded at high altitude (Campestre de Salinas and Tres Picos days) and on the Guapi Assu river.
<i>Ischnura capreolus</i>	Tiny forktail	Common in lowland wetlands.
<i>Ischnura fluviatilis</i>	Austral forktail	Very small numbers at REGUA.
<i>Leptagrion elongatum</i>	Secretive bromeliad guard	One freshly emerged male from the garden bromeliads. Another the next day at the start of the green trail (REGUA). Two more dates in lowlands.
<i>Leptagrion macrurum</i>	Blue-and-brown bromeliad guard	Scattered records at REGUA and Campestre de Salinas (three dates).
<i>Leptagrion perlongum</i>	Long-tailed bromeliad guard	Best looked for on the Green trail (REGUA) where it was recorded in small numbers guarding, or egg-laying in, trailside bromeliads.
<i>Minagrion mecistogastrum</i>	Long-tailed bluetip	Five on the sunny day at the back of the big lake at Vecchi. Three males and two females. One male was eating an <i>Idioneura</i> .
<i>Minagrion waltheri</i>	Orange-tailed bluetip	Good numbers on our day at Campestre de Salinas. A little stunner.
<i>Oxyagrion pavidum</i>	Red-tipped mountain coral	Small numbers at Campestre de Salinas and Tres Picos.
<i>Oxyagrion hempeli</i>	Large mountain coral	Five in the streamside meadow at Campestre de Salinas.
<i>Oxyagrion simile</i>	Blue-tipped mountain coral	Singles at Campestre de Salinas and Tres Picos.
<i>Telagrion longum</i>	Flametip	Scattered records at REGUA and the nearby forest fragment.
<i>Telebasis corallina</i>	Coralline firetail	Frequently encountered at both REGUA and Vecchi.
<i>Telebasis filiola</i>	Striped firetail	Small numbers at REGUA and Vecchi.
<i>Telebasis griffinii</i>	Swamp firetail	Scarce. One for Michael on the first day in the REGUA wetland. This individual (?) at the same location on subsequent visits too. Small numbers hanging in the shade on the second visit to the big pond at Vecchi.
<i>Tigriagrion aurantinigrum</i>	Tiger damselfly	A few seen in the shade at the back of the big Vecchi pond in the heat of the day on our second visit.
<i>Epiploneura venezuelensis</i>	Venezuelan graytip	Small numbers in very slightly boggy forest in the fragment. Only seen

<i>Forcepsioneura regua</i>	Regua pincertip	because we chased an <i>amalia</i> ... The first <i>Forcepsioneura</i> we saw at the start of the Green trail were this species. Michael had one later in the REGUA rainforest fragment clearing ditch, a known site.
<i>Forcepsioneura sancta</i> <i>Idioneura ancilla</i>	Seepage pincertip Ruby-eyed leaf-hanger	Widespread. Only seen struggling feebly in the jaws of a <i>Minagrion mecistogastrum</i> during the 'purple patch' at the back of the big pond at Vecchi on the second visit.
<i>Mecistogaster amalia</i>	Amalia helicopter	A total of five individuals seen during the tour, scattered over many of the lowland sites visited. Two behaved well for the photographers and were an easy trip highlight.
<i>Anax amazili</i>	Amazon darner	Yellow-winged crepuscular <i>Anax</i> over the lodge garden were attributed to this species. We also had yellow-winged aeshnids hawking over the forest fragment in the middle of the day.
<i>Anax concolor</i>	Blue-spotted comet	One at the alternative ponds at Vecchi on our second visit to the area.
<i>Castoraeschna castor</i>	Gunsen darner	Small numbers working the streams at Campestre de Salinas.
<i>Coryphaeschna adnexa</i>	Blue-faced darner	One egg-laying female on the first day at REGUA.
<i>Gynacantha bifida</i>	Wing-striped duskhawker	Roy netted one at dawn in the lodge garden on day 3.
<i>Gynacantha nervosa</i>	Twilight duskhawker	Phil netted one in the lodge garden at dusk on day 3.
<i>Limnetron debile</i>	Little forest darner	One at Campestre de Salinas, another seen at Tres Picos. They looked very different to each other sizewise...
<i>Remartinia luteipennis</i>	Malachite darner	Bill found our only individual whilst the rest of us were in a field chasing <i>Oxyagrion hempelii</i> at Campestre de Salinas.
<i>Rhionaeschna itatiaia</i>	Itatiaia darner	The patrolling male aeshnid at Tres Picos was this species.
<i>Triacanthagyna caribbea</i>	Caribbean duskhawker	Regular singles at REGUA, especially in the tapir swamp. Found at night when spotlighting there too.
<i>Aphylla molossus</i>	Black-tailed forcepstail	Singles recorded at REGUA and the stream en route to Vecchi.
<i>Aphylla theodorina</i>	Double-ringed forcepstail	Regular in the sun at the REGUA wetlands.
<i>Cacoides latro</i>	South American tigertail	Scattered records in lowland wetlands.
<i>Epigomphus paludosus</i>	Austral knobtail	Singles in the rain on our first two visits to the forest fragment. Amazingly not seen on the sunny visits to that site.
