**Phylogeny of World Tachinidae Project**

**Expeditions**

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**Eastern Australia, November 28 – December 18, 2013**

by James E. O’Hara, Pierfilippo Cerretti, John O. Stireman III & Isaac S. Winkler

Our quest for tachinids from different parts of the world for the “Phylogeny of World Tachinidae” project (Stireman *et al*. 2013) continued in late 2013 with a joint trip to eastern Australia. This trip was similar in its expections to the one from the year before to the Western Cape Province of South Africa (Cerretti *et al*. 2013).

We decided early on to concentrate our efforts on collecting in national parks, since these contain among the best undisturbed habitats on the continent and good access. Our time was limited so we chose a route through eastern New South Wales and southern Queensland (Fig. 1) that would encompass coastal and inland sites and habitats ranging from sand dunes to eucalypt forests to wet and dry rainforests. We also planned to split up our team, with Pierfilippo and Jim arriving first and collecting for a week in New South Wales. They would meet up with John and Isaac in Queensland and the four would collect together for the next nine days. Pierfilippo and Jim would leave and John and Isaac would continue collecting for a few more days before also departing. Collecting and export permits were arranged and other plans finalized.

What follows below is a list of sites where we collected tachinids in Australia. Some descriptive information is given about most of the sites. Images are included for many of the sites; click on the thumbnail image for a larger view.

Also given below are lists of tachinid taxa collected during our trip. This content is being added incrementally as we sort through our material and identify what we caught. We expect to see the most change taking place on the page during the first half of 2014. To see when this webpage was last updated, check the date given at the bottom of the page.

A review of this trip will appear in issue 27 of *The Tachinid Times* (2014).

[Thumb-AUS\_localities.jpg] The ten major locations where tachinids were collected in New South Wales and Queensland are shown on this map.

Total specimens collected by J.E. O’Hara: 592

3 pinned

Australia, New South Wales, Myall Lakes National Park, Dark Point, 32°35.61'S 152°16.10'E, 4m, 29.xi.2013, P. Cerretti & J.E. O’Hara

Our first four days out of Sydney were spent exploring different habitats within Myall Lakes National Park. This park is situated about 200 kilometres north of Sydney and encompasses 47,500 hectares of lakes, coastal sand dunes, wetlands, eucalypt forest, and wet and dry rainforest. We were not able to fully appreciate this phenomenally diverse park because the weather was mostly overcast and tachinids were as a consequence less conspicuous. Nevertheless, we did manage to catch some key taxa for our project.

[Thumb-Dark\_Point.jpg] Dark Point is on the coast in the southeastern part of the park. It is an area of sand dunes with pockets of vegetation. The sky was overcast and few tachinids were seen. Pierfilippo is pictured. (Photo: J. O’Hara)

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1, 17 pinned

Australia, New South Wales, Myall Lakes National Park, O’Sullivans Gap, 32°20.63'S 152°15.59'E, 28m, 29.xi.–1.xii.2013, P. Cerretti & J.E. O’Hara

O’Sullivans Gap picnic area is a flat grassy place directly off Wootton Way highway. The picnic area is part of O’Sullivans Gap Flora Reserve, which in turn is part of Myall Lakes National Park. The picnic area is dominated by towering gum trees and bordered by dense rainforest. A 30-minute trail starts and ends at the picnic area and winds through both wet and dry rainforest. The trail was so wet on the day we followed it that we had to stop every minute or two to pull land leeches from our boots to prevent them from reaching bare skin. On a drier day the leeches had mostly disappeared from the trail. The best collecting was along the edge of the forest bordering the picnic area.

At O’Sullivans Gap we were also after another fly that is not a tachinid: the enigmatic “McAlpine’s fly”, an unplaced and undescribed calyptrate fly that was discussed in a paper by Kutty *et al*. (2010). Aided by pictures and a list of characters supplied by Thomas Pape (Natural History Museum of Denmark, Copenhagen), we were successful in catching a few specimens of this special fly.

