Prejeto / Received: 23.7.2012
Sprejeto / Accepted: 6.11.2012

New records of the rare dragonfly, Black Pennant – *Selysiothemis nigra* (Vander Linden, 1825) (Insecta: Odonata) in Bosnia and Herzegovina

Toni KOREN[1], Domen TRKOV[2], Kaja VUKOTIĆ[2], Mitja ČRNE[2]

[1]University of Primorska, Science and Research Centre, Institute for Biodiversity Studies, SI-6310 Izola, Giordana Bruna 6, Slovenia; E-mail: koren.toni1@gmail.com
[2]Biodiva - Conservation Biologist's Society, SI-6000 Koper, Kettejeva 1, Slovenia

Abstract. In 2012, we recorded a Black Pennant, *Selysiothemis nigra*, at two sites in Bosnia and Herzegovina, i.e. in the surroundings of Klepci village and in Hutovo Blato Nature Park, Neretva River. These are the first recent records of this species in Bosnia and Herzegovina, which had previously been known only from the entomological collection in the Museum of Sarajevo. As this species had previously been recorded on the Croatian side of the Neretva River, these records fit into the distribution area of the species. With the confirmation of this record, the dragonfly fauna of Bosnia and Herzegovina consists of 60 species.

Key words: dragonflies, *Selysiothemis nigra,* distribution, Neretva, Bosnia and Herzegovina

Izvleček. NOVE NAJDBE TEMNEGA SLANIŠČARJA, *SELYSIOTHERMIS NIGRA* (VANDER LINDEN, 1825) (INSECTA: ODONATA), V BOSNI IN HERCEGOVINI – V teku leta 2012 je bil zabeležen temni slanišča*r, Selysiothemis nigra*, na dveh lokacijah v Bosni in Hercegovini v okolici vasi Klepci in Naravnega Parka Hutovo Blato, reka Neretva. To sta v Bosni in Hercegovini prvi nedavni najdbi te vrste, ki je bila prej poznana iz entomološke zbirke muzeja v Sarajevu. Najdba je znotraj znanega areala vste, ki je bila predhodno zabeležena na hrvaški strani reke Neretve. S potrditvijo te najdbe šteje favna kačjih pastirjev Bosne in Hercegovine 60 vrst.

Ključne besede: kačji pastirji*, Selysiothemis nigra*, razširjenost, Neretva, Bosna in Hercegovina

Introduction

Bosnia and Herzegovina is a western Balkan country, situated between Croatia in the west and Serbia and Montenegro in the east. Like its name indicates, it consists of two regions, the northern part called Bosnia and the southern part called Herzegovina. It is a mountainous country, with the large part of the country occupied by the Dinaric Mountain chain. The southern part, Herzegovina, is under a strong influence of the Mediterranean Sea, which can be seen particularly in the faunal composition of this region regarding different animal groups (e.g. butterflies (Lelo 2007)).

While the first data on the dragonfly fauna of Bosnia and Herzegovina were published more than 100 years ago (Petrović et al. 1891), the dragonfly fauna of Bosnia and Herzegovina is still insufficiently known. In the past few decades, limited odonatological attention has been devoted to the country, due to war circumstances. Several minefields still persist, which do not enable systematic surveys to be carried out in the country.

In the last overview of dragonflies of Bosnia and Herzegovina (Jović et al. 2010), 57 species were recorded, 6 of them for the first time ever. Jović et al. 2010 also predicted that ten additional species would be recorded in the near future, due to the known distribution range in the surrounding countries. This proved to be true for the two additional species recorded recently for the country: *Anax parthenope* (Selys, 1839) (Sućeska & Karačić 2011) and *Coenagrion hastulatum* (Charpentier, 1825) (Bedjanič 2011). Still, Bosnia and Herzegovina remains one of the least studied countries in terms of dragonfly distribution and number of records (Jović et al. 2010).

