

## **Biodiversity Observations**

http://bo.adu.org.za



### An electronic journal published by the Animal Demography Unit at the University of Cape Town

The scope of Biodiversity Observations consists of papers describing observations about biodiversity in general, including animals, plants, algae and fungi. This includes observations of behaviour, breeding and flowering patterns, distributions and range extensions, foraging, food, movement, measurements, habitat and colouration/plumage variations. Biotic interactions such as pollination, fruit dispersal, herbivory and predation fall within the scope, as well as the use of indigenous and exotic species by humans. Observations of naturalised plants and animals will also be considered. Biodiversity Observations will also publish a variety of other interesting or relevant biodiversity material: reports of projects and conferences, annotated checklists for a site or region, specialist bibliographies, book reviews and any other appropriate material. Further details and guidelines to authors are on this website.

Lead Editor: Arnold van der Westhuizen – Guest Editor: K-D B Dijkstra

### SHOOT THE DRAGONS WEEK, ROUND 1: ODONATAMAP GROWS BY 1,200 RECORDS

Les G Underhill, Alan D Manson, Jacobus P Labuschagne and Ryan M Tippett

Recommended citation format:

**Underhill LG, Manson AD, Labuschagne JP, Tippett RM** 2016. Shoot the Dragons Week, Round 1: OdonataMAP grows by 1,200 records. Biodiversity Observations 7.100: 1–14.

URL: <a href="http://bo.adu.org.za/content.php?id=293">http://bo.adu.org.za/content.php?id=293</a>

Published online: 27 December 2016



#### **PROJECT REPORT**

# SHOOT THE DRAGONS WEEK, ROUND 1: ODONATAMAP GROWS BY 1,200 RECORDS

Les G Underhill<sup>1\*</sup>, Alan D Manson<sup>2</sup>, Jacobus P Labuschagne<sup>3</sup> & Ryan M Tippett<sup>4</sup>

- <sup>1</sup> Animal Demography Unit, Department of Biological Sciences, University of Cape Town, Rondebosch, 7701 South Africa
- <sup>2</sup> Soil Fertility Research, KwaZulu-Natal Department of Agriculture and Rural Development, Private Bag X9059, Pietermaritzburg, South Africa

<sup>3</sup> PO Box 129, Jukskeipark, 2188 South Africa

<sup>4</sup> Ukuhamba Guiding, PO Box 533, Hluhluwe, 3960 South Africa

\* Email: les.underhill@uct.ac.za

#### INTRODUCTION

"Shoot the Dragons Week" is for OdonataMAP what the "LepiBash Week" was for LepiMAP (Loftie-Eaton 2016). They were both nine-day periods of focused data collection for the sections of the ADU Virtual Museum for Odonata (dragonflies and damselflies) and for Lepidoptera (butterflies and moths) respectively.

OdonataMAP aims to atlas the dragonflies and damselflies of Africa, and especially southern Africa (Underhill et al. 2016). The importance of the Odonata is highlighted in many places, and most recently in Samways & Simaika (2016). At the end of June this year, the project had assembled 22,809 records of Odonata from 31 countries in Africa (Underhill et al. 2016). On 25 November, this number had grown to 25,120 records from 33 countries.

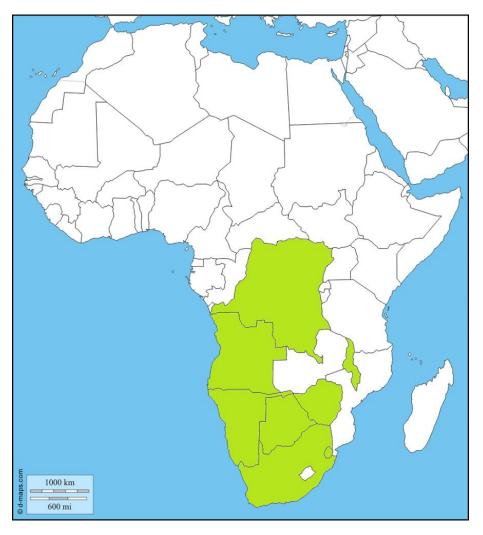


Figure 1. The eight countries in Africa from which records were submitted to OdonataMAP during Shoot the Dragons Week, 26 November to 5 December 2016 Angola, Botswana, Democratic Republic of Congo, Malawi, Namibia. South Africa, Swaziland and Zimbabwe



The first "Shoot the Dragons Week" was held from Saturday 26 November to Sunday 4 December, a period designed to include two weekends. We allowed citizen scientists to continue adding records to the database on Monday 5 December. The objective of the Shoot the Dragons Week was to boost the number of records entering the OdonataMAP database, and to increase awareness of the project. This is the report back on what was achieved during the week.

