

PRIRODOSLOVNI MUZEJ I ZOOLOŠKI VRT

IZVJEŠĆE O RADU ZA 2017. GODINU

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= S. orientalis Murr.
Aukwiede bei Theresienstadt.
1/7 1881. leg. Karl Studnicka.

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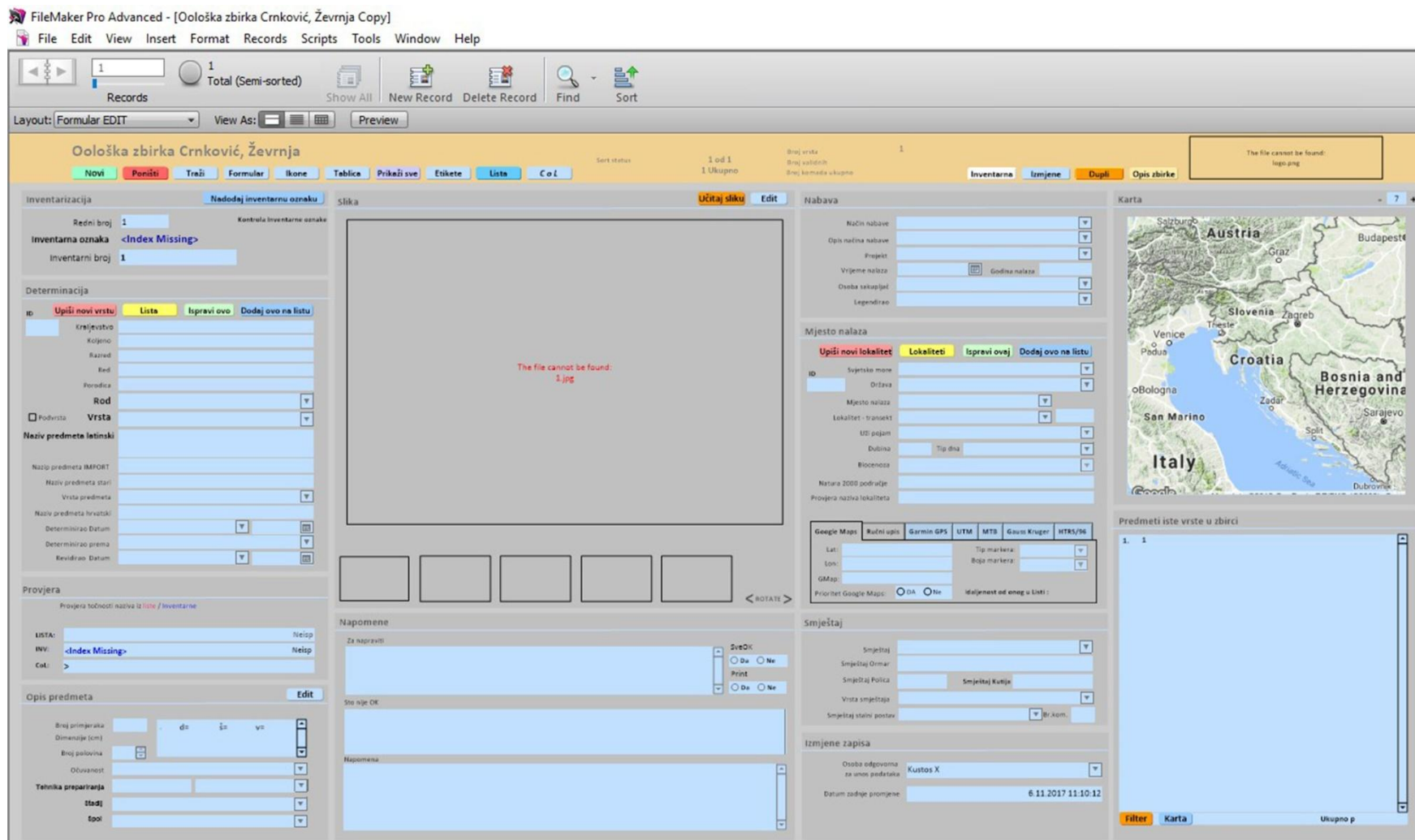
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WATER HABITATS OF THE BRAČ ISLAND