[Thumb-O'Sullivans\_Gap1.jpg] O’Sullivans Gap picnic area is a large grassy area with towering gum trees. The rainforest edge on the left was frequented by tachinids. P. Cerretti is in the background. (Photo: J. O’Hara)

[Thumb-O'Sullivans\_Gap2.jpg] A trail loops through the rainforest, starting at one end of O’Sullivans Gap picnic area and finishing at the other end. (Photo: J. O’Hara)

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6 pinned

Australia, New South Wales, Hawks Nest, 32°40.67'S 152°10.30'E, 3m, 30.xi.2013, P. Cerretti & J.E. O’Hara

Hawks Nest is a small community on the coast just south of Myall Lakes National Park. We stopped near here for a short time to collect on vegetation that was growing in sheltered pockets among the sand dunes next to the beach and ocean.

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1 pinned

Australia, New South Wales, Myall Lakes National Park, Robinsons Fire Trail, 32°36.18'S 152°14.16'E, 8m, 30.xi.2013, P. Cerretti & J.E. O’Hara

Robinsons Fire Trail is accessed from the Mungo Brush Road and runs through a eucalypt forest.

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3 pinned

Australia, New South Wales, Myall Lakes National Park, Mungo Brush Road, 32°31.91'S 152°19.31'E, 18m, 30.xi.2013, P. Cerretti & J.E. O’Hara

At this location the Mungo Brush Road runs through a small area of rainforest.

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7 pinned

Australia, New South Wales, Myall Lakes National Park, Grandis, 32°21.90'S 152°17.53'E, 14m, 1.xii.2013, P. Cerretti & J.E. O’Hara

[Thumb-The\_Grandis.jpg] At 76 m in height, this flooded gum tree (*Eucalyptus grandis*) is thought to be the tallest tree in New South Wales. Called The Grandis, it is about 400 years old and is a remnant of an old-growth forest that once existed in this area. (Photo: J. O’Hara)

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36, 70 pinned

Australia, New South Wales, New England National Park, Point Lookout, 30°29.28'S 152°24.66'E, 1480m, 2–3.xii.2013, P. Cerretti & J.E. O’Hara

New England National Park was one of the highlights of our trip. It covers an area of about 72,000 hectares but seems larger because of its proximity to several other parks and protected areas. Situated in the New England Tablelands, it is best known for the precipitous cliffs that line the Great Escarpment. One particularly scenic spot along the cliffs has been developed into Point Lookout with a parking lot, picnic areas, and trails to overlooks. Despite this development, there is still plenty of natural vegetation and tachinids treat this high cliff-side site like a hilltop.

Monty Wood (Honorary Research Associate, Canadian National Collection of Insects, Ottawa) visited Point Lookout in late December of 2005 and was quick to tell us about its extraordinary tachinid fauna. He drew from memory a map of Point Lookout showing its major landmarks and a dozen or so places where he had caught particular tachinid taxa. We had no problem finding the landmarks but interestingly we did not see many of the tachinids noted by Monty at the places where he had found them. This was unexpected because hilltopping tachinids are highly species-specific in where they aggregate and this is constant year after year unless physical changes are made to a site. We had good collecting at Point Lookout but clearly not as good as Monty, maybe because we were there about three weeks earlier in the year or Monty happened to visit during an especially “good” year for tachinids.

[Thumb-New\_Eng\_NP1.jpg] Entrance to New England National Park, “Welcome to Gondwana Rainforests of Australia”. (Photo: J. O’Hara)

[Thumb-New\_Eng\_NP2.jpg] Point Lookout is a high promontory along the Great Escarpment and overlooks an extentive area of New England National Park. It is among the best hilltopping sites for tachinids in New South Wales. (Photo: J. O’Hara)

[Thumb-New\_Eng\_NP3.jpg] Parking area of Point Lookout, New England National Park. The small tree in the left foreground was frequented by several tachinid taxa (e.g., *Tritaxys tasmaniae* (Walker) and *Chaetophthalmus* spp.). (Photo: J. O’Hara)

[Thumb-New\_Eng\_NP4.jpg] A few males of *Senostoma* sp. were captured on tree trunks along the short trail that links the two main lookout points and parking area of Point Lookout. (Photo: J. O’Hara)

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9 pinned

Australia, New South Wales, New England National Park, Banksia Point, 30°29.56'S 152°24.42'E, 1440m, 3.xii.2013, P. Cerretti & J.E. O’Hara

Banksia Point is a short drive down the road from Point Lookout. Here exists a stand of Antarctic beech (*Nothofagus moorei*), a remnant of a cool temperate rainforest dating back to the supercontinent Gondwana when South America and Australia were physically and ecologically joined via Antarctica. The Antarctic beech forests of New England National Park are part of the Gondwana Rainforests of Australia World Heritage Area.