#### **RESULTS**

1,200 records were submitted during the Shoot the Dragons Week by 61 participants. 21 citizen scientists (or groups of citizen scientists) contributed 25 or more records (Table 1). Jean Hirons, second on the list, Katharina Reddig, fifth, and Christopher Hines, number 11, all submitted their first records to OdonataMAP during the week. The database increased from 25,120 records at the beginning of Shoot the Dragons Week to 26,320 records at the end, an increase in the size of the database of 4.8%.

Records were submitted from eight countries: Angola, Botswana, Democratic Republic of Congo, Malawi, Namibia, South Africa, Swaziland and Zimbabwe (Figure 1). Records were submitted from all the provinces of South Africa (Figure 2).

Of the 1,200 records submitted, 1,158 had confirmed identifications by members of the expert panel (AM, RT, JL and Bertie Brink) by 27 December, three weeks after the event (Appendix 1). 1,101 records were identified to species level, and there were representatives of 116 species. There were more than 50 records for three species: Redveined Dropwing *Trithemis arteriosa* had 103 records, Broad Scarlet *Croceothemis erythraea* had 68 and the Tropical Bluetail *Ischnura senegalensis* had 55. Two records could only be identified to family level; they belonged to the Coenagrionidae. 57 records were identified to genus; of these 24 belonged to the notoriously difficult genus

Pseudagrion (sprites) and 23 to the equally difficult genus *Trithemis* (dropwings) (Appendix 1).

While the expert panel were doing the identifications, they picked out a small sample of records which they thought were interesting. This is not a systematic survey of the most important records submitted.

Table 1. Citizen scientists, some of whom worked in groups, who submitted 25 or more records during the Shoot the Dragons Week from 26 November to 5 December 2016.

	Name	Records
1	Jacobus (Lappies) Labuschagne	104
2	Jean Hirons	83
3	Corrie du Toit	82
4	Sharon Basel	65
5	Katharina Reddig	61
6	Christopher Peter Small	59
7	Desire Darling; Gregg Darling	58
8	Andries Petrus de Vries; Joey de Vries	57
9	John H. Wilkinson	46
10	Helena Coetzee	42
11	Christopher Hines	40
12	Bertie Brink	39
13	Basil Boer; Corne Rautenbach; Sharon Stanton; Wilna Steenkamp; Corrie du Toit; Heleen Louw; Antionio Serrao	38
14	Rick Nuttall	36
15	Gregg Darling; Des Darling	31
16	Altha Liebenberg	31
17	Riëtte Griesel	30
18	Maritza van Rensburg	30
19	Alicia Culverwell	25
20	Dawie Kleynhans; Sarieta Kleynhans	25
21	Ryan Matthew Tippett	25



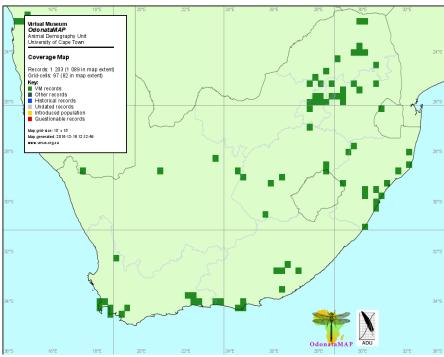


Figure 2. The distribution of records received for South Africa and Swaziland during the Shoot the Dragons Week of the OdonataMAP project, 26 November to 5 December 2016. The shaded quarter degree grid cells had records submitted from them.

All except five of the 45 OdonataMAP records for Angola have been submitted by Christopher Hines. Record OdonataMAP 26628 (<a href="http://vmus.adu.org.za/?vm=OdonataMAP-26628">http://vmus.adu.org.za/?vm=OdonataMAP-26628</a>) is a Forest Elf Tetrathemis camerunensis (Figure 3) from the province of Bengo, in Angola, submitted by Christopher Hines (in 11th place in Table 1). This is the first photographic record of the species in OdonataMAP. The distribution map (Figure 4), uses the 312 records in the Odonata Database of Africa (ODA), and shows that Christopher's record is not



Figure 3. This Forest Elf Tetrathemis camerunensis submitted from Angola by Christopher Hines is the southernmost record for this species (see Figure 4) (more detail at http://vmus.adu.org.za/?vm=OdonataMAP-26628).

only the first for Angola, it is also the southernmost record ever for the species. The ODA database is managed by Jens Kipping and can be accessed through African Dragonflies and Damselflies Online (ADDO; <a href="http://addo.adu.org.za">http://addo.adu.org.za</a>), a website created by Dr K-D Dijkstra, Stellenbosch University, supported by the JRS Biodiversity Foundation and hosted by the ADU.

