

***AESHNA GRANDIS* (LINNAEUS 1758) -  
A NEW SPECIES IN SERBIAN FAUNA  
(ODONATA: AESHNIDAE)**

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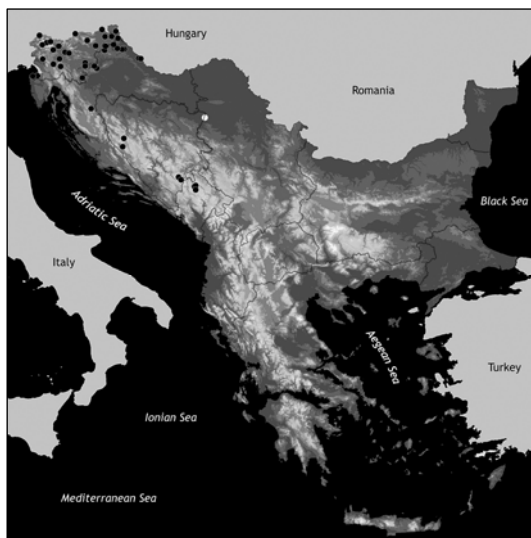
*Aeshna grandis* (Linnaeus 1758) is one of the common species from the family Aeshnidae in middle and eastern Europe (Dijkstra & Lewington 2006). Moreover, it is a type species of the genus *Aeshna* Fabricius 1775. In Europe, it can be found everywhere from Ireland to the Urals, with some exceptions like Scotland, northernmost Scandinavia and the Iberian and Apennine peninsulas (Askew 2004). Previous data on findings of this species in the valley of the Po River in northern Italy today are considered rather unreliable (Boudot *et al.* 2009). This species prefers quiet waters with rich vegetation. In the central and eastern parts of Europe it can often be found even in human settlements (Askew 2004). The Balkan Peninsula is the only one of the three big southern European peninsulas where the populations of species *A. grandis* have been registered (Map 1).

***Aeshna grandis* on Balkan peninsula**

According to The Atlas of the Odonata of Slovenia (Kotarac 1997) a small number of individuals has been found in 64 localities. Several records

of the *A. grandis* in Slovenia have been published during the last twelve years (Poboljšaj *et al.* 1998, Šalamun 2000, 2002, Bedjanič 2002, 2004a, 2004b, Weldt 2004). In Slovenia there is a variety of habitat types where *A. grandis* has been recorded - the eutrophic waters with rich submersed vegetation, backwaters, the old gravel pits, even the karst Lahinja River.

Map 1. - Map of the Balkan Peninsula [including Turkish Thrace, Romanian Dobruja and non-Balkan parts (islands and areas north of the Sava and Danube Rivers) of Greece, Croatia, Serbia and Slovenia] with locations where the species *A. grandis* has been noted (black spots). Positions of some spots are reconstructed according to literature data (see the text) and may represent several localities. The white spot represents the location of the first record of *A. grandis* in Serbia.



In Croatia the species has been noted in the following regions: Bobovica (Vukić 1992), Međimurje, Podravina, Samobor, the Plitvička Jezera Lakes, and big karst rivers (Belančić *et al.* 2008). Belančić *et al.* (2008) in the Red Book of the Odonata of Croatia mention that habitats preferred by *A. grandis* in Croatia are quiet waters in forests with rich littoral vegetation, departed river estuaries, slow rivers, forest lakes and puddles.

The main massif of the Dinaric Alps in Bosnia and Herzegovina is home to several populations of *A. grandis*, recorded on the following mountains: Zelengora, Šator planina and Staretina (Jović *et al.* 2010). The localities where the species is noted are mountain lakes and watering places with developed vegetation both in the water and around it. Several individuals and their copulation and oviposition into the plants of the genus *Carex* have been observed on Zelengora mountain.

*A. grandis* has been noted on Durmitor Mountain in Montenegro (Adamović *et al.* 1996). The species is considered relatively common between 1400 and 1850 meters above the sea level. The copulation and oviposition have also been noted. The species is found on the oligotrophic mountain and glacial lakes, on the lakes with rich vegetation, peat bogs, rocky streams, puddles and rivers with *Carex* sp. in their vicinity.

### ***Aeshna grandis* in Serbia**

There are numerous puddles and 'little islands' (in Serbian 'Adice') beside the lower course of the Drina River that have been created by the exploitation of shingle and changes in water level. On 10<sup>th</sup> August 2009, in several such puddles near the small town of Badovinci (NW Serbia) in the bay with the expanded belt of the *Typha angustifolia* L., the presence of the species *A. grandis* was recorded by M. Stanković. One female specimen, according to which the species has been identified, is kept in the collection of the Natural History Museum in Belgrade. This is the first finding of this species in Serbia. The geographic location of this record is somehow unexpected given other findings in the region (its presence was expected in the northern lowland parts of the country and on mountain lakes). According to its characteristics, this type of habitat corresponds to the general picture we have about the habitat this species prefers (quiet water, developed coastal and water vegetation both). According to these findings we cannot be sure if these individuals originated from the population whose whole cycle of development occurred in Serbia or if these were wanderers (a part of the course of the Drina River is a natural border between Serbia and Bosnia and Herzegovina). In contemporary sources of literature about fauna of Odonata in Europe, there is no data about migrations of the species *A. grandis* (Askew 2004, Dijkstra & Lewington 2006); therefore we assume that these are members of a local population.

New findings of the *A. grandis* in Serbia are expected in the north of the country (first of all in the vicinity of the Danube and Tisa Rivers) and on mountain lakes in the south. Keeping in mind the human influence on water habitats (especially freshwater exploitation and expansion of settlements and arable areas), and the considerable climate changes, we can assume that this species will soon (after obtaining more data on its distribution) be considered threatened in Serbia.

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***AESHNA GRANDIS* (LINNAEUS 1758) -  
НОВА ВРСТА ЗА ФАУНУ СРБИЈЕ  
(ODONATA: AESHNIDAE)**

ИЗВОД

Балканско полуострво представља једино полуострво у јужној Европи за које постоје фаунистички подаци о присуству популација *Aeshna grandis* (Linnaeus 1758). У овом саопштењу је представљен први налаз ове врсте у Србији на обали реке Дрине, у околини насеља Бадовинци. Такође је дат преглед налаза *A. grandis* на подручју балканских земаља, као и осврт на потенцијална станишта врсте на територији Србије.