

In Seattle, USA (18 – 21 September 2003) LTER-Slovenia was accepted in the International Long-Term Ecological Research network (ILTER).



Participating institutions in LTER-Slovenia:

1. Scientific Research Centre of the Slovenian Academy of Sciences and Arts

Karst Research Institute

Jovan Hadži Institute of Biology

Institute of Anthropological and Spatial Studies

Anton Melik Geographical Institute

2. National Institute of Biology

3. University of Primorska, Science and Research Centre of Koper, Institute for Biodiversity Studies

4. University of Ljubljana, Biotechnical Faculty, Department of Biology

Chair of Ecology

Chair of Zoology

5. University of Maribor, Faculty of Natural Sciences and Mathematics, Department of Biology

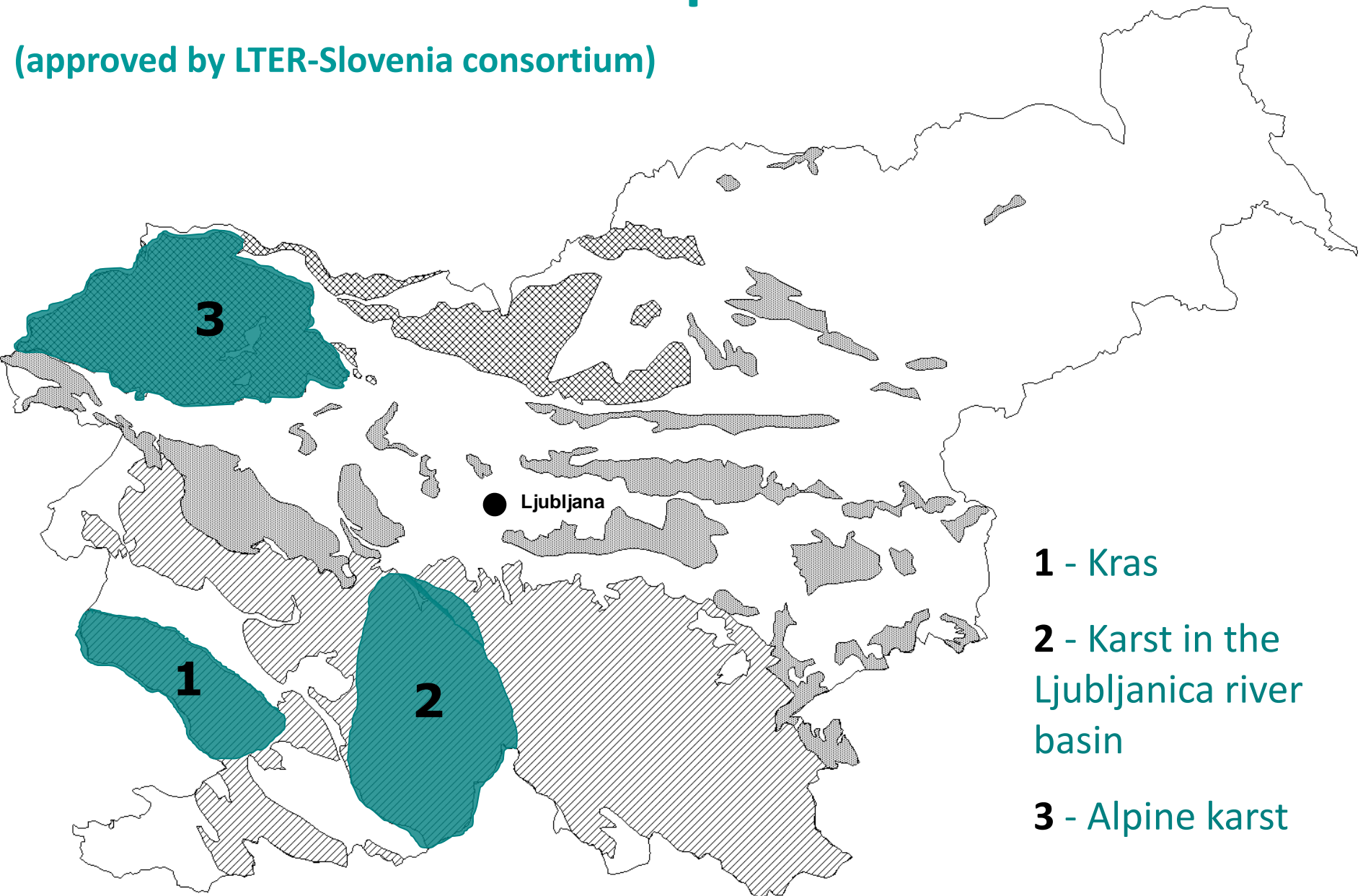
Chair of Geobotanics

6. Notranjska Museum Postojna, Biological Department

7. Ministry of the Environment and Spatial Planning. Environmental Agency of the Republic of Slovenia

LTER-Slovenia research platforms

(approved by LTER-Slovenia consortium)