The Bottletail *Olpogastra lugubris* is a tropical species. Prior to Shoot the Dragons Week, there are only four OdonataMAP records of this species from South Africa in the database. Another two (records 25579 and 26337, <a href="http://vmus.adu.org.za/?vm=OdonataMAP-25579">http://vmus.adu.org.za/?vm=OdonataMAP-25579</a> and <a href="http://vmus.adu.org.za/?vm=OdonataMAP-26337">http://vmus.adu.org.za/?vm=OdonataMAP-26337</a> were submitted by John Wilkinson during Shoot the Dragons Week, including this fantastic photo of a female in flight (Figure 5). John's home base is



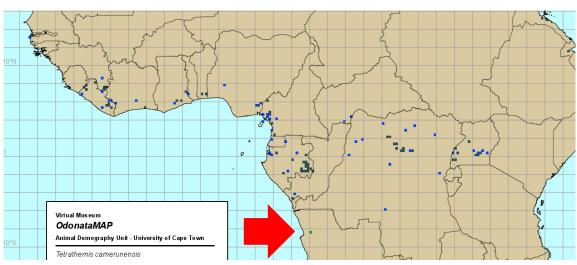


Figure 4. Forest Elf Tetrathemis camerunensis distribution map. This maps was generated on the ADDO website from the ODA database (see text for details)

near Tshipise, in Limpopo Province, and this is a fantastic place to see many of the tropical odonates which are seldom recorded elsewhere in South Africa. John has submitted a total of 785 records to OdonataMAP.

The rains fell in Katanga, in the Democratic Republic of Congo, just in time for Bertie Brink to "Shoot the Dragons" and just in time for him to return to South Africa to submit them during "Shoot the Dragons Week". His trophies included eight species which have no previous records in OdonataMAP, and several of them have relatively small numbers of records in ODA. The Band-eyed Citril

Figure 5. Bottletail
Olpogastra lugubris in
flight. The photographer
was John Wilkinson,
Tshipize, Limpopo (see
http://vmus.adu.org.za/?vm
=OdonataMAP-25579
for details)

Ceriagrion banditum has only 23 records from eight quarter degree grid cells in ODA and this is the first photographic record in OdonataMAP (Figure 6, <a href="http://vmus.adu.org.za/?vm=OdonataMAP-26013">http://vmus.adu.org.za/?vm=OdonataMAP-26013</a>). The importance of this record is further underlined by the fact that it was one of the 60 newly described species in Dijkstra et al. (2015), and is the first record after those made at the time of the discovery of the species.

Record 26253 in OdonataMAP (for the details see <a href="http://vmus.adu.org.za/?vm=OdonataMAP-26253">http://vmus.adu.org.za/?vm=OdonataMAP-26253</a>) is a Stream Hawker *Pinheyschna subpupillata* submitted by Walter Neser (Figure 7). This is a common species, occurring in South Africa, Swaziland and Lesotho. It spends a lot of time flying







Figure 6. Band-eyed Citril Ceriagrion banditum was photographed in Katanga Province, Democratic Republic of Congo, by Bertie Brink (see <a href="http://vmus.adu.org.za/?vm=OdonataMAP-26013">http://vmus.adu.org.za/?vm=OdonataMAP-26013</a>).

