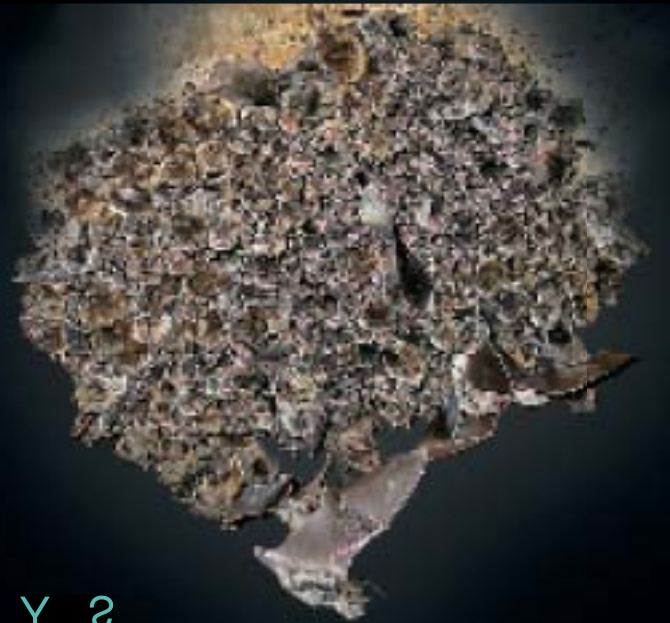


## AND PROTECTION OF ARE PREREQUISITES FOR OF THIS SPECIES!



Nursery of the Long-fingered Bat / Taken by: L. Vuković

Y ?

The most numerous nurseries of the Long-fingered bat dwell in warm caves of the Mediterranean karst. By protecting the Long-fingered bat we are actually protecting the quality of life for ourselves and for the large number of other cave animals// species like the olm or even seven different bat species who can dwell in caves together with the Long-fingered Bat.



Underground fauna (from left to right)

*Onychiurus* sp. – Springtails / Taken by: R. Ozimec  
*Sphaeromides* sp. – aquatic isopod / Taken by: B. Jalžić  
*Neobisium* sp. – Pseudoscorpiones / Taken by: R. Ozimec  
*Tithanetes* sp. – terrestrial isopod / Taken by: R. Ozimec

## HOW TO GET INVOLVED IN BAT PROTECTION?

With more than 8000 recorded speleological objects in Croatia and an extremely small number of people that work in research and protection of cave fauna:

### GET INVOLVED - COMMUNICATE - CALL!

If you visit caves, live or work near them or in one of the protected areas of Croatia it is important only to...

### FORWARD THE INFORMATION OF A BAT FINDING!

#### FORWARD THE INFORMATION TO:

Croatian Biospeleological Society  
www.hbsd.hr  
sismisi@hbsd.hr  
Mobile: 095 8643802 / Mon-Fri. 15-16

#### BAT FINDING INFORMATION:

Name and surname:

Your phone number, e-mail address:

You are:  speleologist  
 work in protected area (name)  
 other (citizen, villager, hiker, tourist etc.)

Name of the cave:

Closest inhabited place:

Date or a season of bat finding:

Presence of droppings / guano:  much  
 few

Species name (if possible to estimate):

- Greater Horseshoe Bat
- Lesser Horseshoe Bat
- Schreibers's Long-fingered Bat
- Long-fingered Bat
- Geoffroy's Bat
- Greater Mouse-eared Bat,  
Lesser Mouse-eared Bat

## DON'T HIBERNATE GET INVOLVED!



Taken by: D. Pejić



Taken by: D. Hamidović

Long-fingered Bat / *Myotis capaccinii* is one of the most endangered bat species in world as well as in Croatia!

## You can help protect the Long-fingered Bat!



The project »Conservation of the Long-fingered Bat for the protection of the karstic habitat in Croatia« is being implemented since 2007 by the Croatian Biospeleological Society with the financial support of the Whitley Fund for Nature, State Institute for Nature Protection, Environmental Protection and Energy Efficiency Fund and the Ministry of Culture.

We thank the Hrvatska Elektroprivreda (HEP Group), HEPP Miljacka, Hrvatske vode, Croatian Natural History Museum, the Krka National Park, the Town of Skradin and all participants of the project for the technical support.

## CLEAN KARSTIC RIVERS CAVES IN WHICH IT DWELLS THE SURVIVAL

W H

The Long-fingered Bat feeds on insects it hunts above the water surface. Majority of the insects mature in the water of our karstic rivers. The abundance of females with young in cave colonies close to rivers is also an indicator of the high water quality of those rivers. By monitoring the abundance of this species we are also monitoring the karstic river habitats and the surrounding areas as well!