Material and methods

We visited the Bosnian part of Neretva River on two occasions, 8.7.2012 and 6.8.2012. Additionally, the data collected from three localities in Croatia between 4.-7.7.2012 are also included. Dragonflies were collected with the butterfly net and released on the same spot. The specimens' determination was done using Dijkstra & Lewington (2006).

Localities in which the species was recorded:

Bosnia and Herzegovina

1. Klepci, near Čapljina, N 43.088617, E 17.718767, 8.7.2012, 2F
2. Hutovo Blato Nature Park, N 43.070767, E 17.750383, 6.8.2012, >20 M & F

Croatia

3. Dubravica, 1 km northwest from the village, N 43.028350, E 17.643433, 5.7.2012, 3 M
4. Blace, 1 km northwest from the village, N 43.021917, E 17.490967, 4.7.2012, 2M, 1 F
5. Kamp Rio, Opuzen, N 43.015819, E 17.467575, 6.8.2012, 4 M, 3 F

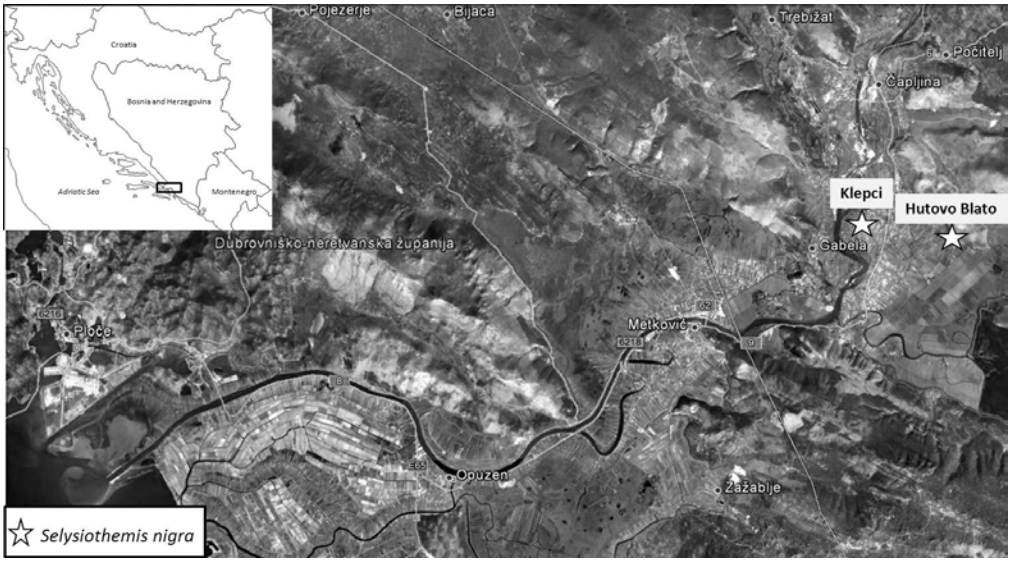

Figure 1. Map of the Neretva River with the marked records of *S. nigra* in Bosnia and Herzegovina and Croatia.
Slika 1. Zemljevid reke Neretve z označeno najdbo *S. nigra* v Bosni in Hercegovini in na Hrvaškem.

Results and discussion

In the first locality, a single dragonfly species, Black Pennant, *Selysiothemis nigra* (Vander Linden, 1825), was recorded. Two females were collected in dry grassy area near the village. The meadows in which they were recorded are surrounded by a small river and ponds, which represent an ideal habitat for this species (Dijkstra & Lewington 2006). The same species was again recorded in the area of Hutovo Blato Nature Park, some 3 kilometres southeast from the first locality. The habitat there consisted of swamps, path edges and maquis. Both male and female *S. nigra* were flying around in great numbers, and occasionally resting on bushes and branches. More than 20 specimens were observed in a half hour period. Such high number of observed specimens indicates that the population of this species in this locality is numerous, and the habitat favourable.