(Tarboton & Tarboton 2015) so it is a difficult species to photograph. There are thus fewer records in OdonataMAP than anticipated, given its abundance. The striking aspect of this record is that it is from 1986, 14 January 1986 to be precise. The photograph was taken by Johan Kritzinger, originally as a 35°mm colour slide, which Walter has

digitized. It is also the first record in OdonataMAP, of any odonate, for the quarter degree grid cell 2529CC. This is in Limpopo, on the border with Mpumalanga, to the west of the town of Lydenburg. It is a poorly surveyed grid cell in the ADU Virtual Museum; it has only two records in FrogMAP, four in LepiMAP, one in MammalMAP, seven in PHOWN





Figure 7. Stream Hawker Pinheyschna subpupillata photographed by Johan Kritzinger as a 35 mm colour slide on 14 January 1986,, digitalized in 2016 by Walter Neser and submitted by him as OdonataMAP record 26253 (see <a href="http://vmus.adu.org.za/?vm=OdonataMAP-26253">http://vmus.adu.org.za/?vm=OdonataMAP-26253</a> for more details).

and 11 in ReptileMAP (Virtual Museum website, http://vmus.adu.org.za).

Walter says: "I have been scanning my slide collection, turning photos into digital images, and entering the data into the Virtual Museum. Most of my collection is submitted now, but I am still working on getting accurate locations and dates for some slides. I can potentially offer to scan the slides of other contributors who have collections which are not getting into the Virtual Museum. My system uses my slide projector and digital camera; I have solved the colour issues and I can easily do



Figure 8. Yellowjack Longleg Notogomphus praetorius. Photographed by JPL at the Ezemvelo Nature Reserve, eastern Gauteng (see Figure 9) (Details of the record at <a href="http://vmus.adu.org.za/?vm=OdonataMAP-26121">http://vmus.adu.org.za/?vm=OdonataMAP-26121</a>).

over 1000 slides a day including capturing the data on the slide frames into a bulk upload spreadsheet." Thanks, Walter, that is a fantastic offer.



The link between Johan Kritzinger and Walter was that they were school friends, and birded together from their primary school years, and then through high school and beyond. In modern terms, they were BioBashers. When Johan moved to Scotland, Walter was entrusted with his slides, and now they are becoming permanent records of biodiversity information in the ADU Virtual Museum. Thanks, Walter, that is an awesome example for all of us.

JPL, co-author of this report, is chief administrator of the Facebook group called Dragonflies and Damselflies of Southern Africa (<a href="https://www.facebook.com/groups/dragonflies.damselflies.southern.">https://www.facebook.com/groups/dragonflies.damselflies.southern.</a>
Africa). He was the leading contributor to Shoot the Dragons Week (Table 1). His best find in the week was a Yellowjack Longleg Notogomphus praetorius in quarter degree grid cell 2528DB on the Ezemvelo Nature Reserve at the eastern boundary of Gauteng (<a href="http://vmus.adu.org.za/?vm=OdonataMAP-26121">http://vmus.adu.org.za/?vm=OdonataMAP-26121</a>) (Figure 8). The only other record of this species in Gauteng was made near Krugersdorp six decades ago on 23 January 1955, and is preserved in the Ditsong National Museum of Natural History in Pretoria (<a href="http://vmus.adu.org.za/?vm=OdonataMAP-257749">http://vmus.adu.org.za/?vm=OdonataMAP-257749</a>). The closest recent records were made near Dullstroom in Mpumalanga (Figure 9).

Katharina Reddig (fifth position in Table 1) submitted 62 records from Namibia, many from the desert area just inland of Swakopmund. She reports: "Dragonflies are not at all often recorded here along the desert coastline. Most of my photographs were made on hot days with an easterly wind, when they are blown towards the coast from somewhere inland. However, I have found a place with a tiny permanent waterhole in the Namib Desert, where Broad Scarlets *Crocothemis erythraea* and Epaulette Skimmers *Orthetrum chrysostigma* are abundant. In June this year, 2016, the Namib Desert had a really good rainshower of about 50 mm. This is very unusual in winter but the dragonflies just seemed to arrive out of nowhere in a short time. The Namibian dragonfly guide, Suhling & Martens (2007),

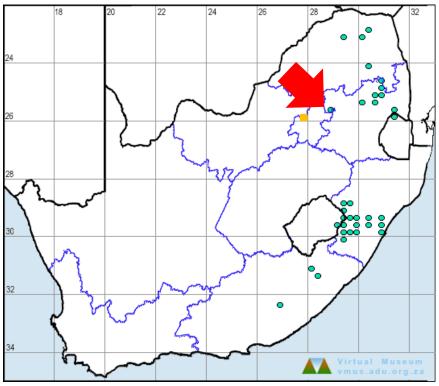


Figure 9. OdonataMAP distribution for the Yellowjack Longleg
Notogomphuds praetorius. The red arrow points to JPL's record at
Ezemvelo Nature Reserve during Shoot the Dragons Week.
(http://vmus.adu.org.za/?vm=OdonataMAP-26121) The orange rectangle
represents the position of the 1955 museum specimen of the species
from Krugersdorp. The new record helps confirm the 1955 record.

does not show the Blue Basker *Urothemis edwardsii* and Silhouette Dropwing *Trithemis hecate* as being recorded near Swakopmund."