Some Criteria to define LTER-Slovenia research sites:

1. Recorded past activities in the region
2. Existence of “reference areas”
3. Coverage of gradients, e.g. altitude, types of habitats, ...
4. Establishing of network of people



- Slovenia is situated in the very northwestern end of the Dinaric area, and is inhabited by the richest subterranean fauna in the world in addition to a rich variety of surface fauna and flora.
- This richness means that of 517 registered species of stygobionts (obligate aquatic subterranean fauna) and 783 species of troglobionts (obligate terrestrial subterranean fauna) in Western Europe, there are respectively 207 and 166 of these species in Slovenia.
- Besides the approximately 207 stygobiotic taxa in Slovenia there are 120 endemic taxa.

LTER-Slovenia sites includes investigations of biodiversity on:

KARST SURFACE

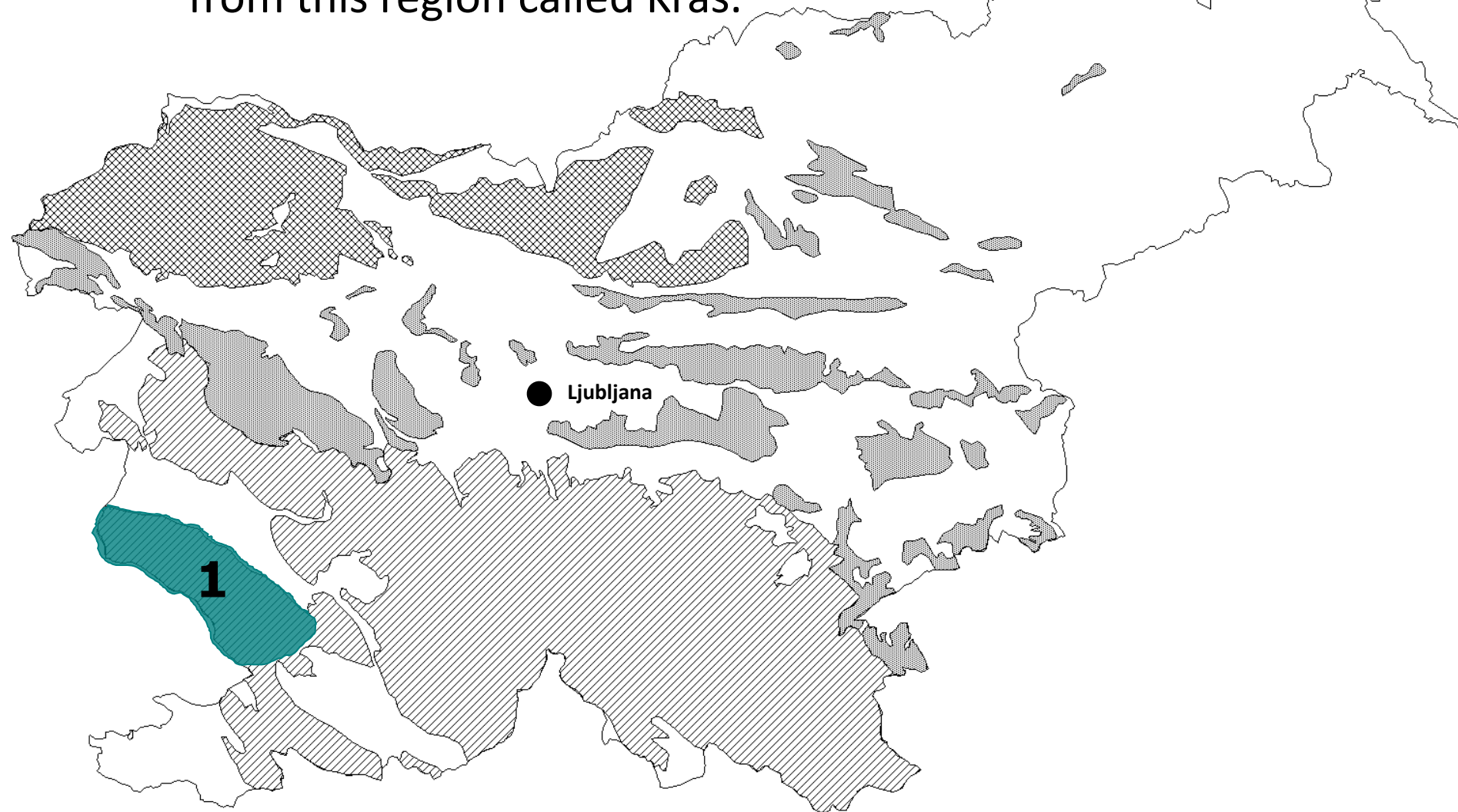
Karst poljes and intermittent lakes

High Alpine lakes

KARST UNDERGROUND

Caves

The first LTER-Slovenia site was chosen in the region called Kras – this is the limestone plateau, the hill region behind Trieste in Italy, and the international term *karst* is derived from this region called Kras.

