A dragonfly trip report: Western Andalusia, June 2017

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SUMMARY
Dragonfly (Odonata) records collected during a field trip to Western Andalucía in June 2017 are presented. In ten field days, 42 species of Odonata were observed, which represents two-thirds of the Andalusian odonatofauna.

RESUMEN
Se presenta una recopilación de citas de libélulas (Odonata) observadas durante un viaje a Andalucía Occidental realizado en Junio 2017. Durante estos diez días de campo, 42 especies de Odonata han sido avistadas, representando dos tercios de la odonatofauna andaluza.

INTRODUCTION
From the 2nd until the 11th of June 2017 the authors made a field trip to Western Andalusia for recording dragonflies (Fig. 1). This paper presents an overview of the observation data collected on this trip. The localities visited during the trip (Table 1) were mostly planified in colaboration with the Andalusian Dragonfly Recording Scheme (ROLA) in order to survey sites and to provide data for the European dragonflies monitoring project.
Starting near Malaga, the first area visited was the Guadalhorce valley and Arroyo de las Piedras. From there we travelled west, through the Sierra de Grazalema into Los Alcornocales where several locations were visited from the 4th to 7th of June. This area was known from a previous trip in July 2014 (Vliegenthart et al., 2015). During this visit, a bit earlier in the year, several species were found that were not encountered in 2014. From here, the rice fields of La Janda were visited and we ended up further westward in the Coto Doñana. On the 9th of July we have spent some time along the coast of Tarifa for a whale watching trip on the Strait of Gibraltar, including Finn Whale (*Balaenoptera physalis*), Pilot Whale (*Globicephala melas*) and Bottlenose Dolphin (*Tursiops truncatus*). The last day, the 10th of July, we visited the Valle del Rio del Genal. During the whole trip, we stopped at accessible dragonfly habitats whenever it was possible.

In ten field days, 42 species of Odonata were observed, which represents two-thirds of the Andalusian odonatofauna.
HIGHLIGHTS PER AREA

Guadalhorce valley and Arroyo de las Piedras

We visited the Guadalhorce river between Pizarra and El Chorro, which is rather narrow on this part and didn’t contain a lot of water. The available water that was left, was clean and cool and flowed rather fast between the gravel beds. These locations hosted many of the common species found in this part of Spain: *Calopteryx haemorrhoidalis*, *Platycnemis latipes*, *Erythromma lindenii*, *Ischnura graellsii*, *Onychogomphus forcipatus*, *Orthetrum chrysostigma*, *O. brunneum*, *O. coerulescens*, *Crocothemis erythraea*, *Trithemis annulata* and *T. kirbyi*.

On kind directions from Paul Winter we visited Arroyo de las Piedras, a brook that drains into the Guadalhorce river. The bare gravel banks of the Guadalhorce at this location yielded large numbers of *Onychogomphus*.
costae: at least twenty males and females of this small Gomphid were found, some of them in copula. The Guadalhorce river at this spot was also the only location where we’ve encountered Zygonyx torridus during the trip. Following the Arroyo upstream, Orthetrum nitidinerve and Coenagrion caeruleascens were added to the list, as well as even more Onychogomphus costae males, perched on a couple of large boulders.

**Sierra de Grazalema**

We didn’t spend much time in this splendid area, as we were looking out for butterflies and other insects. On several locations we observed beautifull terrestrial insects of the order Neuroptera, namely Libelloides baeticus, L. ictericus and Nemoptera bipennis hunting above the flowers on dry slopes. Among the many butterfly species observed, *Melitaea aetherie* is especially noteworthy for its rarity.

**Los Alcornocales, Guadiaro and Genal rivers**

The superb rivers in this area, habitats of many rare riverine dragonflies, made us decide to re-visit Western Andalusia. On both rivers Platycnemis acutipennis was found along with *P. latipes*. While searching for *Macromia splendens* didn’t yield any results on the Río Genal near Gaucín. However, this brilliant species was found patrolling on the Hozgarganta River near Jimena de la Frontera. At least two different males were seen flying by a couple of times, but unfortunately, they weren’t found perching and they didn’t cooperate for being photographed. Territorial males of *Oxygastra curtisii* were found on all three rivers. Close to Jimena de la Frontera, no less than six Gomphidae were detected: one male of *Paragomphus genei* was found accompanied by two males of *Onychogomphus costae*. Other species present were: *Onychogomphus forcipatus*, *Gomphus graslinii*, *G. similimus* and *G. pulchellus*. Exuviae of *Boyeria irene* were abundant, but imagos were only found on two occasions. On a small brook in the Cork Oak forest a rather fresh female *Sympecma fusca* was found.
Figura 2. Hábitats acuáticos en la sierra de Baza. Fig. 2A. Arroyo de Las Piedras. Fig 2B. Same locality, hábitat of *Coenagrion caerulescens* and *Onychogomphus costae*. Fig. 2C,D. Río Hozgarganta en Jimena de La Frontera. Fig. 2E. A lagoon in Doñana. Fig. 2F. Puerto Real. Pictures by the authors.
La Janda

We passed the Barbate river near Benalup on the way to Coto Doñana. Several stops were made in a fruitless attempt to find *Borbo borbonica*, a Hesperid butterfly known from this area. Although this species is multivoltine, it is better to look for it in September or October.

For dragonflies the canals and rice fields of this area aren’t the most interesting habitat, however we could add a new species to the growing list anyway: *Brachythemis impartita*. Around fifteen of these magnificent dragonflies were found perching in the vegetation. Other species in this area included *Ischnura graellsii*, *Anax parthenope*, *Sympetrum fonscolombii* and *Crocothemis erythraea*.