Katharina also submitted an important but frustrating record of a wisp, from the genus *Agriocnemis* (Figure 10). Three species of wisp occur in Namibia; two are thought to be restricted to the Caprivi area of





Figure 10. The wisp (Agriocnemis sp.) photographed near Swakopmund in Namibia by Katharina Reddig. It is most likely a Little Wisp Agriocnemis exilis, but wisps are difficult to identify with certainty from photographs (details at http://vmus.adu.org.za/?vm=OdonataMAP-26538).

northern Namibia (Suhling & Martens 2007). The third species, Little Wisp *Agriocnemis exilis* is widespread in tropical Africa, and is generalist with respect to habitat. One of Katharina's Shoot the Dragons Week submissions was a wisp from Swakopmund: <a href="http://vmus.adu.org.za/?vm=OdonataMAP-26538">http://vmus.adu.org.za/?vm=OdonataMAP-26538</a>. It is most likely to be a Little Wisp; however wisps are difficult to identify with certainty from photographs, and there is not yet a definite record of a Little Wisp in OdonataMAP. Other factors also contribute to poor coverage of the

wisps: this group contains some of the smallest African odonates; they often hide in flooded grass or sedges – they are thus hard to find and difficult to photograph.

Of all the records submitted from South Africa during Shoot the Dragons Week, Selwyn Quan's record of an Evening Hawker *Anaciaeschna triangulifera* is probably the most remarkable and interesting (<a href="http://vmus.adu.org.za/?vm=OdonataMAP-26701">http://vmus.adu.org.za/?vm=OdonataMAP-26701</a>). It is only the fourth record in OdonataMAP for the Western Cape from Babylonstoren, in quarter degree grid cell 3318DD, which includes Stellenbosch (Figure 11).

#### **DROUGHT**

Much of South Africa was drought-stricken at the time of Shoot the Dragons Week. The drought became a recurring theme in the discussions within the Facebook group Dragonflies and Damselflies of Southern Africa. The general comment was how many wetlands and streams were completely dry, and that odonates were hard to find. It is therefore appropriate to devote a few paragraphs to this topic in this report.

We approached the OdonataMAPpers and asked them how the drought had impacted their submissions. One of the people who responded was Riëtte Griesel (Table 1), who writes: "I am on the Garingboom Guest Farm in the southern Free State between Bethulie and Springfontein (quarter degree grid cell 3025BD), and have about 2,500 ha to search for dragonflies and damselflies. We are experiencing the worst drought for three decades. There are no rivers



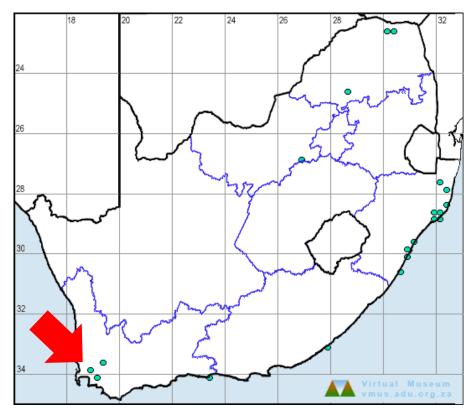


Figure 11. OdonataMAP distribution for the Evening Hawker Anaciaeschna triangulifera. The red arrow points to Selwyn Quan's record at Babylonstoring in the Western Cape during Shoot the Dragons Week (http://vmus.adu.org.za/?vm=OdonataMAP-26121).

at present on the farm, so I searched at the seven springs on the farm; only two had water (Figures 12 and 13). They were absolutely wonderful! At one of the springs I was surprised to find 14 species, including a Powder-faced Sprite *Pseudagrion kersteni*; this record (<a href="http://vmus.adu.org.za/?vm=OdonataMAP-25606">http://vmus.adu.org.za/?vm=OdonataMAP-25606</a>) is way outside of the known range for this damselfly (Figure 14) (and see also Tarboton & Tarboton 2015). At the other spring there were 11 species.