[Thumb-Beech\_forest1.jpg] Antarctic beech (*Nothofagus moorei*) forest near Banksia Point. (Photo: J. O’Hara)

[Thumb-Beech\_forest2.jpg] Fallen and mossed covered trees in Antarctic beech forest. (Photo: J. O’Hara)

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34 pinned

Australia, New South Wales, Cunnawarra National Park, hilltop, 30°40.76'S 152°12.34'E, 720m, 4.xii.2013, P. Cerretti & J.E. O’Hara

We were following the Armidale-Kempsey dirt road and came upon a hillside that our GPS map showed leading to a prominent hilltop. There was a steep off-road trail leading up the hill and we followed it on foot. The slope flattened out in places and here tachinids were accumulating, including hovering *Rutilia*, as if we were on a mini-hilltop. The summit had been cleared and sported three tall concrete towers bearing power lines. We caught some tachinids that landed on the sides of the towers (e.g., *Chetogaster violacea* Macquart and *Palpostoma* sp.) and from vegetation on the edge of the summit.

[Thumb-Cunnawarra\_NP.jpg] Pierfilippo stalks a hovering *Rutilia* sp. on a high point along the track leading to a prominent hilltop. (Photo: J. O’Hara)

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10 pinned

Australia, New South Wales, New England National Park, Bashers Road, 30°29.56'S 152°24.42'E, 1000m, 4.xii.2013, P. Cerretti & J.E. O’Hara

[Thumb-Bashers\_Road.jpg] Sandy track through the eucalypt forest. (Photo: J. O’Hara)

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10 pinned

Australia, New South Wales, Mount Lindesay Hwy., near Queensland border, 28°20.13'S 152°41.07'E, 530m, 5.xii.2013, P. Cerretti & J.E. O’Hara

[Thumb-Mt\_Lindesay\_Hwy.jpg] Grassy track through the forest along Mount Lindesay Hwy. (Photo: J. O’Hara)

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3 pinned

Australia, Queensland, O’Reilly’s Rainforest Retreat, 28°13.87'S 153°08.21'E, at light, 930m, 5.xii.2013, P. Cerretti & J.E. O’Hara

Lamington National Park is divided into the western Green Mountains Section and eastern Binna Burra Section. Both require a significant drive from the nearest towns and thus the best option, if one can afford it, is to seek accommodation within the park. This we did for one night, booking a room in O’Reilly’s Rainforest Retreat deep within the Green Mountains Section of the park. The Retreat is on private land but is surrounded on all sides by Lamington National Park. Our decision to stay at the Retreat paid off as it allowed us to collect some specimens of a nocturnal tachinid (*Palpostoma* sp.) at lights after dark.

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15 pinned

Australia, Queensland, Lamington National Park, along park road, 28°13.53'S 153°07.70'E, 890m, 6.xii.2013, P. Cerretti & J.E. O’Hara

We had only a morning of collecting at Lamington National Park because we were due in Brisbane later that day. This meant that we were confined to shorter hikes in the vicinity of O’Reilly’s Rainforest Retreat and along the Lamington National Park Road. The rainforest was the most awe-inspiring we had seen so far but this was not matched by high numbers of tachinids and in the end we left the park with fewer key taxa than we had hoped for.

[Thumb-Lamington\_NP1.jpg] Pierfilippo and Jim at the beginning of a trail in Lamington National Park. (Photo: J. O’Hara)

[Thumb-Lamington\_NP2.jpg] A densely forested trail in Lamington National Park. (Photo: J. O’Hara)

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5 pinned

Australia, Queensland, D’Aguilar National Park, Scrub Road, 27°25.65'S 152°50.48'E, 230m, 7.xii.2013, P. Cerretti & J.E. O’Hara

Scrub Road, a gated track, runs south through a eucalypt forest to a remote campsite about 4 km from Mount Nebo Road (Hwy. 31). Our destination was about 1.5 km down Scrub Road where the eucalypt forest changes to rainforest along the course of a small stream. Despite the appearance of good habitat, tachinids were exceedingly scarce.