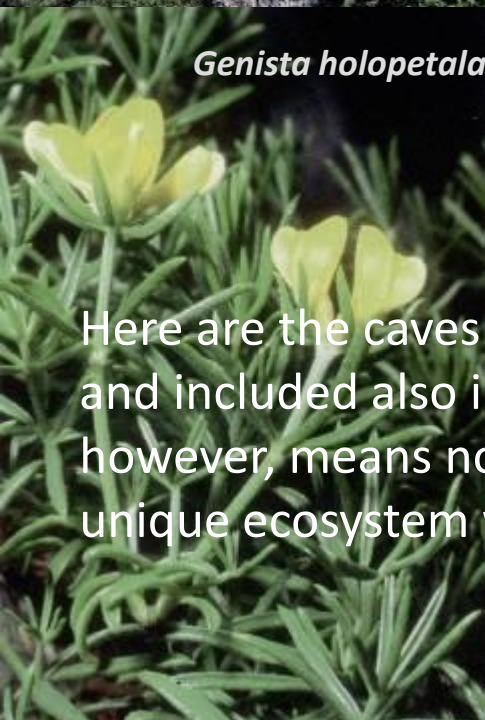




Škocjanske jame



Titanethes albus



Genista holopetala

Here are the caves **Škocjanske jame**, included in the UNESCO World Heritage List and included also in the Ramsar list as the important subterranean wetland. This, however, means not only an honour, but also a commitment to preserve this unique ecosystem with interesting subterranean and surface **fauna and flora**.