Temperatures averaged 40°C during the week and excessive winds were experienced. My garden has three ponds, specifically maintained for dragonflies. There were seven species at them. Given the drought conditions, to find 14 species in total during the week was amazing! The overall list of Odonata for the Garingboom Guest Farm is 28 species."

Likewise, Altha Liebenberg (Table 1), who is based at Danielskuil in the Northern Cape reported: "During the Shoot the Dragons Week I



Figure 12. At this spring, on Garingboom Guest Farm, Riëtte Griesel found seven species of dragonfly and damselfly during Shoot the Dragons Week. Under normal conditions, the water from this spring runs from here to an earth dam 2 km distant.



visited two of my favourite spots for OdonataMAP, and the results were not pleasing at all. At the first, where I usually find lots of damselflies, the water level was so low I found none at all. At the water's edge, there was no grass to perch on or to use as shelter. I only found a handful of dragonflies. At the second spot, I found no dragonflies and only managed to find one damselfly, a Powder-faced Sprite (Figure 14). Most remarkable of all, was the number of dragonflies, especially the Wandering Gliders Pantala flavescans, which entered the vehicle showroom where I worked, and oviposted their eggs on the blue-painted floor; this has to point to the lack of open water in this area, because all the ponds had dried up."

Tony Archer is primarily a bird atlaser, mainly in the area around Klerksdorp in North West Province, but has submitted 105 records to OdonataMAP since 2010: "Because I am passionate about the bird atlas, recording birds is by far my top priority. But I have found that with a bit of extra time in each pentad I can get a few photos of dragonflies and butterflies. During the Shoot the Dragons Week even the perennial Schoonspruit was completely dry. I have seen Klerksdorp Dam low but never as completely dry as it was this year. All of the farm dams that held water throughout the year had also dried up. For Shoot the Dragon Week, I decided to go all out and do as many contributions as I possibly could. But I only managed one submission: a Southern Banded Groundling Brachythemis leucosticta (http://vmus.adu.org.za/?vm=OdonataMAP-25592.



Figure 13. This spring is on Garingboom Guest Farm. During the drought experienced in Shoot the Dragons Week, it was only running for 2 m into a rock cavity. The warthogs had just had a bath, so the puddle was muddy. There were no dragonflies recorded here. Under normal conditions this would be a fantastic mountain stream. Riëtte plans to visit it and search for dragonflies and damselflies after the rains eventually arrive.



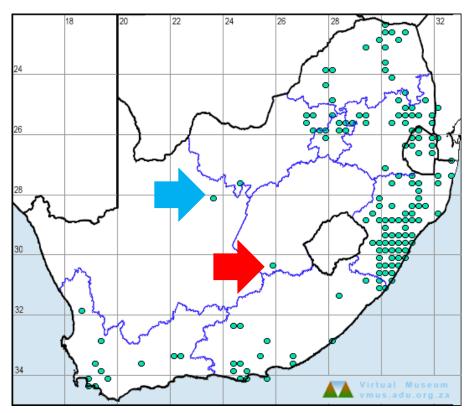


Figure 14. OdonataMAP distribution for the Powder-faced Sprite Pseudagrion kerstoni. The red arrow points to Riëtte Griesel's record at Garingbook Guest Farm in the Free State and the blue arrow points to Altha Liebenburg's record at Danielskuil in the Northern Cape during Shoot the Dragons Week.

There were a few flying around at the sites where water is normally found. But they did not sit on a particular perch. I tried to shoot them in flight but all the exposures were bare of dragons. A week later there were a few scattered showers and I photographed many Vagrant Emperors *Anax ephippiger*."

These three reports help underline the impact of the drought of 2016 on Odonata in general, and on the Shoot the Dragons Week in particular. The total number of records submitted would have been considerably larger than 1,200 if the event had taken place in more normal conditions. Given the drought, the volume of data collected during the first Shoot the Dragons Week was an extraordinary achievement.

#### **ACKNOWLEDGEMENTS**

We celebrate the awesome citizen scientists who submitted the 1,200 records upon which this report is based. The Expert Panel for OdonataMAP made a huge effort to confirm the identifications of records submitted, and had made more than 95% of the identifications within 10 days of the end of Shoot the Dragons Week and 97% of the records had confirmed identifications within 20 days. Thank you to Rene Navarro, for developing the software upon which this project depends. Megan Loftie-Eaton produced the map of Figure 1.

