



# Transdisciplinary Case Study 2022 «Biosphere Entlebuch – Culture & Environment»

Information event for students

Tuesday, 7th December 2021 (17h15–18h00)

Zoom

Michael Stauffacher, Florian Knaus, Pius Krütli

# Agenda

1. Welcome
2. Introduction to Biosphere Entlebuch (Florian Knaus)
3. TdCS 2022 (Michael Stauffacher, Florian Knaus, Pius Krütli)
  - General characteristics tdCS and tdCS 2022
  - Collaboration with arts, arts science and cultural studies
4. Q&A

# Intro to Biosphere Entlebuch (Florian Knaus)



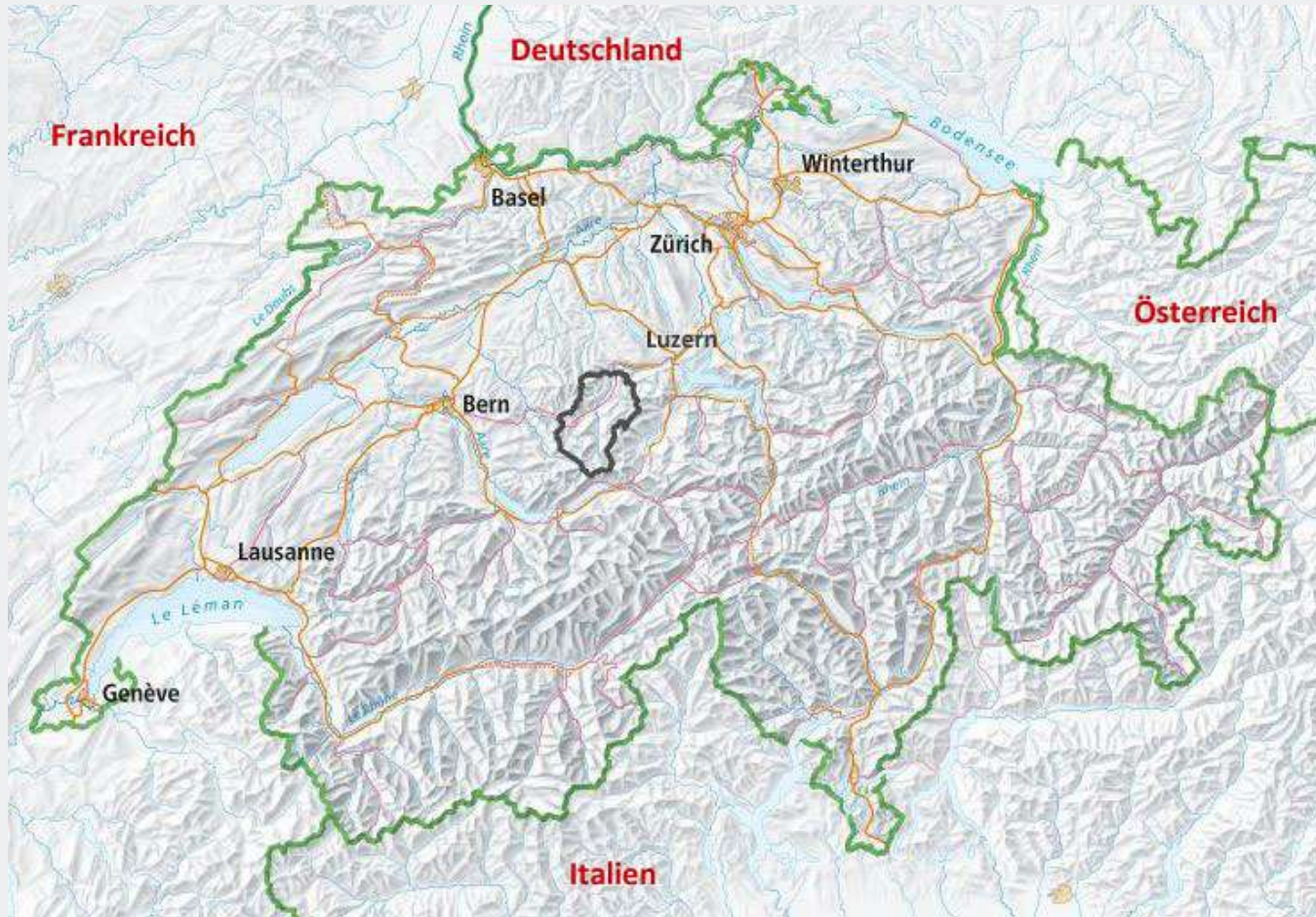
*The Entlebuch UNESCO Biosphere Reserve –  
Introduction to the case study area*

# BIOSPHERE RESERVES



- *Conservation:* Reduce biodiversity loss
- *Development:* Improve livelihoods of people
- *Research and Education:* Enhance social, economic and cultural knowledge and conditions for environmental sustainability.