This species is distributed mainly in Central Asia and in the Middle East, with scarce distribution in the Mediterranean. It is active from May, until August or September (Dijkstra & Lewington 2006). Few additional species were recorded in the locality of Hutovo Blato, and are listed here to improve the knowledge of dragonflies of Bosnia and Herzegovina: *Sympetrum fonscolombi* (Selys, 1840), *Orthetrum coerulescens* (Fabricius, 1798), *Crocothemis erythraea* (Brullé, 1832) and *Ischnura elegans* (Vander Linden, 1820).

After the review of all recent data of dragonflies of Bosnia and Herzegovina (Jović et al. 2010, Bedjanič 2011, Sućeska & Karačić 2011), we concluded that no published records exist for *S. nigra* for Bosnia and Herzegovina. However, it was given to our attention that some specimens of this species are stored in the Zemaljski muzej of Bosnia and Herzegovina in Sarajevo and that the paper with existing records of this species had already been submitted for publication (Kulijer et al. in press). And while our records are not the first records for the country, they are important as they represent first recent records of this species in Bosnia and Herzegovina.

According to Jović et al. (2010), its occurrence in the Mediterranean part of the country was expected due to the records made in Croatia (Belančić et al. 2008) and Montenegro (Jović et al. 2008). In Croatia, it was also recorded across the Neretva River (Bogdanović et al. 2008), so this record only fits into the known range from Croatia toward the Bosnian part of the river. Our recent observations from the Neretva river (Fig. 1) confirm that this species is present as well as very numerous and widespread in the Croatian part of the Neretva. Further surveys of the Bosnian part of the Neretva River and surrounding localities will probably reveal more localities for this species. With the records of this species, the dragonfly fauna of Bosnia and Herzegovina consists of 60 species.

References

Bedjanič M. (2011): *Coenagrion hastulatum* (Charpentier, 1825), new for the dragonfly fauna of Bosnia and Herzegovina (Odonata: Coenagrionidae). Nat. Slo. 13(2): 31-36.

Belančić A., Bogdanović T., Franković M., Ljuština M., Mihoković N., Vitas B. (2008): Red data book of dragonflies of Croatia. Ministry of Culture, State Institute for Nature Protection, Republic of Croatia, 132 pp. [in Croatian with English summary]

Bogdanović T., Merdić E., Mikuska J. (2008): Data to the Dragonfly Fauna of Lower Neretva River. Entomol. Croat. 12(2): 51-65.

Dijkstra K.-D.B., Lewington R. (2006): Field guide to the dragonflies of Britain and Europe. British Wildlife Publishing, Dorset, 320 pp.

Lelo S. (2007): Dnevni leptiri Bosne i Hercegovine. Prirodno-matematički fakultet Univerziteta u Sarajevu, Sarajevo, 337 pp. [in Bosnian]

Jović M., Andjus LJ., Bedjanič M., Santovac S. (2008): Review of the Odonata fauna of Montenegro. Opusc. zool. Flumin. 224: 1-27.

Jović M., Gligorović B., Stanković M. (2010): Review of faunistical data on Odonata in Bosnia and Herzegovina. Acta entomol. Serb. 15(1): 7-27.

Kulijer D., De Knijf G., Franković M. Review of the Odonata of Bosnia and Herzegovina, Odonatologica 42(2), in press.

Petrović N.J., Miljković LJ., Tipa P.A., Pavlović P.S., Juršić Ž.J. (1891): The second journey of the teachers and pupils of the Second Belgrade secondary school, over Serbia and Bosnia. Prosvetni Glasnik, 12(3): 104-116, 12(4): 189-194, 12(5): 247-254, 12(6): 320-325, 12(7/8): 384-398. [in Serbian]

Sućeska S., Karačić J. (2011): Lesser emperor dragonfly *Anax parthenope* (Selys, 1839) (Insecta: Aeshnoidea, Aeshnidae), a new species on Odonata of Bosnia and Herzegovina. Natura Montenegrina 10(4): 467-472.