#### **REFERENCES**

**Dijkstra, K-DB, Kipping J, Mézière N** 2015. Sixty new dragonfly and damselfly species from Africa (Odonata). Odonatologica 44: 447–678. Available online from

http://www.osmylus.com/images/own/Downloads/Odonatologica\_44-4-low\_res.pdf

**Loftie-Eaton M** 2016 Report on the Spring LepiBASH for LepiMAP, 15–23 October 2016. Biodiversity Observations 7.89: 1–11. Available online at http://bo.adu.org.za/content.php?id=282

**Samways MJ, Simaika JP** 2016. Manual of freshwater assessment for South Africa: Dragonfly Biotic Index. Suricata 2: 1–224. South African National Biodiversity Institute, Pretoria. Available online at <a href="http://biodiversityadvisor.sanbi.org/wp-content/uploads/2016/07/Suricata 2 2016.pdf">http://biodiversityadvisor.sanbi.org/wp-content/uploads/2016/07/Suricata 2 2016.pdf</a>



**Suhling F, Martens A** 2007. Dragonflies and damselflies of Namibia. Gamsberg MacMillan Publishers, Windhoek.

**Tarboton W, Tarboton M** 2015. A guide to dragonflies & damselflies of South Africa. Struik Nature, Cape Town.

Underhill LG, Navarro R, Manson AD, Labuschagne JP, Tarboton WR 2016. OdonataMAP: progress report on the atlas of the dragonflies and damselflies of Africa, 2010–2016. Biodiversity



Observations 7.47: 1–10. Available online at <a href="http://bo.adu.org.za/content.php?id=240">http://bo.adu.org.za/content.php?id=240</a>

#### **APPENDIX 1**

This appendix lists the species of Odonata recorded during the Shoot the Dragons Week, Saturday 26 November to Sunday 5 December 2016. All except 42 of the 1,200 submissions to OdonataMAP during this period had confirmed identifications by 27 December 2016.

Scientific names	Common name	Records
Anax ephippiger	Vagrant Emperor	12
Anax imperator	Blue Emperor	23
Anax speratus	(Eastern) Orange Emperor	4
Anax tristis	Black Emperor	1
Gynacantha bullata	Black-kneed Duskhawker	1
Pinheyschna subpupillata	Stream Hawker	11
Zosteraeschna minuscula	Friendly Hawker	3
Phaon iridipennis	Glistening Demoiselle	1
Umma electa	Metallic Sparklewing	1
Chlorocypha consueta	Ruby Jewel	1
Chlorocypha cyanifrons	Blue-fronted Jewel	1
Platycypha	dancing jewels	3
Platycypha angolensis	Angola Jewel	3
Platycypha caligata	Dancing Jewel	8
Platycypha fitzsimonsi	Boulder Jewel	4
Family Coenagrionidae		2
Aciagrion africanum	Blue Slim	1
Africallagma	African bluets	1
Africallagma fractum	Slender Bluet	1
Africallagma glaucum	Swamp Bluet	13
Africallagma sapphirinum	Sapphire Bluet	1
Agriocnemis	wisps	4



Scientific names	Common name	Records
Agriocnemis falcifera	White-masked Wisp	9
Agriocnemis gratiosa	Gracious Wisp	2
Azuragrion nigridorsum	Sailing Bluet	3
Ceriagrion banditum	Band-eyed Citril	1
Ceriagrion glabrum	Common Citril	28
Ceriagrion platystigma	Variable Citril	1
Ceriagrion whellani	Yellow-faced Citril	1
Ischnura senegalensis	Tropical Bluetail	55
Proischnura rotundipennis	Round-winged Bluet	2
Pseudagrion	sprites	24
Pseudagrion citricola	Yellow-faced Sprite	7
Pseudagrion coeleste	Catshead Sprite	1
Pseudagrion commoniae	Black Sprite	3
Pseudagrion draconis	Mountain Sprite	8
Pseudagrion furcigerum	Palmiet Sprite	3
Pseudagrion glaucescens	Blue-green Sprite	1
Pseudagrion hageni	Painted Sprite	16
Pseudagrion hamoni	Swarthy Sprite	8
Pseudagrion kersteni	Powder-faced Sprite	25
Pseudagrion massaicum	Masai Sprite	21
Pseudagrion melanicterum	Farmbush Sprite	1
Pseudagrion salisburyense	Slate Sprite	21
Pseudagrion spernatum	Upland Sprite	9
Pseudagrion sublacteum	Cherry-eye Sprite	2
Pseudagrion vaalense	Vaal Sprite	2
Pseudagrion	A-group sprites	1