<i>Progomphus intricatus</i>	Pale-tailed sand-dragon	One on the stream en route to Vecchi.
<i>Zonophora campanulata</i>	Blacktail	A single recorded on two sunny visits to the fragment clearing (REGUA).
<i>Cordulisantosia/</i> <i>Navicordulia/Neocordulia sp.</i>	an emerald	We failed to catch the individual hawking the edge of a clearing at Campestre de Salinas.
<i>Anatya januaria</i>	Brazilian blue-eye	This shade-loving species was seen in

<i>Brachymesia furcata</i>	Red-tailed pennant	suitable habitat at the REGUA wetlands and Vecchi. Widespread, often at the lodge moth wall at night.
<i>Brachymesia herbida</i>	Tawny pennant	Gunther found us one on the big pond at Vecchi on our second visit. Apparently scarce away from the coast.
<i>Brechmorhoga nubecula</i>	Bachelorette clubskimmer	An egg-laying female at the high meadow at Tres Picos SP.
<i>Brechmorhoga praedatrix</i>	Elegant clubskimmer	Teneral individuals along the small stream on the Vecchi road.
<i>Brechmorhoga "tepeaca"</i>	Stripe-tailed clubskimmer	Michael photographed one on the Campestre de Salinas day.
<i>Dasythemis mincki</i>	Stripe-backed skimmer	Recorded in good numbers when the sun came out in the high meadow at Tres Picos SP.
<i>Dasythemis venosa</i>	Dusty skimmer	Recorded in small numbers in the forest fragment and at the start of the Green trail (REGUA).
<i>Diastatops obscura</i>	Red-tailed blackwing	Common in the Vecchi area. Small numbers recorded at REGUA when the sun came out.
<i>Dythemis nigra</i>	Blue-eyed setwing	Scattered records in lowland wetlands (eg REGUA and Vecchi).
<i>Elasmothermis cannaerioides</i>	Golden streamskimmer	Singles at the start of the Green trail (REGUA) and on the Guapi Assu river.
<i>Elga leptostyla</i>	Blue-eyed fairy	Michael saw several on the last morning on the stream at the far reaches of the fragment trail but sadly did not tell us until later.
<i>Erythemis carmelita</i>	Carmelita pondhawk	One pruinose female in well-wooded wetland edge visited briefly on the way home from our second trip to Vecchi.
<i>Erythemis credula</i>	Blue pondhawk	Recorded in small numbers at Vecchi and the old wetland at REGUA.
<i>Erythemis haematogastra</i>	Red pondhawk	Scattered records throughout lowland sites visited.
<i>Erythemis mithroides</i>	Claret pondhawk	Small numbers at REGUA and Vecchi.
<i>Erythemis peruoiana</i>	Flame-tailed pondhawk	Common and widespread in the lowlands.
<i>Erythemis plebeja</i>	Pin-tailed pondhawk	Small numbers at REGUA and Vecchi.
<i>Erythemis vesiculosa</i>	Great pondhawk	Singles on four dates in lowlands.
<i>Erythrodiplax avittata</i>	Mottled dragonlet	Common and widespread in the lowlands.
<i>Erythrodiplax castanea</i>	Leaf-hugging dragonlet	Frequently encountered at lowland sites.
<i>Erythrodiplax fusca</i>	Red-faced dragonlet	Common and very widespread.
<i>Erythrodiplax juliana</i>	Grassland dragonlet	Common around Vecchi.
<i>Erythrodiplax laurentia</i>	Silver-clouded dragonlet	Small numbers on our first sunny visit to the fragment clearing.
<i>Erythrodiplax media</i>	Black-and-blue dragonlet	One male on our first sunny visit to the fragment clearing.
<i>Erythrodiplax melanorubra</i>	Red-and-blue dragonlet	Small numbers in the high meadows at Campstre de Salinas.
<i>Erythrodiplax ochracea</i>	Ochre dragonlet	At least one on the first visit to Vecchi. Also recorded by the the team on the 6 th and 7 th .
<i>Erythrodiplax sp.</i>	Mimic dragonlet	Just one male (for Phil only?) in the

<i>Erythrodiplax paraguayensis</i>	Paraguayan dragonlet	high meadow at Tres Picos SP. One on the fishponds at Vecchi, two more on the other ponds near Vecchi on our second visit.
<i>Erythrodiplax umbrata</i>	Band-winged dragonlet	Small numbers scattered throughout lowland sites.
<i>Idiataphe amazonica</i>	Amazon pennant	A few at REGUA on just two dates.
<i>Macrothemis capitata</i>	White-fronted sylph	One of the highlights of our time in the sun at the top meadow of Tres Picos SP was this splendid species.
<i>Macrothemis declivata</i>	Racket-tailed sylph	Recorded in small numbers on the sunny visits to the forest fragment.
<i>Macrothemis hemichlora</i>	Delta-fronted sylph	Recorded in small numbers on the sunny visits to the forest fragment.
<i>Macrothemis imitans</i>	Ivory-striped sylph	Phil photographed a female in the rainforest fragment near REGUA.
