

# AMPHIBIANS IN HERPETOLOGICAL COLLECTION OF NATURAL HISTORY MUSEUM SPLIT



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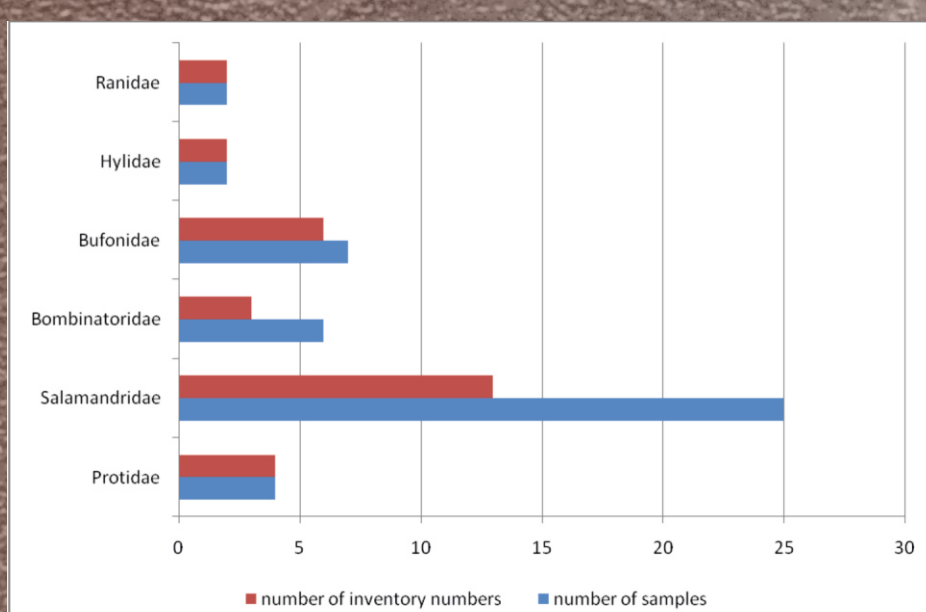


Figure 1. Distribution of samples and inventory numbers by families

## INTRODUCTION

The National History Museum in Split was founded on 10 March 1924. (Ževrnja et al., 2004). From the very beginning of Museum's opening its founder, the first director and curator Mr. Umberto Girometta started to collect materials for the herpetological collection which integral part was also the collection of amphibians. His work to establish the herpetological collection continued Mr. Novak and Mr. Cvitanić. Today's collection of amphibians of Natural History Museum in Split is the result of work and material collection in period of 20-ies of XX. century to the end of 2012. year.

## MATERIALS AND METHODS

During June 2013. the herpetological collection of Natural History Museum was analyzed, which integral part was also the collection of amphibians. The material is stored in alcohol with the exception of one sample that is stored in formalin and one dermoplastic preparation. When working on the analysis of the collection was used Book of inventory: vertebrates, fish, amphibians, reptiles, birds, mammals of the Natural History Museum in Split and to identify certain types of species we used to available literature (Arnold et al., 2007. Schätti and Utiger, 2001, Böhme et al., 2006). Croatian names of species taken from the Red List of Threatened Plants and Animals of Croatia (Marković /ur./ 2004) and from the Red Book of Amphibians and Reptiles of Croatia (Tvrković /ur./ 2006).

## RESULTS AND DISCUSSION

Analyzing herpetological collection revealed that the reptiles in the collection of the Natural History Museum in Split represented through 30 inventory numbers with 46 samples. 8 samples are determined by the level of genus (*Triturus*) and other specimens are determined to species level. Due to the age and poor preservation of specimens which precludes determination of the level of species in this paper uses the genus *Triturus* although today it includes genera *Lissotriton*, *Mesotriton* and *Triturus*. In herpetological collection of the Natural History Museum in Split, therefore, are examples of 2 orders, 6 families, 7 genus and 11 species of amphibians.

### Caudata

#### Proteidae

##### *Proteus*

*P. anguinus* Laurenti, 1768 4 (pic.3)

#### Salamandridae

##### *Salamandra*

*S. atra* Laurenti, 1768 5

*S. salamandra* (Linnaeus, 1758) 5

##### *Triturus*

*T. sp.* 8

*T. alpestris* (Laurenti, 1768) 3

*T. carnifex* (Laurenti, 1768) 2

*T. vulgaris* (Linnaeus, 1758) 1

*T. vulgaris graecus* (Volterstorff, 1906) 1

### Anura

#### Bombinatoridae

##### *Bombina*

*B. variegata* (Linnaeus, 1758) 6

#### Bufonidae

##### *Bufo*

*B. bufo* (Linnaeus, 1758) 1

*B. viridis* Laurenti, 1758 6

#### Hylidae

##### *Hyla*

*H. arborea* (Linnaeus, 1758) 2

#### Ranidae

##### *Pelophylax*

*P. ridibundus* (Pallas, 1771) 2

Analyzing the collection by families (fig. 1) revealed that the family Salamandridae represented by 25 specimens (13 inventory numbers). Followed by family Bufonidae with 7 samples (6 inventory numbers), Bombinatoridae with 6 samples (3 inventory number), Proteidae with 4 samples (4 inventory number), Hylidae with 2 samples (2 inventory number) and Ranidae with 2 samples (2 inventory number).