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Introduction

The island of Brač is a middle Dalmatian island (Crkvenčić et al., 1974). It is 36 km long and 12 km wide, and, with an area of 393 km², third largest Adriatic island (Rubić, 1952). At the same time it is the highest island in the Adriatic, with the elevation of 778 m above the sea level (Vidova gora mountain). The island of Brač is made of limestone, so there are no water courses on its surface. Therefore inhabitants of Brač used to build cisterns/watering-places for livestock from ancient times. After the water supply system was built these cisterns/watering-places were neglected and transformed into larger or smaller ponds and some of them run dry temporarily. According to the literature data, there are 20 pools (large reservoirs) on this island, 200 cisterns dug out in living stone and troughs (smaller basins), 40 water supplies (drinking water basins) and some 1800 to 2000 cisterns (Bulić, 1954).

Materials and methods

A research of flora of water habitats of the island of Brač was carried out during 2014 and 2015 and simultaneously herpetofauna and existence/non-existence of allochthonous species were researched too. Total of 12 days of field work was carried out and the research was conducted in all weather conditions, except during heavy precipitations (strong rain and snow) and during extremely cold weather. Identification of species was performed using field guide books for determination (Domac, 1994; Arnold and Burton, 2002) and based on years of experience of field work in the Croatian coastal area. Geographic coordinates (GPS device), elevation (GPS device), exposition, date, weather conditions (because of recorded species) and remark were recorded for each water habitat. The collected data were processed by the computer programme Arc Info GIS 9.2.





Picture 1. Water habitats on island Brač

Results and discussion

52 water habitats were located and processed during the research (Picture 1., Table 1.). Total of 18 new taxa of vascular plants were noted for the Brač island flora (*Potamogeton crispus*, *Potamogeton natans*, *Zinnichia palustris*, *Eleocharis palustris*, *Juncus balfourii*, *Juncus compressus*, *Juncus acutiflorus*, *Ranunculus aquatilis*, *Ranunculus chrisi*, *Lythrum hyssopifolia*, *Ornithogalum gussonei*, *Valerianella coronata*, *Allium pulchrum* sp. *tenaxiflorum*, *Crepis sancta*, *Fumana ericifolia*, *Tragopogon bolcanicus*, *Sedum caespitosum*, *Medicago didyma*). Amphibians were recorded in 27 water habitats (*Bufo viridis* and *Pelodytes ridibundus*), and alien species in 22 water bodies (*Gambusia holbrooki* and *Carcassia aurata*) (Table 2.). Finding of *Pelodytes ridibundus* is the first record of this species for the island of Brač – June 19 2015., Stevinjak 1, 2, 3 and 4 pools. Out of 13 reptile species recorded so far for the island of Brač, following were recorded in 52 processed water habitats: *Dalmatolacerta oxycephala*, *Lacerta trilineata*, *Podarcis melisellenis*, *Natrix natrix*, *Malpolon insignatus* and *Zamenis longissimus* (Table 3.). This two-year research is just a beginning, it was a pilot project of the complete research of water habitats of the Brač island, which are very numerous, according to the literature data. Also this two-year research confirmed the assertion of Bulić (1954) that numerous water habitats of Brač island were neglected after the construction of water supply. For example, water habitat in the Babin lar cove (Picture 3.) is completely dry and overgrown by vegetation nowadays, and one out of two pools on the route of the road Nerežišća – Supetar was destroyed by the construction of the road. This research also showed that, except introduced alien species, mechanical waste is also a great danger in water habitats (Picture 4.).