Caves

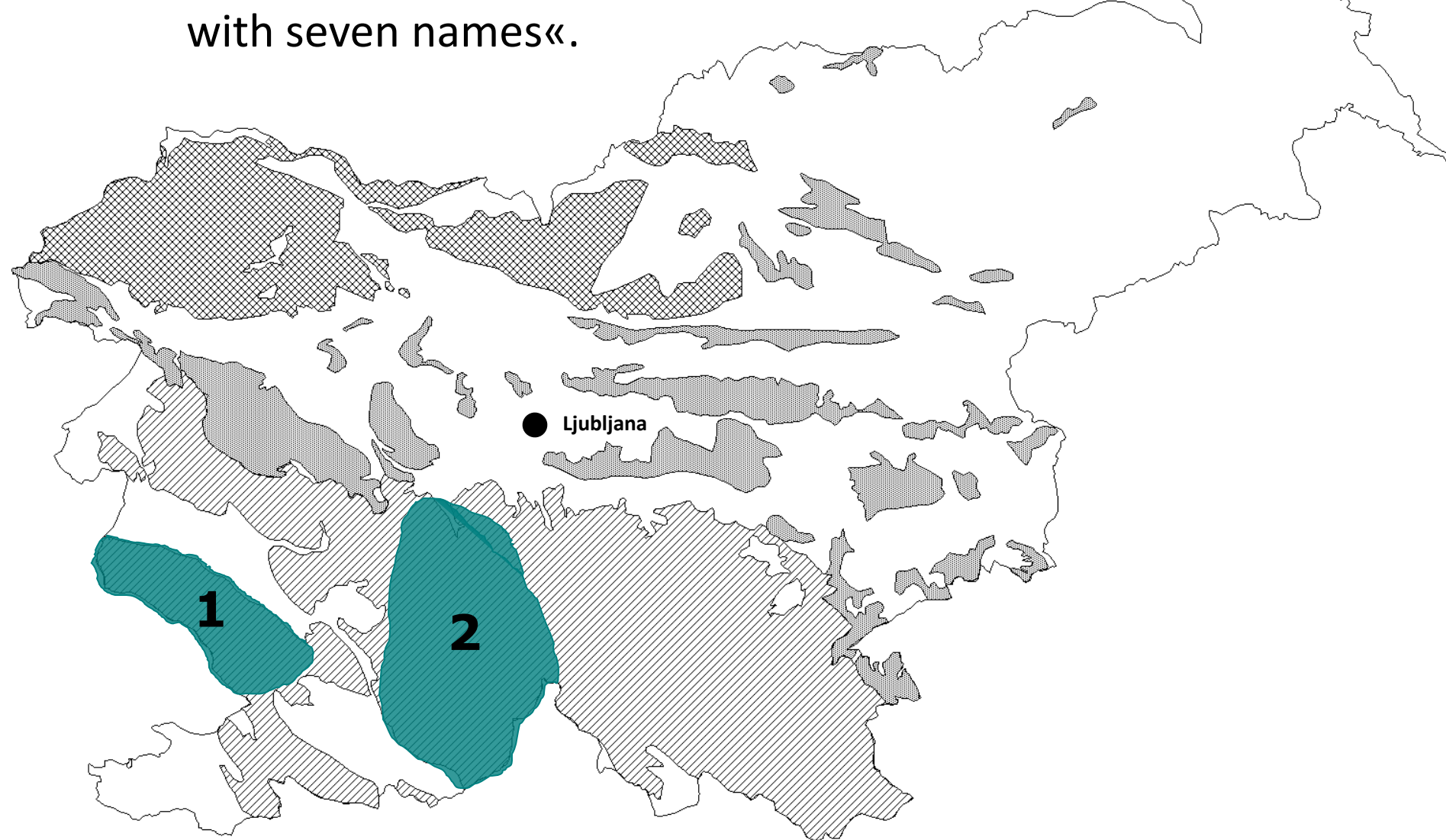


Geranium robertianum



macroinvertebrates

The second LTER-Slovenia site is a karst region in the Ljubljana river basin. There are more than 1500 caves in the catchment area of the Ljubljana river, the so called »river with seven names«.





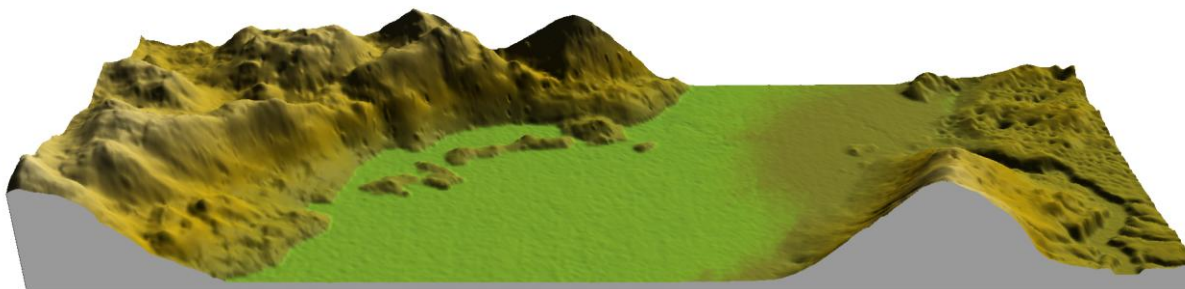
There are karst **springs**



Cerknica lake

Cerknica polje

Karst poljes as
the well known
Cerknica polje





JEZERO, KI IZGINJA

JEZERO, KI IZGINJA

*Monografija o
Cerkniškem jezeru*

In 2003 very interesting and comprehensive **monograph** about Cerknica lake was published, edited by Prof. Dr. Alenka Gaberščik. The book covers from geological, geomorphological, hydrological, speleological, climatic properties of the region, to flora, vegetation and fauna of the Cerknica lake, as well as socio-geographic and cultural characteristics.