[Thumb-D’Aguilar\_Scrub.jpg] Creek about 1.5 km down Scrub Road from the main Mount Nebo Road (Hwy. 31). (Photo: J. O’Hara)

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12 pinned

Australia, Queensland, D’Aguilar National Park, Jolly’s Lookout, 27°23.99'S 152°48.40'E, 490m, 7.xii.2013, P. Cerretti & J.E. O’Hara

D’Aguilar National Park is a narrow strip of parkland that straddles the rugged D’Aguilar Range and extends southeastward into the city of Brisbane. Despite its proximity to the city and its well-groomed lookouts and picnic areas, it is still home extensive tracts of natural eucalypt forest and rainforest. Running through the South D’Aguilar Section of the park is Mount Nebo Road. After collecting along Scrub Road we drove northwestward along Mount Nebo Road stopping

along the way at lookouts and other promising-looking places. Jolly’s Lookout was the best of these for tachinids, attracting some hilltopping species.

John and Isaac reached Brisbane on this day and within hours started collecting in the Mount Mee Section of the park. The four of us would meet that evening at a motel in the small town of Kilcoy, a few hours’ drive from our next destination, Bunya Mountains National Park.

[Thumb-D’Aguilar\_Jolly’s.jpg] Jolly’s Lookout, a popular destination for tourists and residents of nearby Brisbane. (Photo: J. O’Hara)

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1 pinned

Australia, Queensland, D’Aguilar National Park, Boombana, 27°24.13'S 152°47.55'E, 490m, 7.xii.2013, P. Cerretti & J.E. O’Hara

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1 pinned

Australia, Queensland, D’Aguilar National Park, Westridge Lookout, 27°21.82'S 152°45.58'E, 500m, 7.xii.2013, P. Cerretti & J.E. O’Hara

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30 pinned, AUS001, 002, 004, ISAU01

Australia, Queensland, D’Aguilar National Park, Somerset Lookout, 27°05.475'S 152°39.803'E, 7.xii.2013, J.O. Stireman & I. Winkler

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None pinned, ISAU02

Australia, Queensland, D’Aguilar National Park, Western Escarpment Forest Drive, at creek, 27°06.012'S 152°40.397'E, 7.xii.2013, J.O. Stireman & I. Winkler

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2 pinned, AUS005, 006-alc, ISAU03

Australia, Queensland, D’Aguilar National Park, Mill Rainforest Walk, creek below car park, 27°04.830'S 152°42.497'E, 7.xii.2013, J.O. Stireman & I. Winkler

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13 pinned

46 pinned, AUS008-017, ISAU04

Australia, Queensland, Bunya Mountains National Park, Mt. Kiangarow & trail, 26°49.87'S 151°32.93'E, 1150m, 8.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

Bunya Mountains National Park covers about 12,000 hectares and encompasses most of the Bunya Mountains. This isolated portion of the Great Dividing Range is northwest of Brisbane and about 150 kilometres inland from the coast. In addition to its eucalypt and rainforest habitats, this park is especially noted for its bunya pines (*Araucaria bidwillii*) with dome-shaped crowns (and near-lethal 10-kilogram cones the size of watermelons) and unusual-looking grass trees (*Xanthorrhoea glauca glauca*).

[Thumb-Mt.\_Kiangarow1.jpg] Peculiar-looking grass trees sporting long flower spikes are common on the summit of Mt. Kiangarow. (Photo: J. O’Hara)

[Thumb-Mt.\_Kiangarow2.jpg] View westward from the summit of Mt. Kiangarow. This mountain peak is the tallest in the Bunya Mountains range. (Photo: J. O’Hara)

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3 pinned

7 pinned, AUS019, 020, 023, ISAU05

Australia, Queensland, Bunya Mountains National Park, near Westcott camping area, 26°51.8'S 151°34.3'E, 1070m, 8.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

Throughout the Bunya Mountains are small areas of natural grassland known as ‘balds’. These balds are recognized as forming an ecologically sensitive and endangered ecosystem that harbours a fragile fauna and flora.