# OUR CONTEXT



17'000 Inhabitants

7 Municipalities

394 km<sup>2</sup>

19 Jodeling clubs

850 farms

22 ski lifts

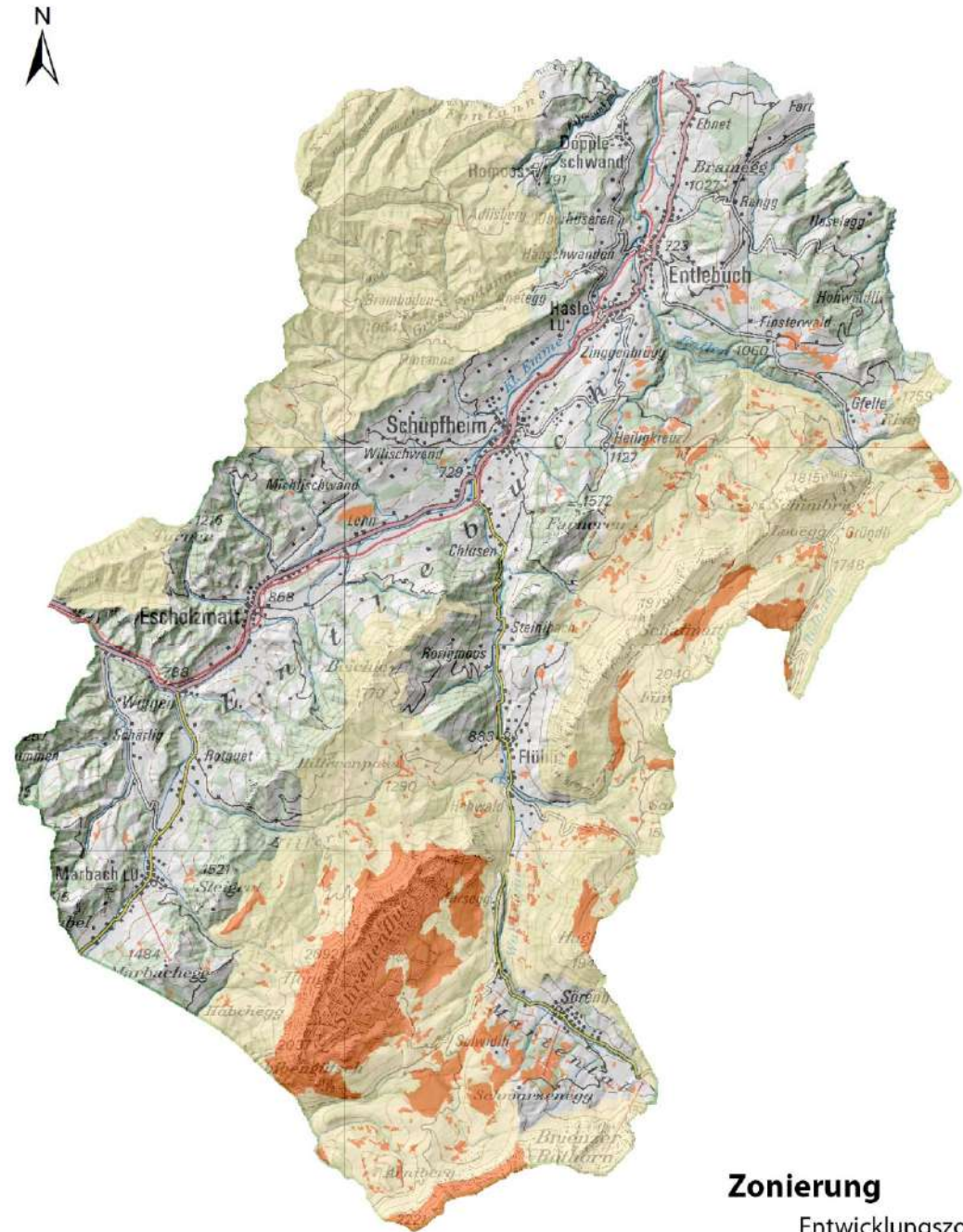
110 protected peatlands

# ZONING

Core area: 8%

Buffer zone: 42%

Transition area: 50%



## Zonierung

Entwicklungszone

Pufferzone

Kernzone









## OUR GOALS

As a model region for sustainable development, we want to take responsibility for our living space.