Water habitat	Location	Coordinates	Area (m ²)	Depth (m)	Water source	Water temperature (°C)	Water pH	Water conductivity (µS/cm)	Water turbidity (NTU)	Water color (Pt-Co)	Water odor	Water taste	Water smell	Water clarity	Water color	Water odor	Water taste	Water smell	Water clarity
Water habitat 1




Picture 2. *Potamogeton natans* from cisterns/watering-places Supetar 3

Picture 3. Water habitat in the Babin lar cove

Water habitat	Location	Coordinates	Area (m ²)	Depth (m)	Water source	Water temperature (°C)	Water pH	Water conductivity (µS/cm)	Water turbidity (NTU)	Water color (Pt-Co)	Water odor	Water taste	Water smell	Water clarity	Water color	Water odor	Water taste	Water smell	Water clarity
Water habitat 1






Picture 4. *Carcassia aurata* stock and died in aluminum packaging, packs of waste

Picture 5. Water habitat STEVINJAK 1, example of drinking water basin

Picture 6. Stone trough on Kirita

References

Arnold E. N. & Burton J. A. (2002): A field guide to the Reptiles and Amphibians of Britain and Europe. HarperCollinsPublishers, London.

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Slika 24. Poster „Water habitats of the Brač island“

SAURIA IN HERPETOLOGICAL COLLECTION OF THE NATURAL HISTORY MUSEUM IN SPLIT, CROATIA

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INTRODUCTION

The Natural History Museum in Split was founded on 10 March 1924 (Ževrnja et al., 2004). From the very beginning of the Museum's opening, its founder, the first director and curator Mr. Umberto Girometta, started to collect materials for the herpetological collection, the integral part of which was also the collection of sauria. His work to establish the herpetological collection continued Mr. Petar Novak and Mr. Antun Cvitančić. Present-day herpetological collection of Natural History Museum in Split is the result of work and material collection in period from twenties of twentieth century to the end of 2014.

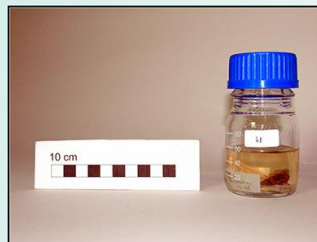
MATERIAL AND METHODS

During June 2013 and July 2014 the herpetological collection of Natural History Museum was analysed, and the collection of sauria is the integral part of it. The material is stored in alcohol with the exception of 7 dermoplastic preparations. While working on the analysis of the collection, "Book of inventory: vertebrates, fish, amphibians, reptiles, birds, mammals" of the Natural History Museum in Split was used, and to identify certain species we used available literature (Arnold and Burton, 2002, Marković, 2004, Cox et al., 2006, Tvrtković et al., 2006, Jelić et al., 2012).

RESULTS

Analysis of the herpetological collection of Natural History Museum in Split found that sauria were represented in the herpetological collection by 130 inventory numbers with 237 samples. In the herpetological collection there are samples of 5 families, 5 subfamilies, 10 genera and 14 sauria species.

- Sauria
 - Agamidae
 - Agaminae
 - Laudakia
 - L. stellio* Linnaeus, 1758 - 1
 - Anguinidae
 - Anguinae
 - Anguis
 - A. fragilis* Linnaeus, 1758 - 1
 - Pseudopus
 - P. apodus* (Pallas, 1775) - 8
 - Chamaeleonidae
 - Chamaeleoninae
 - Chamaeleo
 - C. sp.* - 1
 - C. chamaeleon* (Linnaeus, 1758) - 3
 - Gekkonidae
 - Gekkoninae
 - Hemidactylus
 - H. turcicus* (Linnaeus, 1758) - 10
 - Lacertidae
 - Lacertinae
 - Acantodactylus
 - A. savignyi* (Audouin, 1809) - 1
 - Dalmatolacerta
 - D. oxycephala* (Duméril & Bibron, 1839) - 2
 - Dinarolacerta
 - D. mosorensis* (Kolombatovic, 1886) - 1
 - Lacerta
 - L. agilis* Linnaeus, 1758 - 7
 - L. trilineata* Bedriaga, 1886 - 10
 - L. trilineata major* (Boulenger, 1887) - 1
 - L. viridis* (Laurenti, 1768) - 8
 - Podarcis
 - P. melisellensis* (Braun, 1877) - 35
 - P. melisellensis fiumana* (Werner, 1891) - 39
 - P. melisellensis melisellensis* (Braun, 1877) - 1
 - P. muralis* (Laurenti, 1768) - 4
 - P. siculus* (Rafinesque, 1810) - 94
 - P. siculus adriaticus* (Werner, 1902) - 7
 - P. siculus campestris* (De Betta, 1857) - 2
 - P. siculus pelagosae* (Bedriaga, 1886) - 1