[Thumb-Bunya\_Westcott1.jpg] This is one of many ‘balds’ within Bunya Mountains National Park. John is pictured to the left. (Photo: J. O’Hara)

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2 pinned

Australia, Queensland, outside Bunya Mountains National Park, near Dandabah, 26°52.74'S 151°36.26'E, 1000m, 8.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

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5 pinned

8 pinned, AUS018-alc, 021, 022

Australia, Queensland, outside Bunya Mountains National Park, near Dandabah, 26°52.74'S 151°36.26'E, at light, 1000m, 8–9.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

We spent two nights in a remarkably affordable fully-equipped cottage on the edge of Bunya Mountains National Park. At night, nocturnal tachinids were attracted to the outdoor lights of our cottage.

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17 pinned

Australia, Queensland, Bunya Mountains National Park, trail from Westcott camping area, 26°52.0'S 151°34.2'E, 1070m, 9.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

[Thumb-Bunya\_Westcott2.jpg] Trail near Westcott camping area. (Photo: J. O’Hara)

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pan traps, 1 pinned, AUS025-028, ISAU06

13 pinned, AUS029, 037, 038 [add spaces]

Australia, Queensland, Bunya Mountains National Park, Koondaii Lookout, 26°51.74'S 151°33.70'E, 9.xii.2013, J.O. Stireman & I. Winkler

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25 pinned

26 pinned, AUS030, 039, [add space] ISAU07 [as Paradise Rainforest, 26°52.38'S, 151°34.82'E]

Australia, Queensland, Bunya Mountains National Park, trail to Little Falls, 26°52.3'S 151°34.7'E, 1040m, 9.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

A trail through beautiful rainforest leads to several waterfalls and lookouts.

[Thumb-Little\_Falls1.jpg] An emergent bunya pine (*Araucaria bidwillii*) towers over the surrounding rainforest. (Photo: J. O’Hara)

[Thumb-Little\_Falls2.jpg] Despite the dense undergrowth in sunny spots along the rainforest trail, tachinids were not common. (Photo: J. O’Hara)

[Thumb-Little\_Falls3.jpg] John braves icy water at the base of Little Falls to sweep flies from the vegetation. (Photo: J. O’Hara)

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16 pinned, AUS031-034,040-041, ISAU08

Australia, Queensland, Bunya Mountains National Park, Mt. Kiangarow, 26°49.83'S 151°32.94'E, 9.xii.2013, J.O. Stireman & I. Winkler

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1 pinned, AU035

Australia, Queensland, Mt. Moffat Road, northwest of Injune, 25°17.45'S 148°0.33'E, 10.xii.2013, P. Cerretti, J.O. Stireman & I. Winkler

Injune is the last town on the way to the Mt. Moffatt section of Carnarvon National Park. The route from Injune to the park is about 120 kilometres, much of it a consisting of a well-maintained dirt road. Although the road is not a problem when dry, it can become impassable for days at a time after especially heavy rains. Both of our vehicles were 4WD and one had a 150-litre gas tank to give us an added sense of security and greater range while in the park.

[Thumb-Mt\_Moffatt\_Rd.jpg] A white refrigerator marks the spot where we stopped briefly to check for tachinids. (Photo: J. O’Hara)

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1 pinned [10.xii]

1 pinned [10.xii]

1 pinned [11.xii]

1 pinned [12.xii]

7 pinned [13.xii]

Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, barracks, 25°01.23'S 147°57.13'E, at light, 730m, 10–13.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

Carnarvon National Park was our most anticipated destination and the one at which we were hoping for the greatest tachinid diversity. The park did not disappoint. It is located about 600 kilometres northwest of Brisbane in the Central Queensland Sandstone Belt. Vast in size – almost 300,000 hectares – the park is also exceptionally diverse ecologically. It is divided into two sections, the remote western Mt. Moffatt Section and the popular eastern Carnarvon Gorge Section. Our primary interest was in the former because of its status as the best tachinid hilltopping location in Australia. This section of the park does not attract a lot of visitors and we did not seeing other people here except for rangers during our five-day stay.