- Maintain natural and cultural values and diversity
- Strengthen regional economy and foster innovations
- Become a “learning” region and organization

*From goals...*

*...to implementation*

# Search for synergies and multiple positive outcomes



Introduce successful and self-subsistent activities using «multipliers»



## 9. Alpabfahrt

Samstag, 22. September 2012  
Sörenberg-Schüpfheim



UNESCO BIOSPHÄRE  
ENTLEBÜCH  
LUZERN SCHWEIZ



alpKäse

Luzerner  
Kantonalbank

ALC  
Alpenalpina

Landi  
Landschaftsbau

SWP  
Schweizerische  
Wirtschafts- und  
Produktionsbank

Garten  
Reschmann  
Garten | Pflege | Ambiente

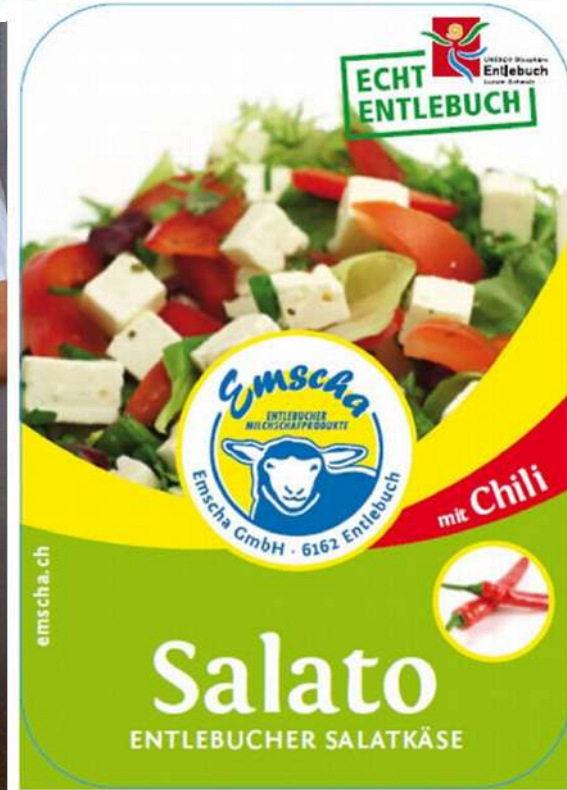
Emmenegger  
Hörschli  
Hörschli | Hörschli | Hörschli