<i>Macrothemis marmorata</i>	Marbled sylph	Check your photos. One photographed by Phil perched on the road at Tres Picos SP.
<i>Macrothemis musiva</i>	Delicate sylph	One female netted on the small stream on the way to Vecchi. Some saw territorial males there without securing photographs. Also seen and photographed in flight at the back of the rainforest fragment at REGUA.
<i>Macrothemis tenuis</i>	Pin-tailed sylph	Recorded in small numbers at Campestre de Salinas and Tres Picos SP.
<i>Miathyria marcella</i>	Hyacinth glider	Small swarm feeding on the road to Vecchi on our second visit. One caught. The only record.
<i>Miathyria simplex</i>	Dwarf glider	Common at REGUA and Vecchi.
<i>Micrathyria artemis</i>	Artemis dasher	REGUA and Vecchi.
<i>Micrathyria athenais</i>	Blue-grey dasher	Photographed at Tres Picos NP.
<i>Micrathyria atra</i>	Black dasher	Common at lowland ponds and lakes.
<i>Micrathyria catenata</i>	Bow-tailed dasher	Phil ended up with photos from Vecchi (20190204), but he cannot help thinking it should have been more widespread.
<i>Micrathyria hesperis</i>	Hieroglyphic dasher	Common at lowland ponds and lakes.
<i>Micrathyria hypodidyma</i>	Austral dasher	Female photographed at the forest fragment in REGUA.
<i>Micrathyria laevigata</i>	Swamp dasher	A few recorded at REGUA and nearby sites.
<i>Micrathyria ocellata</i>	Square-spotted dasher	A few recorded at REGUA and nearby sites.
<i>Micrathyria sp.</i>	Powdered dasher	Photographed at Campestre de Salinas.
<i>Micrathyria spuria</i>	Stripe-tailed dasher	One female photographed at Vecchi (20190204).
<i>Micrathyria stawiariskii</i>	Dot-tailed dasher	Several photographed at Campestre de Salinas.
<i>Nephepeltia flavifrons</i>	Glossy-fronted dryad	Small numbers daily at REGUA and Vecchi.
<i>Nephepeltia phryne</i>	Spine-bellied dryad	Small numbers daily at REGUA and Vecchi.
<i>Oligoclada abbreviata</i>	River leafsitter	Scattered records including at least two at REGUA on the periphery of the wetland.
<i>Oligoclada laetitia</i>	Laetitia leafsitter	Small numbers recorded at REGUA.
<i>Orthemis ambinigra</i>	Brown-and-red skimmer	Occasional on the moth wall at night. One photographed by Gunther and Hartwig in the rainforest fragment on

<i>Orthemis attenuata</i>	Attenuate skimmer	our last visit. Check your photos! Seen in small numbers in the fragment clearing, a very beautiful libellulid in an understated way.
<i>Orthemis cultriformis</i>	Swamp skimmer	Small numbers in the rainforest fragment and in the woods at REGUA.
<i>Orthemis discolor</i> <i>Orthemis schmidtii</i>	Carmine skimmer Red-tailed skimmer	Lowland sites around REGUA. Scarce, photographed amongst the more numerous <i>discolor</i> individuals at Vecchi and the rainforest fragment near REGUA.
<i>Pantala flavescens</i> <i>Perithemis mooma</i>	Wandering glider Pallid amberwing	Scattered records. Widespread in small numbers in lowland wetlands.
<i>Perithemis thais</i>	Broad-banded amberwing	Recorded in small numbers in the shaded ditch in the fragment clearing. Also one under the bridge over the Guapi Assu river. A really smart species.
<i>Planiplax phoenicura</i> <i>Rhodopygia cardinalis</i> <i>Rhodopygia pruinosa</i> <i>Tauriphila argo</i> <i>Tauriphila australis</i>	Guiana spiderlegs Cardinal redskimmer Dusty redskimmer Arch-tipped glider Garnet glider	Lowland sites around REGUA. Lowland sites around REGUA. REGUA and Vecchi. Lowland sites around REGUA. Michael photographed one at Vecchi. Also photographed feeding in swarms on the back edge of the rainforest fragment at REGUA on 20190208.
<i>Tauriphila xiphea</i>	White-tailed glider	Michael photographed one without alerting us on the ponds on our second visit to Vecchi.
<i>Tramea abdominalis</i>	Vermilion saddlebags	Lowland sites around REGUA and Vecchi.
<i>Tramea binotata</i> <i>Tramea calverti</i> <i>Tramea cophysa</i>	Sooty saddlebags Striped saddlebags Austral saddlebags	Commonplace in lowland wetlands. A few seen at REGUA and Vecchi. One came to light overnight at REGUA during rain.
<i>Tramea rustica</i>	Rustic saddlebags	Gunther uncovered a lovely image of a male of this species on his return home, taken at Vecchi fishponds on our first visit. The fantastic yellow-winged <i>Tramea</i> that stopped us in our tracks whilst driving to Vecchi on our second visit was probably the unknown female of this scarce species. Gunther got flight shots, Phil missed it with the net...
<i>Zenithoptera lanei</i>	Clearspot bluewing	One of the highlights of the trip. Small numbers on both visits to the Vecchi area.