What to do if you find a ground trap

In Slovenia, it is **forbidden to catch, kill, transport, poison, keep in captivity within a cave or deliberately disturb and remove from caves any animals living or temporarily residing in caves.**

Populations of cave beetles and other cave animals may only be disturbed with **a permit from the ministry responsible for the preservation of nature.** Any individual illegally possessing, removing, harming, killing, exporting, importing or trading a protected animal species may be punished by a fine or imprisonment.

Instructions for local people, hikers, foresters, hunters

If you notice any visitors who might be involved in capturing cave animals, try to **establish contact with them.** If a conversation with them or other observations further strengthen your **suspicion** of their possibly illegal activities, **please inform the competent services listed on the bottom left.** Detailed information about your observations (e.g. the number of people, purpose, location, car registration number etc.) will help them with their further actions.
If **you suspect and you have evidence** showing that individual(s) are involved in illegal catching of cave animals, inform the police.

Good practice – marking the traps in caves

Any trap for catching animals in caves should be marked by a label containing the number of a permit issued by the ministry responsible for the preservation of nature or contact information where further detailed information is available.

Speleologists and cave visitors may also significantly contribute to the preservation of caves and subterranean animals. Should you find unmarked ground traps in caves, please follow the instructions on the bottom.

An example of a marked trap

What to do if you find unmarked traps in a karst cave

1. **Do NOT touch the trap unless necessary.**
2. **Take a picture of the trap.**
3. **Do not remove the trap from the cave.**
4. **Report the trap to the police or the Inspectorate of the Republic of Slovenia for Environment and Spatial Planning immediately.**
5. **Report the found trap to the Institute of the Republic of Slovenia for Nature Conservation (zrsvn.oe@zrsvn.si).**

LIVING CAVE TREASURE – RECOGNISE AND SAVE THE ANIMALS OF SLOVENIAN CAVES

Text: dr. Teo Delić, Mina Dobravc, Bojana Fajdiga, dr. Jana Laganis, Primož Presetnik
Review: mag. Uršula Belaj, Mateja Blažič, Andrej Kapla, Mateja Kocjan, Jure Tičar, Martin Vernik, dr. Al Vrezec
Photo: dr. Teo Delić, dr. Uroš Kunaver, mag. Slavko Polak, Bojana Fajdiga
Design and printing: Birografika BORI
Translation: Alkemist, Translation Agency
Number of copies: 1000
Published by: The Institute of the Republic of Slovenia for Nature Conservation, september 2020

This leaflet was published on the 100th anniversary of the Memorandum of the Department for Conservation of Nature and Natural Monuments. It was published in the framework of the "For Karst" project (OP20.01465), as a part of activities which contribute to the improvement of the conservation status of the Slenderneck beetle, qualifying species in the special area of conservation Karst (Natura 2000 area SI3000276). The leaflet was produced in cooperation with the Slovenian Environment Agency, Society for Cave Exploration, Ljubljana, the Caving Club Črni galeb Prebold, the Speleologist Association of Slovenia, the Ministry of the Interior RS – the police, the National Institute of Biology, the Speleology Group at the Biotechnical Faculty and Institute of the Republic of Slovenia for Nature Conservation. This is a revised and supplemented Living Cave Treasure leaflet published by the Society for Cave Exploration, Ljubljana in 2008.

EVROPSKA UNIJA
EVROPSKI SKLAD ZA REGIONALNI RAZVOJ
NALOŽBA V VAŠO PRIHODNOST

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA OKOLJE IN PROSTOR
AGENCIJA REPUBLIKE SLOVENIJE ZA OKOLJE

ZAVOD REPUBLIKE SLOVENIJE ZA VARSTVO NARAVE

NIB NACIONALNI INŠTITUT ZA BIOLOGIJO
NATIONAL INSTITUTE OF BIOLOGY

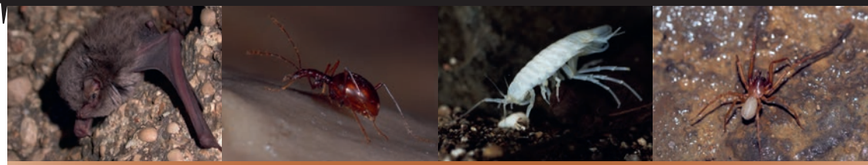
Univerza v Ljubljani Biotehniška fakulteta

SubBioLab

The investment is co-financed by the Republic of Slovenia and the European Union under the European Regional Development Fund

ZAVOD REPUBLIKE SLOVENIJE
ZA VARSTVO NARAVE

Recognise and save the animals of Slovenian caves



LIVING CAVE TREASURE

With several hundred species of subterranean animals, **Slovenia** is one of **the richest environments in the world.** That number includes animals adapted to the subterranean life. These animals are partially or completely blind, are uncoloured or have significantly reduced pigmentation, and mostly have elongated appendages.

Compared to terrestrial ecosystems, subterranean ecosystems are simpler. Food sources in caves are scarce, yet **numerous diverse and peculiar organisms** live there. Besides the renowned olm or blind cave salamander, many species of mollusc, arachnids, crustaceans, millipedes, beetles and other animals live in Slovenian caves. Crustaceans and beetles particularly stand out in terms of their diversity and the number of species.

Blind cave salamander
(Proteus anguinus)

Leiodid beetle
(Pretneria latitarsis)

Eyeless ground beetle
(Typhlotrechus bilimeki)

Cave millipede
(Haasia stenopodium)

Postojna cave pseudoscorpion
(Neobisium spelaeum)

Bole's cave aquatic »pillbug«
(Monolistra bolei)

Slender-legged blind amphipod
(Niphargus stenopus)

Postojna cave snail
(Zospeum spelaeum)

Cave leech
(Dina sp.)

Cave beetles in Slovenia

Slovenia is where it was discovered that **animals can also live underground. The first cave beetle was found** in the Postojna Cave. The discovery of **slenderneck beetle** (*Leptodirus hochenwartii* Schmidt, 1832) raised awareness of the existence of **true subterranean animals.** This discovery spurred systematic research into subterrestrial fauna and cave ecosystems.

The properties of the bedrock platform, surface diversity, geological processes and climatic changes in the past have limited the living environment of certain species to very small areas. These are our endemic species, which means they cannot be found anywhere else in the world. Many species are known from only one cave. Such caves are extremely important on a global level, as their protection is crucial to preserving these globally unique species.

In Slovenia, more than 175 different cave beetle species and subspecies have been found. Even after 180 years, we still have not discovered all of them, with scientists currently discovering and describing new species not yet known to science.

Slenderneck beetle *(Leptodirus hochenwartii)*

Can subterranean animals be endangered?

Subterranean animals are mostly endangered by changes on the surface. Human interference and activities, such as urbanisation, changes in water management, groundwater pumping, spilling of chemical and other dangerous substances and soil fertilization have a particular impact on them. One must also not forget the pollution of caves with waste, including dangerous waste that may contaminate drinking water and affect our health.

Due to their limited dispersal abilities, all cave animals are statutorily protected and catching them is not allowed without an appropriate permit.

Cave beetles, captured in ground traps, are particularly threatened by **illegal capturing from nature.** These traps are mostly plastic or glass pots containing bait and preservative solution. The traps can be set in caves for **several months,** catching many beetles and other underground animals.

Illegal animal capturing is nonprofessional and unmonitored and consequently harms the local underground animal populations.

Ground beetle traps found in a cave

Illegal or unmarked traps in plastic pots are well concealed and hard to spot