Das Beste  
der Region

cheese-festival.ch

regionalprodukte.ch

# Foster innovation



# Develop regional added-value cycles

Cordon Bleu at Restaurant Engel



Eggs from Wermelingers farm, Hasle



Meat from butcher Giger, Entlebuch



Cheese produced in the dairy in Schüpffheim



Chicken food from the Wicki Mill, Schüpffheim



Pigs from Schmidigers farm, Hasle



Milk from Müllers farm, Hasle



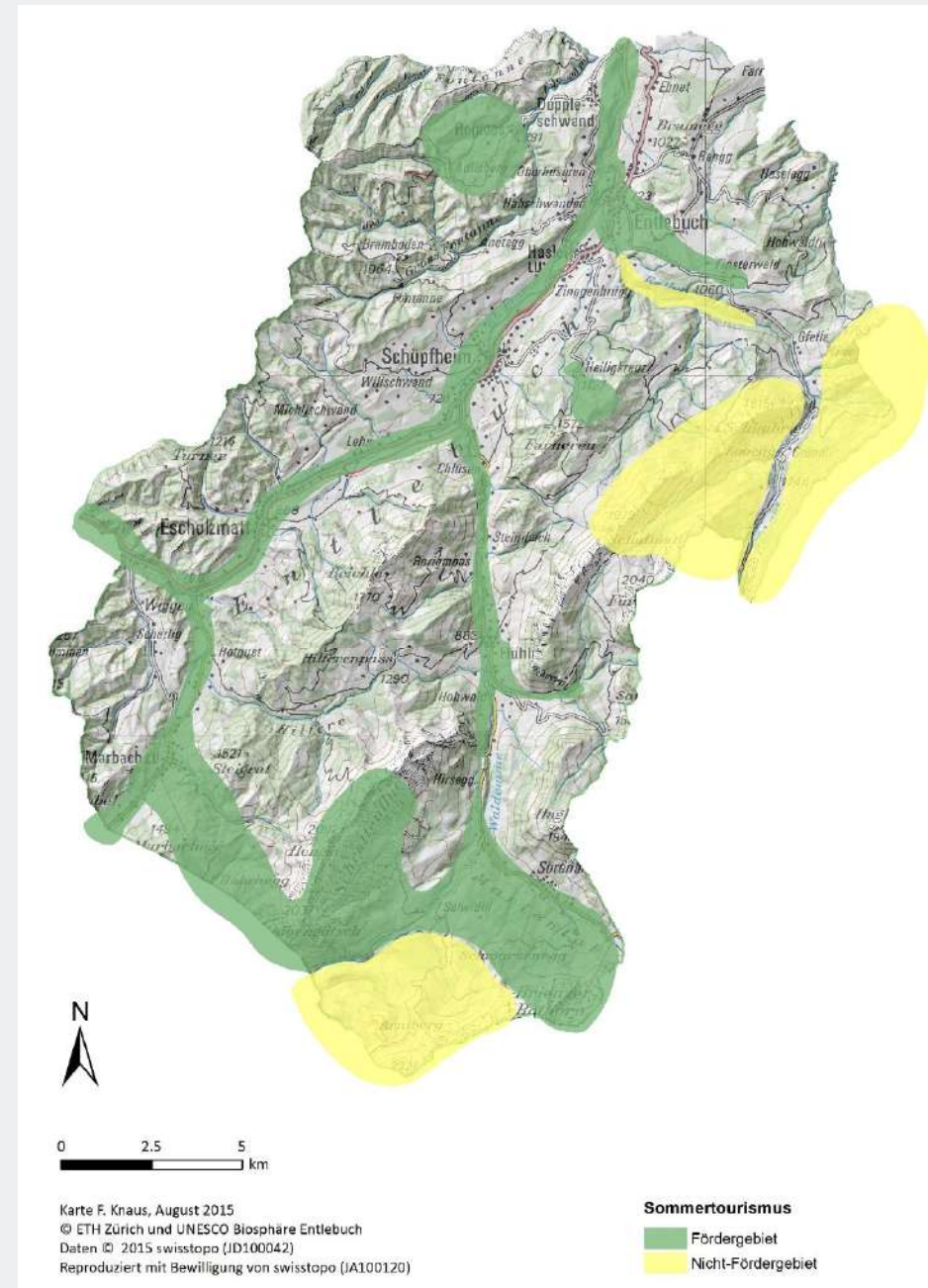
Wheat from 4 farms in Schüpffheim



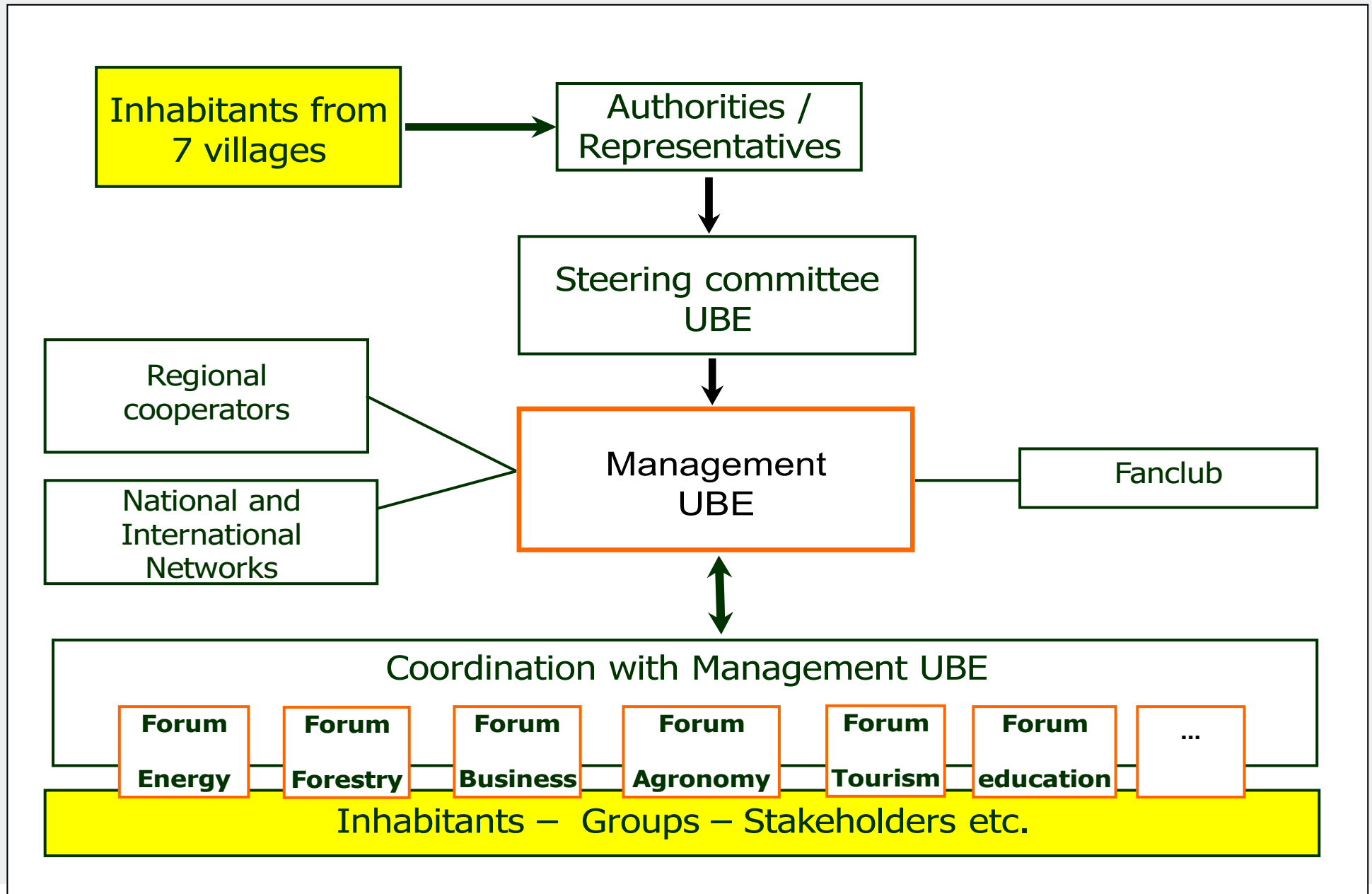
Involve stakeholders into shaping and implementing projects

Tourism Development Plan:

- involvement of all possible stakeholders (including researchers)
- stakes and trade-offs were identified, solutions proposed
- mutually agreed spatial solution
  - Touristic development areas
  - Touristic non-development areas