Scientific names	Common name	Records
Ceratogomphus pictus	Common Thorntail	7
Ceratogomphus triceraticus	Cape Thorntail	3
Ictinogomphus dundoensis	Swamp Tigertail	1
Ictinogomphus ferox	Common Tigertail	7
Notogomphus praetorius	Yellowjack Longleg	1
Paragomphus cognatus	Rock Hooktail	21
Paragomphus genei	Common Hooktail	3
Lestes	true spreadwings	1
Lestes pallidus	Pallid Spreadwing	3
Lestes plagiatus	Highland Spreadwing	23
Lestes virgatus	Smoky Spreadwing	3
Acisoma inflatum	Stout Pintail	3
Acisoma variegatum	Slender Pintail	1
Brachythemis lacustris	Red Groundling	1
Brachythemis leucosticta	Southern Banded Groundling	19
Chalcostephia flavifrons	Inspector	1
Crocothemis	scarlets	1
Crocothemis divisa	Rock Scarlet	1
Crocothemis erythraea	Broad Scarlet	68
Crocothemis sanguinolenta	Little Scarlet	9
Diplacodes	perchers	1
Diplacodes lefebvrii	Black Percher	7
Diplacodes luminans	Barbet Percher	6
Hadrothemis coacta	Robust Jungleskimmer	1
Hemistigma albipunctum	African Piedspot	2



Scientific names	Common name	Records
Nesciothemis farinosa	Eastern Blacktail	32
Notiothemis jonesi	Eastern Forestwatcher	1
Olpogastra lugubris	Bottletail	3
Orthetrum	skimers	8
Orthetrum abbotti	Little Skimmer	2
Orthetrum caffrum	Two-striped Skimmer	17
Orthetrum capicola	Cape Skimmer	38
Orthetrum chrysostigma	Epaulet Skimmer	15
Orthetrum hintzi	Dark-shouldered Skimmer	1
Orthetrum julia	Julia Skimmer	40
Orthetrum machadoi	Highland Skimmer	11
Orthetrum stemmale	Bold Skimmer	5
Orthetrum trinacria	Long Skimmer	21
Palpopleura deceptor	Deceptive Widow	2
Palpopleura jucunda	Yellow-veined Widow	5
Palpopleura lucia	Lucia Widow	11
Palpopleura portia	Portia Widow	6
Pantala flavescens	Wandering Glider	14
Rhyothemis semihyalina	Phantom Flutterer	3
Sympetrum fonscolombii	Red-veined Darter or Nomad	24
Tetrathemis camerunensis	Forest Elf	1
Tetrathemis polleni	Black-splashed Elf	5
Tholymis tillarga	Twister	1
Tramea basilaris	Keyhole Glider	8
Tramea limbata	Ferruginous Glider	1
Trithemis	dropwings	23

Scientific names	Common name	Records
Trithemis annulata	Violet Dropwing	12
Trithemis arteriosa	Red-veined Dropwing	103
Trithemis donaldsoni	Denim Dropwing	1
Trithemis dorsalis	Highland Dropwing	9
Trithemis furva	Navy Dropwing	26
Trithemis hecate	Silhouette Dropwing	4
Trithemis kirbyi	Orange-winged Dropwing	31
Trithemis pluvialis	Russet Dropwing	11
Trithemis stictica	Jaunty Dropwing	25
Urothemis assignata	Red Basker	6
Urothemis edwardsii	Blue Basker	4
Zygonyx natalensis	Blue Cascader	3
Zygonyx torridus	Ringed Cascader	1
Syncordulia gracilis	Yellow Presba	1
Phyllomacromia picta	Darting Cruiser	1
Allocnemis leucosticta	Goldtail	10
Elattoneura frenulata	Sooty Threadtail	6
Elattoneura glauca	Common Threadtail	25
Chlorolestes apricans	Amatola Malachite	1
Chlorolestes conspicuus	Conspicuous Malachite	1
Chlorolestes draconicus	Drakensberg Malachite	1
Chlorolestes fasciatus	Mountain Malachite	8
Chlorolestes tessellatus	Forest Malachite	7
Chlorolestes umbratus	White Malachite	13
Ecchlorolestes nylephtha	Queen Malachite	1