Analyzing genera in the collection (fig. 2) showed that the largest number of samples belongs to the genus *Triturus* with 15 specimens (8 inventory numbers). Followed by genus *Salamandra* with 10 samples (5 inventory numbers), *Bufo* with 7 samples (6 inventory numbers), *Bombina* with 6 samples (3 inventory number), *Proteus* with 4 samples (4 inventory numbers), *Hyla* with 2 samples (2 inventory numbers) and *Pelophylax* with 2 samples (2 inventory numbers).

The largest number of specimens (fig. 3) collected Girometta U. and Cvitanić A., collecting in Dalmatian area. However, 21 samples (45%) do not contain information about the collector. Same is case with the date of collection, missing for 15 (32%) samples. For 6 samples (13%) do not give any collector or collection date or locality where the specimens were collected.

The oldest specimen (pic.1) was collected 1919th year, and the youngest (pic.2) 2012th year.

## CONCLUSION

The amphibians in the herpetological collection of Natural History Museum in Split are represented by 30 inventory numbers (46 samples). In the herpetological collection there are samples of 2 orders, 6 families, 7 genus and 11 species. The most represented samples are from family Salamandridae, infact genders *Triturus* and *Salamandra*. The largest number of samples were collected by Girometta U. and Cvitanić A. collecting at the area of Dalmatia. A large part of the amphibians collection, which is a result of work and gathering of materials in period 20-ies of XX. century to the end of 2012. year., doesn't contain any information of collector or collection date.

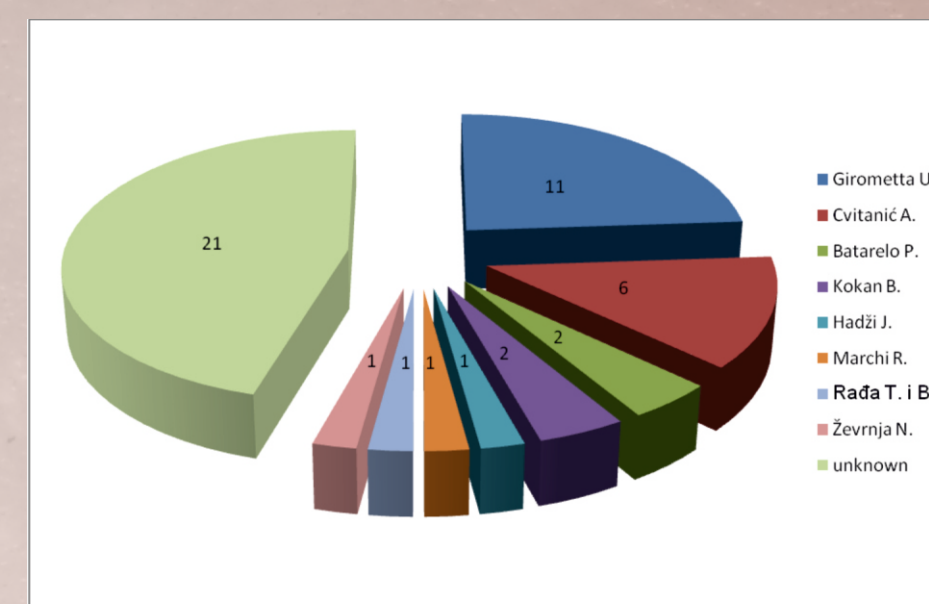


Figure 3. Distribution of samples by collectors

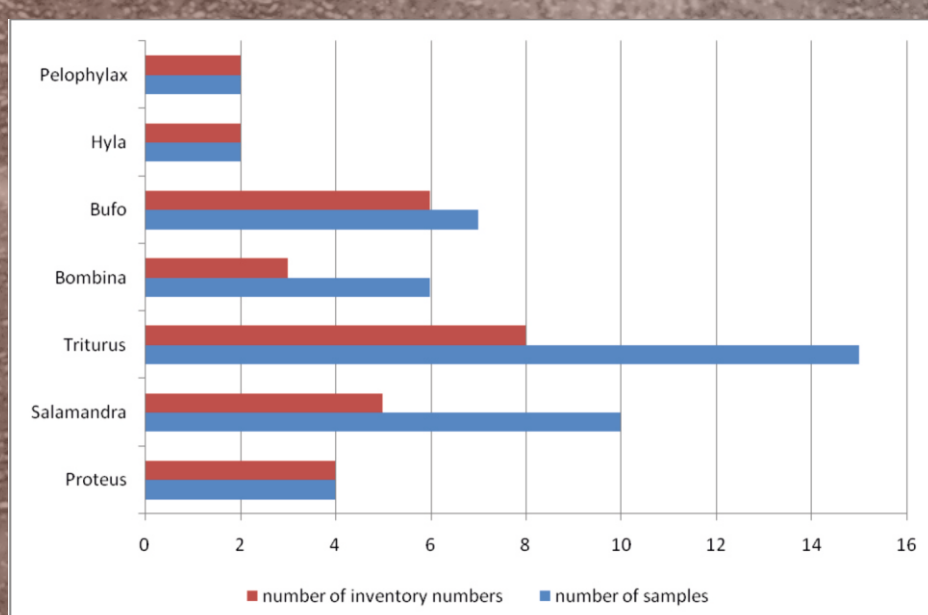


Figure 2. Distribution of samples and inventory numbers by genus



Picture 1. The oldest specimen from 1919th year



Picture 2. The youngest specimen from 2012 th year



Picture 3. Olm (*Proteus anguinus* Laurenti, 1768) from Vrgorac