*Monografija o
Cerkniškem jezeru*

UREDILA ALENKA GABERŠČIK
DRUŠTVO EKOLOGOV SLOVENIJE

LJUBLJANA, 2003

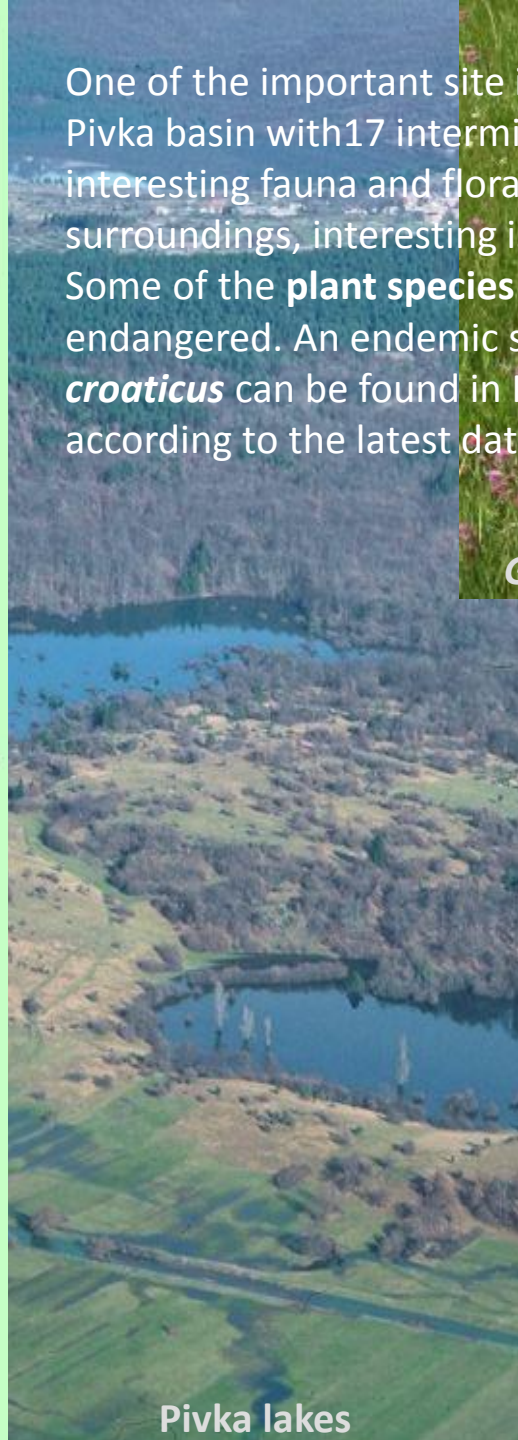


One of the important site in this region are **Pivka intermittent lakes**. Pivka basin with 17 intermittent lakes is very interesting region due to interesting fauna and flora of intermittent karst lakes and their surroundings, interesting is karst hydrology and geological structure. Some of the **plant species** that are growing here are very rare and endangered. An endemic species of fairy shrimp, ***Chirocephalus croaticus*** can be found in Petelinjsko jezero intermittent lake and according to the latest data it appears also in nearby lake Jeredovce.



Gladiolus illyricus

Intermittent lakes



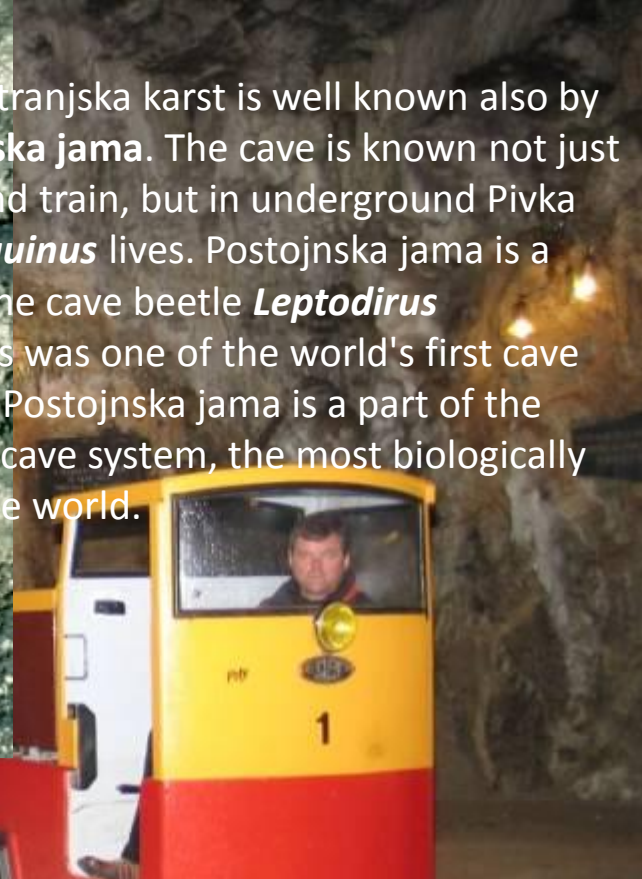
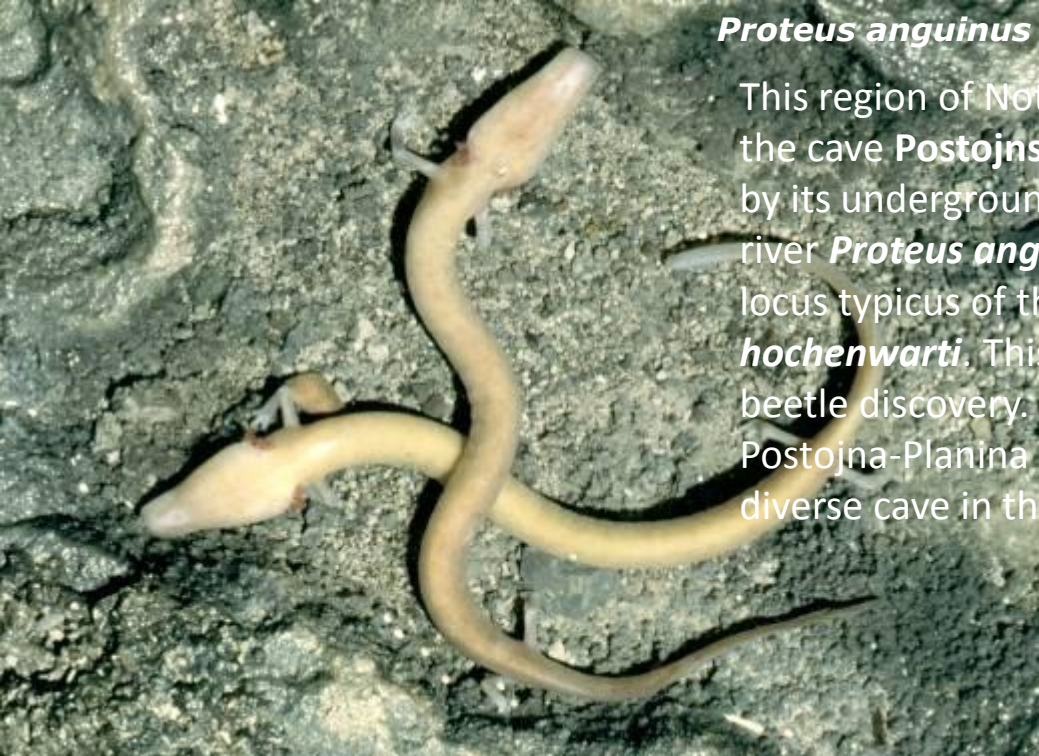
Pivka lakes