We gladly accepted the offer of Greg Keith, Ranger in Charge of Mt. Moffatt Section, to stay in the well-equipped barracks next to the ranger’s house during our visit to this section of the park. This was the same place where Jim stayed during his visit to Carnarvon in 2002, although the barracks have since been enlarged.

[Thumb-Carn\_Barracks.jpg] The barracks, our base of operations for five days. (Photo: J. O’Hara)

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84 pinned

145 pinned, AU045-067

161 pinned

Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, “Fly Hill”, summit, 24°58.36'S 147°59.63'E, 900m, 11.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler; also 13.xii.2013, J.E. O’Hara

This small conical hill, barely visible from the nearest road a kilometre away, got is name when ranger Craig Eddy noted the abundance of flies at its summit in 2002 and nicknamed it Fly Hill. Dipterists visiting the park in October of the same year followed-up on this observation by collecting on Fly Hill and discovered it to be the best tachinid hilltopping site they had ever visited (see Hansen 2003, O’Hara 2003, O’Hara *et al*. 2004). It was again remarkably diverse in 2013, but not to the same extent as in 2002. Fly Hill was visited on December 11th by the four of us and on December 13th by Jim alone (the others spending the 13th on Mt. Moffatt).

[Thumb-Carn\_Fly\_Hill1.jpg] The pointed summit of Fly Hill, one kilometre away, can be glimpsed from a park road through the open eucalypt forest. (Photo: J. O’Hara)

[Thumb-Carn\_Fly\_Hill2.jpg] View westward from the small, sparsely-vegetated summit of Fly Hill. Each scrub, cactus and tree was visited by a particular set of tachinid species. (Photo: J. O’Hara)

[Thumb-Carn\_Fly\_Hill3.jpg] Pierfilippo and Isaac examine a tachinid in Isaac’s net while John captures rutiliine tachinids on a tree trunk downslope. (Photo: J. O’Hara)

[The following are moved to here from 13.xii.2013]

[Thumb-Carn\_Fly\_Hill4.jpg] View southward from summit. (Photo: J. O’Hara)

[Thumb-Carn\_Fly\_Hill5.jpg] Pinned tachinids and other insects caught by Jim on 13.xii.2013, mostly from the summit of Fly Hill. (Photo: J. O’Hara)

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10 pinned

Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, trail to The Tombs, 25°05.2'S 147°52.0'E, 12.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

The sandstone bluff known as The Tombs was used by Aboriginal people as a burial site for their dead for thousands of years. The human remains have been plundered from the site, but the area continues to be sacred to the Aboriginal people. We followed a marked trail through the area but the day was overcast with periods of light rain and few tachinids were seen.

[Thumb-Carn\_The\_Tombs.jpg] Known as The Chimneys, the three sandstone pillars pictured here are a distinctive landmark along the trail to The Tombs. (Photo: J. O’Hara)

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1 pinned

Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, 25°02.66'S 147°54.12'E, blacklight on road, 700m, 12.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

[Thumb-Carn\_blacklight.jpg] Blacklighting along the park road produced few tachinids. Much better was collecting at the barrack’s outdoor lights at night. (Photo: J. O’Hara)

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9 pinned

Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, hilltop west of road, 24°59.04'S 147°57.69'E, 940m, 13.xii.2013, J.E. O’Hara

[Thumb-Carn\_hill.jpg] Mixed vegetation on slope leading to hilltop. (Photo: J. O’Hara)

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~~161 pinned~~

~~Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, “Fly Hill”, summit, 24°58.36'S 147°59.63'E, 900m, 13.xii.2013, J.E. O’Hara~~

~~[Thumb-Carn\_Fly\_Hill4.jpg] View southward from summit. (Photo: J. O’Hara)~~

~~[Thumb-Carn\_Fly\_Hill5.jpg] Pinned tachinids and other insects caught by Jim on 13.xii.2013, mostly from the summit of Fly Hill. (Photo: J. O’Hara)~~