*Proteus anguinus* – the olm / Taken by: B. Jalžić

# BATS IN CAVES

## 1. *Myotis capaccinii* / Long-fingered Bat

Medium-sized bat, fur color is grey-brown. Inhabits caves exclusively, both in winter and in summer, generally further away from the entrance. Along with Schreibers's long-fingered bat it is one of the most endangered species in Croatia as well as in Europe.



Taken by: G. Polić

Length of head and body: 5 cm  
Wing span: approx. 25 cm  
Number of bats in colony / m<sup>2</sup>: around 2000

Taken by: D. Polić

## 2. *Miniopterus schreibersii* / Schreibers's Long-fingered Bat

Relatively easy to identify because its small, triangle-shaped ears do not stick out of the fur as in other bat species. Inhabits exclusively caves, both in winter and in summer. One of the most endangered species in Croatia.



Taken by: G. Polić

Length of head and body: 5-6 cm  
Wing span: approx. 35 cm  
Number of bats in colony / m<sup>2</sup>: around 2000

Taken by: G. Polić

## 3. *Myotis emarginatus* / Geoffroy's Bat

Medium-sized bat, fur color is predominantly red. In summer maternity colonies (colonies with young bats) frequently dwell in entrance areas of the caves. Endangered species.

Taken by: T. Ržounek

Length of head and body: approx. 5 cm  
Wing span: approx. 23 cm  
Number of bats in colony / m<sup>2</sup>: around 2000

Taken by: H. Žučko

## 4. *Myotis myotis* / Greater Mouse-eared Bat & *Myotis blythii* / Lesser Mouse-eared Bat

Two largest species of this genus. Very similar and frequently hard to distinguish. Fur color is grey-brown. Maternity colonies are generally recorded in entrance areas of the cave. Greater Mouse-eared Bat is not listed in the national Endangered Species List and Lesser Mouse-eared Bat is listed.

Length of head and body: 7-8 cm  
Wing span: approx. 40 cm  
Number of bats in colony / m<sup>2</sup>: around 1300

Taken by: M. Ercegović

## 5. *Rhinolophus ferrumequinum* / Greater Horseshoe Bat

Length of head and body: 6-7 cm  
Wing span: approx. 35 cm

Taken by: D. Hamidović



The largest horseshoe bat with a horseshoe-shaped flap of skin around his nostrils. In winter they wrap themselves in their wing membranes in a cloak-like manner. Young specimens are grey, and older more brown in color. Endangered species. Smaller species of this genus *Rhinolophus euryale* / Mediterranean Horseshoe Bat and *Rhinolophus blasii* / Blasius' Horseshoe Bat are also endangered.

Taken by: D. Hamidović

## 6. *Rhinolophus hipposideros* / Lesser Horseshoe Bat

Length of head and body: approx. 4 cm  
Wing span: around 20 cm

Taken by: D. Hamidović



The smallest horseshoe bat and therefore easily identifiable. In winter they also wrap themselves in wings in a cloak-like manner. Larger colonies are not recorded in caves in Croatia. Generally it comes individually, usually in winter. Endangered species.

Taken by: D. Hamidović

## HOW TO BEHAVE IN BAT INHABITED CAVES:

All bat species in Croatia are protected under the Nature Protection Act of the Republic of Croatia. It is legally forbidden to disturb and kill bats as well as to destroy their shelters.

- Do not take bats in your hands and do not touch them!  
Pay particular attention to bats while passing through narrow passages in caves.
- Do not take photographs of bat colonies!  
Camera flash lights can severely disturb bats.
- Do not warm up hibernating bats, it can wake them up!  
Do not linger in narrow cave areas because even your body temperature can wake them up.
- Do not light the bats with bright light!  
Light and heat can severely disturb the bats.
- Do not use carbide lamps in areas inhabited by bats.  
Carbide lamps are particularly unacceptable due to heat and smoke.
- Do not smoke and do not make loud noise in caves!  
Any strong stimulant can disturb the bats.
- Do not organize parties, concerts and visits including large number of people in caves during the winter or summer.  
Rescue practices are also to be avoided.
- Seek expert advice before any digging or mining activities.  
Explosives can cause problems due to the blast itself and the accompanying fumes. Mining should be limited in bat inhabited areas to periods when bats are not present.

\* Code of Conduct in Caves adapted after the instructions given by the Bat Conservation Trust, Great Britain.