Chirocephalus croaticus

Proteus anguinus

This region of Notranjska karst is well known also by the cave **Postojnska jama**. The cave is known not just by its underground train, but in underground Pivka river *Proteus anguinus* lives. Postojnska jama is a locus typicus of the cave beetle *Leptodirus hochenwartii*. This was one of the world's first cave beetle discovery. Postojnska jama is a part of the Postojna-Planina cave system, the most biologically diverse cave in the world.



Postojnska jama

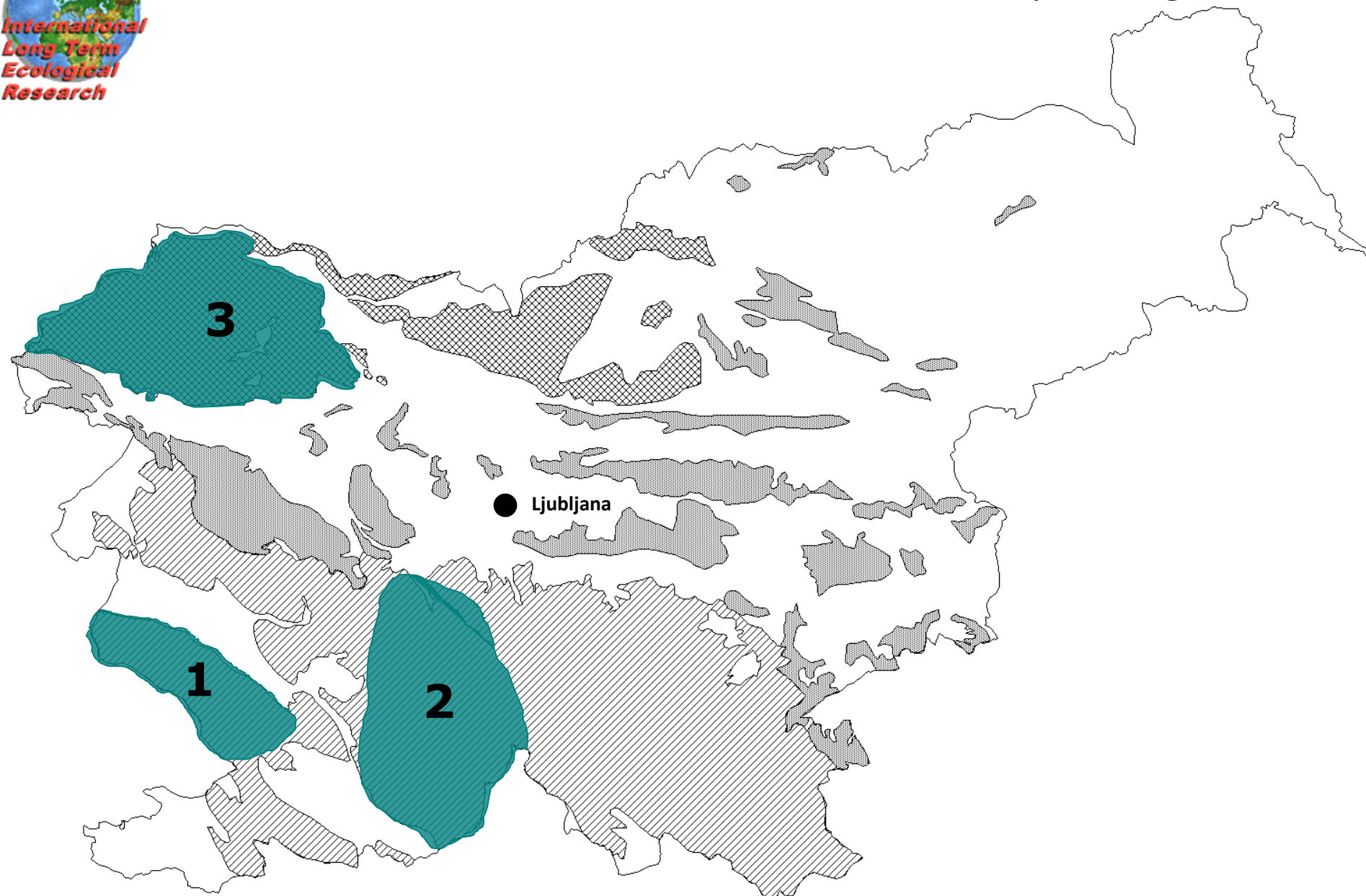
Postojna cave

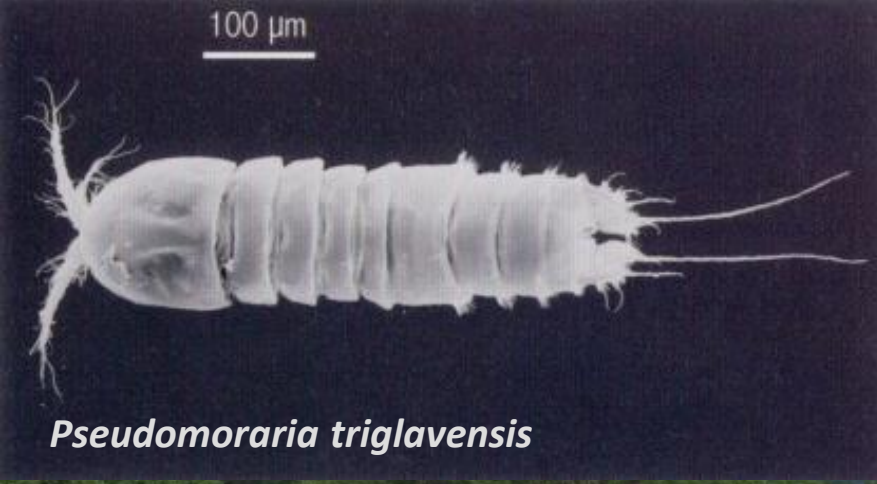


Leptodirus hochenwartii

Caves

The third LTER-Slovenia site was chosen in Alpine region





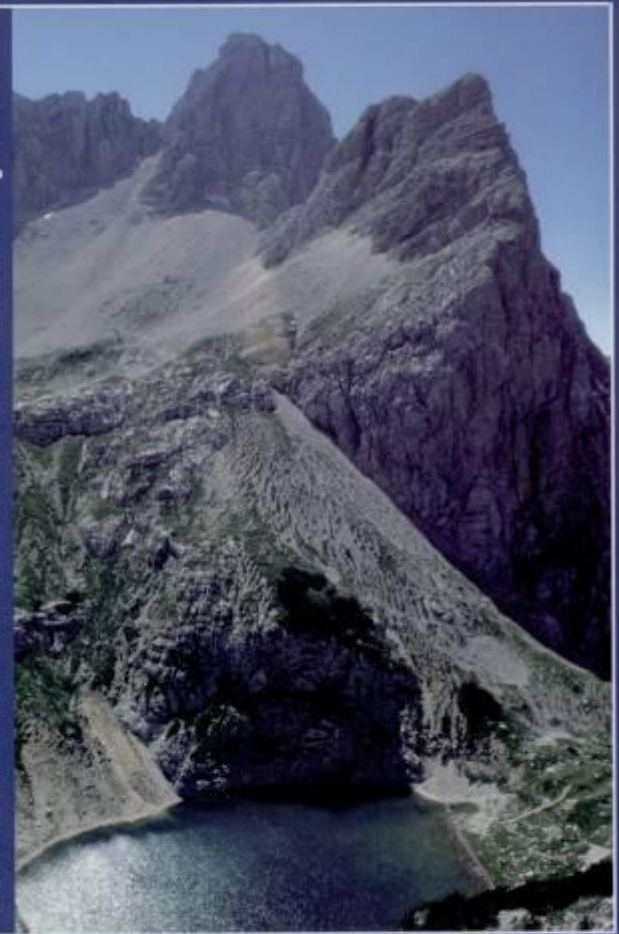
Pseudomoraria triglavensis



Campanula zoysii



VISOKOGORSKA JEZERA V VZHODNEM DELU JULJSKIH ALP
HIGH-MOUNTAIN LAKES IN THE EASTERN PART OF THE JULIAN ALPS

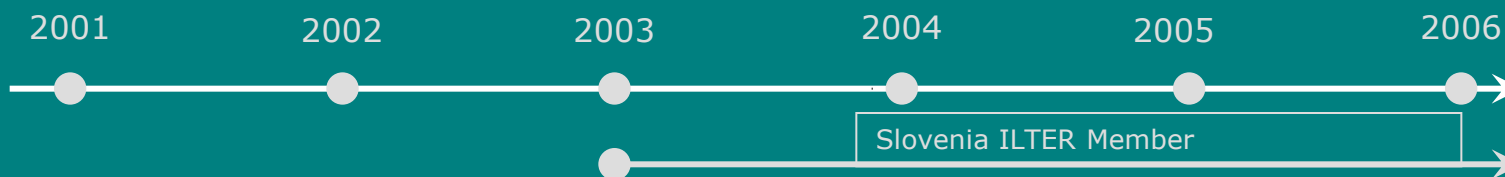


Uredil / Edited by ANTON BRANCELJ

Alpine karst