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3 pinned

Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, route to “Fly Hill”, 24°58.04'S 147°59.60'E, 900m, 13.xii.2013, J.E. O’Hara

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1 pinned

Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, Mount Moffatt, summit, 25°03.47'S 148°02.66'E, 1060m, 13.xii.2013, P. Cerretti, J.O. Stireman & I. Winkler

[Thumb-Carn\_Moffatt.jpg] Mt. Moffatt rises high above the surrounding eucalypt forest. (Photo: J. O’Hara, 2002)

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3 pinned

Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, Top Shelter Shed, 24°54.57'S 148°02.55'E, 1220m, 14.xii.2013, P. Cerretti, J.E. O’Hara & I. Winkler

Top Shelter Shed is located high on a plateau, the Consuelo Tableland.

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9 pinned

Australia, Queensland, Carnarvon National Park, Mt. Moffatt Section, Mahogany Forest, 24°55.54'S 148°03.85'E, 1215m, 14.xii.2013, P. Cerretti, J.E. O’Hara & I. Winkler

Cool and moist conditions support the lush Mahogany Forest, which is also located on the Consuelo Tableland.

[Thumb-Carn\_Mahogany.jpg] The Mahogany Forest is thickly carpeted with tall grasses. Sweeping for flies was particularly rewarding. (Photo: J. O’Hara)

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11 pinned

Australia, Queensland, Carnarvon National Park, Carnarvon Gorge trail, 25°02.7'S 148°12.2'E, 470m, 15.xii.2013, P. Cerretti, J.E. O’Hara, J.O. Stireman & I. Winkler

The eastern portion of Carnarvon National Park, the Carnarvon Gorge Section, is popular among tourists because of easy access, good trails, and spectacular views. There are surely many tachinids here but without clear aggregation sites they are hard to find, at least with only one day of collecting available. Jim and Isaac spent the day collecting deep into the Gorge along the main trail, whereas Pierfilippo and John went first to Boolimba Bluff before also collecting along the Gorge trail. There was hope that Boolimba Bluff would be a perfect spot for hilltopping tachinids but it proved disappointingly unattractive to tachinids.

[Thumb-Carn\_Gorge1.jpg] Carnarvon Gorge fan palms (*Livistona nitida*) line parts of the trail through the Gorge. (Photo: J. O’Hara)

[Thumb-Carn\_Gorge2.jpg] Two tachinids rest on the underside of a rock surface. The long-legged one on the right is *Senostoma* sp. (Dexiini). The dark-winged one on the left eluded capture and was not identified. (Photo: J. O’Hara)

[Thumb-Carn\_Gorge3.jpg] A side canyon leads to the sheltered and scenic Moss Garden. (Photo: J. O’Hara)

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1 pinned

Australia, Queensland, Tin Can Bay, motel, 25°55.53'S 153°00.58'E, at light, J.O. Stireman & I. Winkler

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7 pinned, AUS136

Australia, Queensland, Great Sandy National Park, Carlo Sandblow, 25°54.84'S 153°05.91'E, 17.xii.2013, J.O. Stireman & I. Winkler

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26 pinned, AUS135, 137

Australia, Queensland, Great Sandy National Park, Bymien Picnic Area, 25°57.25'S 153°06.27'E, 17.xii.2013, J.O. Stireman & I. Winkler

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59 pinned, AUS138, 147-154, 158, 162-163

Australia, Queensland, Tewantin National Park, Mt. Tinbeerwah, 26°23.41'S 152°58.53'E, 18.xii.2013, J.O. Stireman & I. Winkler

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3 pinned, pan traps

Australia, Queensland, Conondale National Park, Booloumba Creek, campground, 26°38.37'S 152°38.78'E, 18–19.xii.2013, J.O. Stireman & I. Winkler

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4 pinned, caddisfly vials

Australia, Queensland, Conondale National Park, Booloumba Creek, campground, 26°38.37'S 152°38.78'E, at light, 18.xii.2013, J.O. Stireman & I. Winkler

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102 pinned, AUS139-146, 155-157, 159-161

Australia, Queensland, Conondale National Park, Mt. Allan, 26°38.39'S 152°38.07'E, 19.xii.2013, J.O. Stireman & I. Winkler

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