Coto Doñana

Coto Doñana’s freshwater habitat are largely closed for the public! Fortunately, we could visit some great dragonfly habitats during the morning and early afternoon by way of special permit. Both at the pond outside the main office and at several other locations, *Lestes macrostigma* was found. This elusive species was highly anticipated, and it didn’t disappoint. Another member of the same family, *Lestes virens* was abundant at a couple of ponds. This species is common in the eastern provinces of The Netherlands but the Spanish subspecies *L. virens virens* looks remarkably different from the subspecies *L. virens vestalis* we see in The Netherlands.

A couple of ponds in the western part of the National Park added a number of interesting species to this trip’s list. *Diplacodes lefebrii* was present, as was *Orthetrum trinacria*, *Sympecma fusca*, *Sympetrum meridionale*, *S. striolatum* and a fresh female of *Anax ephippiger*.

In the afternoon surroundings of the Acebrón palace was visited. Overlooking El Charco del Acebrón, *Orthetrum cancellatum*, *Anax imperator*, *Trithemis annulata*, *Lestes macrostigma* and *Erythromma viridulum* were seen. Two more *Lestes macrostigma* were found on Arroyo de la Cañada Martín, north of El Rocío, in the evening.
Puerto Real salt marshes

Passing by the Bay of Cadiz, a stop was made at the salt marshes of Puerto Real. While this was primarily meant as a birdwatching break, a canal along the road offered a couple of nice dragonfly species as well: some *Lestes macrostigma* and *Orthetrum trinacria* were present here, as well as *Anax parthenope*, *Sympetrum fonscolombii*, *Ischnura graellsii*, *Orthetrum cancellatum* and *Crocothemis erythraea*.

Valle del Río del Genal

In this valley we have focussed on the Arroyo Hondo. This rocky brook is easily accessible from the Camping site, west of Jubrique. Following the Arroyo downstream, both *Onychogomphus forcipatus* and *O. uncatus* were seen, occasionally at the same time. Other species here included *Trithemis kirbyi*, *Calopteryx haemorrhoidalis* and *Oxygastra curtisii*. Upstream, an artificial dam has
been created to turn the Arroyo into a swimming pond (such as those described by Chelmick, 2015). Here the Arroyo looked very well suited for Macromia splendens. A long wait in the evening, when the camping guests had abandoned the pond, proved to be fruitful when a single male M. splendens did indeed patrol the edge of the pond a couple of times before disappearing into the forest.

ACKNOWLEDGMENT

While planning this great trip we were generously provided with a long list of good locations to visit. We want to thank (in no particular order) Florent Prunier, Paul Winter, Javier Ripoll Rodríguez and Leónidas de los Reyes for sharing your valuable data and knowledge.
ANEXO: CITAS

*Calopteryx haemorrhoidalis* (Vander Linden, 1825)

*Lestes macrostigma* (Eversmann, 1836)

*Lestes virens virens* (Charpentier, 1825)

*Chalcolestes viridis* (Vander Linden, 1825)

*Sympecma fusca* (Vander Linden, 1820)
[19] 8/6/17: 1Ad.

*Platycnemis acutipennis* Selys, 1841

*Platycnemis latipes* Rambur, 1842

*Coenagrion caerulescens* (Fonscolombe, 1838)

*Erythromma lindenii* (Selys, 1840)

*Erythromma viridulum* (Charpentier, 1840)

*Ischnura graellsii* (Rambur, 1842)

*Aeshna mixta* Latreille, 1805

*Anax ephippiger* (Burmeister, 1839)
Anax imperator Leach, 1815

Anax parthenope (Selys, 1839)

Boyeria irene (Fonscolombe, 1838)

Gomphus graslinii Rambur, 1842

Gomphus pulchellus Selys, 1840

Gomphus simillimus simillimus Selys, 1840

Onychogomphus costae Selys, 1885

Onychogomphus forcipatus unguiculatus (Vander Linden, 1823)

Onychogomphus uncutus (Charpentier, 1840)
[26] 10/6/17: 5Ad.

Paragomphus genei (Selys, 1841)

Cordulegaster boltonii algirica Morton, 1915

Macromia splendens (Pictet, 1843)

Oxygastra curtisii (Dale, 1834)

Brachythemis impartita (Karsch, 1890)

Crocothemis erythraea (Brullé, 1832)
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Table 1. Localities visited during the June 2017 field trip.
**Diplacodes lefebvrrii** (Rambur, 1842)  
[19] 8/6/17: 10Ad.

**Orthetrum brunneum** (Fonscolombe, 1837)  

**Orthetrum cancellatum** (Linnaeus, 1758)  

**Orthetrum chrysostigma** (Burmeister, 1839)  

**Orthetrum coerulescens** (Fabricius, 1798)  

**Orthetrum nitidinerve** (Selys, 1841)  

**Orthetrum trinacria** (Selys, 1841)  

**Sympetrum fonscolombii** (Selys, 1840)  
11/6/17: 1Ad.

**Sympetrum meridionale** (Selys, 1841)  

**Sympetrum striolatum** (Charpentier, 1840)  
[18] 8/6/17: 4Ad.

**Trithemis annulata** (Palisot de Beauvois, 1807)  

**Trithemis kirbyi** Selys, 1891  
10Ad; [26] 10/6/17: 2Ad.

**Zygonyx torridus** (Kirby, 1889)  