where interesting **alpine flora** and vegetation appears. In 2002 interesting **monograph** on High mountain lakes in the Eastern part of the Julian Alps was published, edited by dr. Brancelj. Many physical, chemical and biological data from high mountain lakes are described in it.

Historical review of LTER-Slovenia activities



Expression of
interest

Kopenhagen
Denmark, 16 Jan

Workshop on
European

Motz
1-5 July

European-
American
workshop on long
term socio-
environmental
research

France,

Postojna
Slovenia, 12-14 Sep

Visit of Dr. H. Gholz,
Program Director for
LTER, and Executive
of

Colima
26 Oct-

Coordinating
committee meetig
of the ILTER

Mexico,
2 Nov

Gumpenstein Austria,
17-19 May

Gumpenstein joint
of ALTER-Net meeting of
workpackages I2, I3,
R1

Postojna
Slovenia

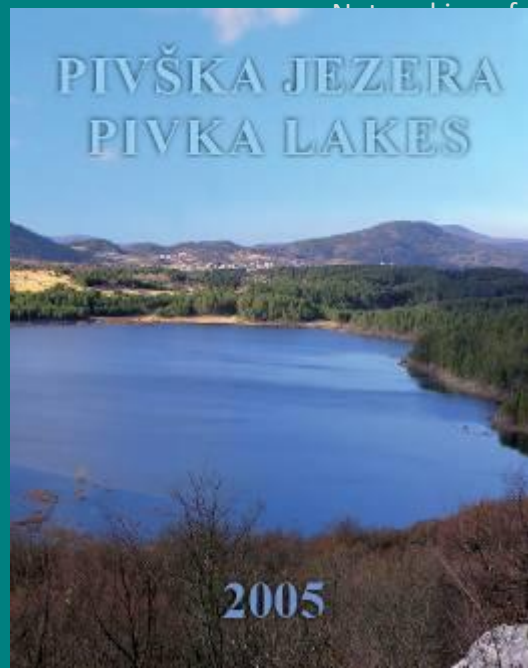
Monograph of
LTER-Slovenia site
(Pivka lakes)

Východná Slovakia,
24-28 May

ILTER workshop of
Central and Eastern
European countries

Postojna Slovenia,
20-24 Oct

Slovenian-US
workshop on long
term ecological
research



and

Seattle USA,
18-21 Sept

LTER All scientists
meeting



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LTER-Slovenia

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Slovenian Academy of Sciences
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Ministry of the Environment and
Spatial Planning
ID 2061

Slovenian Research Agency

University of Ljubljana,
Biotechnical Faculty ID
2063

Institutes within ZRC SAZU
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2058

National Institute of
Biology
ID 2060

University of Maribor,
Faculty of Natural Sciences
and Mathematics
ID 2064

High-Mountain Lakes

Cerknica Lake

Postojna-Planina
Cave System

Škocjanske jame

Alpine karst

Karst in the Ljubljana
River Basin

Kras/Karst

Julian Alps

Snežnik Mountain

Pivka Intermittent
Karst Lakes

Karst Plateau

Univ. of Primorska,
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Postojna
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University of Maribor,
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