Picture 1. The oldest specimen from 1921th year - *Podarcis melisellensis melisellensis* (Braun, 1877) from Jabuka island



Picture 2. The youngest specimen from 2014th year - *Lacerta trilineata* Bedriaga, 1886 from Dugopolje (Krc)

The largest number of specimens (fig. 1) was collected by Girometta, U. in Dalmatian area. However, 64 samples (27%) do not contain information about the collector and 18 samples (8%) do not contain information about the locality. The same case is with the dates of collection, which are missing for 44 (19%) samples. For 17 samples (7%) there are no data about collector or collection date or locality where the specimens were collected. The oldest specimen was collected in 1921, and the most recent in 2014.

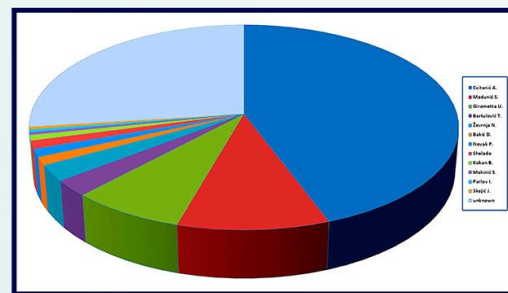


Figure 1. Distribution of samples by collectors

DISCUSSION AND CONCLUSION

Analysis of the herpetological collection of Natural History Museum in Split found that sauria were represented in the herpetological collection by 130 inventory numbers with 237 samples. In the herpetological collection there are samples of 5 families, 5 subfamilies, 10 genera and 14 sauria species. The most represented samples are from Lacertidae families, in fact genera Podarcis. The largest number of samples was collected by Girometta, U. collecting in the area of Dalmatia. A small part of the collection doesn't contain information of collector or collection date. The collection of sauria was created in period of twenties of XX. century to the end of 2014.

Slika 25. Poster „Sauria in herpetological collection of the Natural History Museum in Split, Croatia“



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9. IZLOŽBENA DJELATNOST



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Slika 28. Dio herpetološke zbirke J. Skejić i zbirke skakavaca J. Skejo



Slika 29. Akvariji koji prikazuju dva različita morska staništa



Slika 30. Kostur dobrog dupina, dermoplastični preparati bodljikaša i raka



Slika 31. Pop-up zid s infografikom

Žabnjačka kornjačnica



Žabnjačka kornjačnica
/Baldellia ranunculoides (L.) Parl./

Žabnjačka kornjačnica je biljka iz porodice žabočuni (Alismataceae). Raste u hranjivima siromašnim stajaćim vodama i uz njih na: pjeskovitom, muljevitom ili glinastom tlu. Stabljika joj je uspravna (20-60 cm), a u tlu je kratki, tanki i okomiti podanak. Najdonji listovi su vrpčasti i pod vodom, a u vrijeme cvatnje odumiru. Cvat se sastoji od 1-2 pršljena, a u pršljenu se nalazi 10-20 cvjetova. Tri vanjska lista ocvjeća su mala i zelena, a tri unutarnja su bijela ili svijetlo-purpurna. Raširena je uz atlantsku i baltičku obalu zapadne i sjeverne Europe, te u Mediteranu (uključujući Tursku i sjevernu Afriku). Na popisu je ugroženih vrsta poradi isušivanja močvara i reguliranja vodnih tokova. Rod je dobio ime u čast markiza Bartolomeo Bartolini Baldelli.



Tomasov šafan



Tomasov šafan, Tomasov podlesak
/Crocus thomasi Ten./

Tomasov šafan je biljka iz porodice perunika (Iridaceae), zeljasta trajnica visoka 8-30 cm. Listovi (obično 5-10) pojavljuju se u vrijeme cvjetanja, obično dužinom dostižu cvjetove. Cvjetovi (1-2, rjeđe 3) pojavljuju se u jesen, ugodna su mirisa, svijetlo do tamnije ljubičastoplavi. Na području Hrvatske ova vrsta šafana rasprostranjena je u Dalmaciji, od zadarskog područja na sjeveru do dubrovačkog na jugu. Naseljava kamenita staništa na brdskim padinama, a pronađen je na submediteranskim i epimediteranskim suhim travnjacima.



Slika 32. Izložbeni plakat s izložbe „Lipo cvijeće uokolo Cvita Mediterana“

10. IZDAVAČKA DJELATNOST MUZEJA

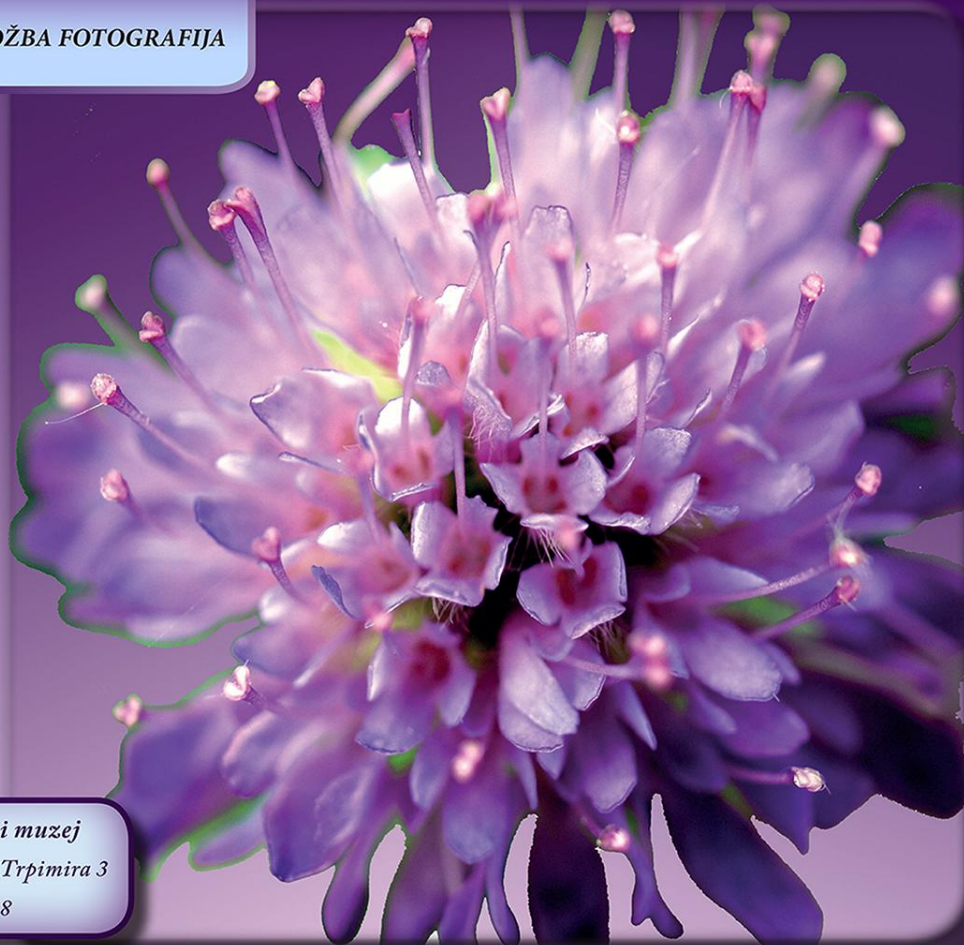
10.1. Tiskovine



Slika 33. Korice kataloga izložbe „Priče iz mora“

Lipo cviće uokolo Cvita Mediterana

IZLOŽBA FOTOGRAFIJA



*Prirodoslovni muzej
Poljana kneza Trpimira 3
Split, 4.5.2018*

Slika 34. Korice kataloga izložbe „Lipo cviće uokolo „Cvita“ Mediterana“