# Involve the public into the management of the BR

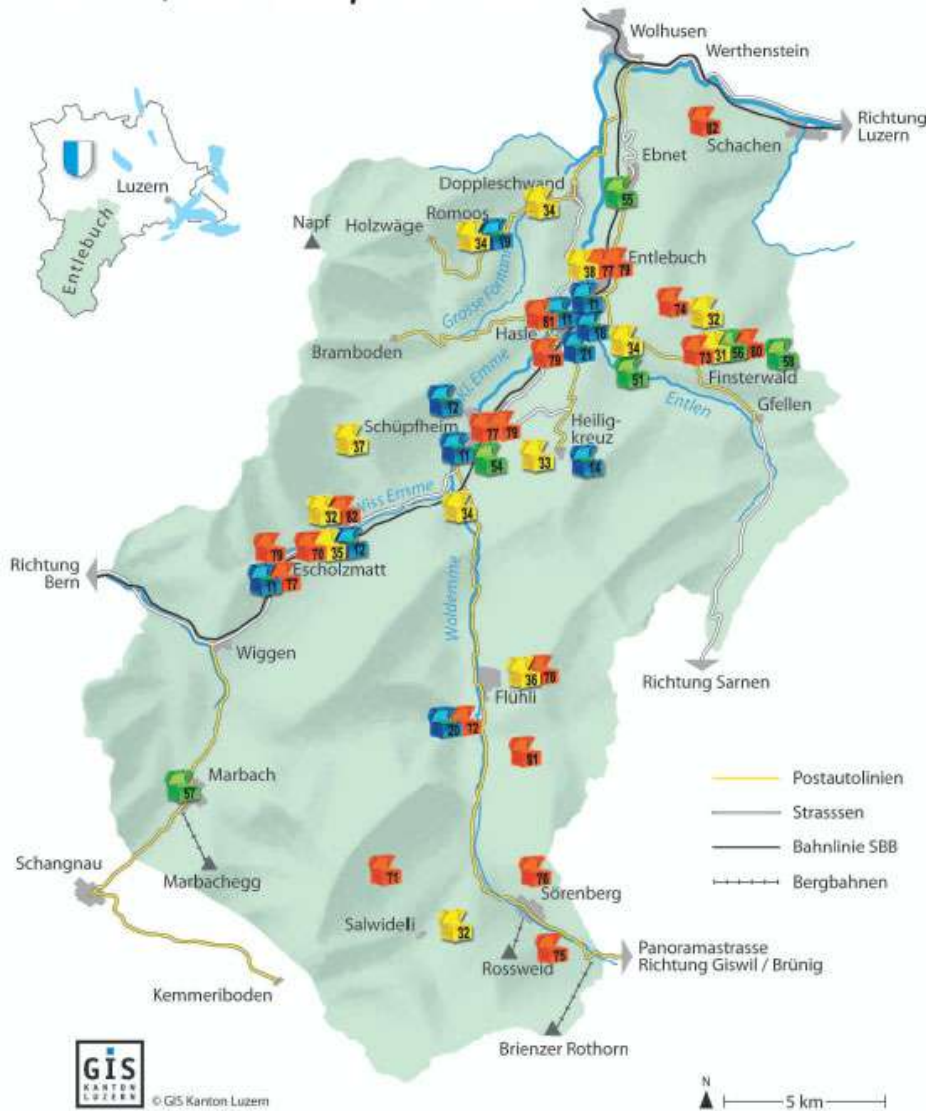


# Foster acceptance and identification



**BIBLIOSPHÄRE.CH**

# Schatzkarte



Educate future generations

- From Primary to High School: 2 days per year topics about the Biosphere in class
- A total of 250 involved teachers
- 2500 kids followed the courses

## Accompany and support the activities with research

- Initializing, accompanying and supporting BSc, MSc, PhD theses as well as external and internal research projects
- Monitoring activities and long term research
- Active knowledge sharing towards important actors in the region (management, steering committee, municipalities, enterprises, institutions)
- Exchange within the national and international network

*We are looking forward to your research projects and insights into a completely under-researched topic...*

# Management figures

- 14 persons, sharing 10 full time jobs in the fields of
  - Nature conservation
  - Landscape & urban planning
  - Research & Education
  - Nature based tourism
  - Regional economic development
  - Communication & Admin
- Total yearly budget of 3 Mio CHF
- Legal status: association of local municipalities
  - Governing body is the assembly of mayors of the municipalities
  - Vast network of collaborators and supporters

# The TdCS 2022 (Michael Stauffacher, Florian Knaus, Pius Krütli)



# Transdisciplinary Case Study (tdCS)

## key characteristics

- 7 ECTS (210 hours)
- For all Majors in *Environmental Sciences* and *Agricultural Science*; open as well for other MSc (e.g. BAUG, environmental engineering, planning, MTEC, ISTP)
  - Research-oriented / project-based learning
  - Focus on real-world case
  - Working in groups, self-directed
  - Close interaction / collaboration with practitioners and stakeholders
- Number of participants is limited (approx. 15-25 students)

# Learning objectives

- Students should be able to understand a case and its context from a variety of perspectives, and to extract multiple ways of framing, analysing and developing potential solutions for the problem at hand.
- More specifically, students
  - structure a wicked problem and define relevant research questions
  - apply various methods to collect and analyze data to answer these research questions
  - work in an interdisciplinary team and
  - engage effectively with stakeholders.

# End product in two formats scientific reports (English) & German brochure

Internal document, please do not cite and not distribute

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ETH zürich

ETH Zurich Trans  
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Active Mobility G

SUMMER HOLIDAY TRAVEL  
BEHAVIOR AT

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ETH zürich

- AN APPROACH TH

Mobility and vacation

Lisa Boshuizen, Katja Dunkel, Selma

Exploring the meaning of "joyful and positive" family holidays for the residents of the Hunzikerareal



Suheun Lee  
7-4-2019



Research report for the course "Transdisciplinary Case Study"

Laurence Jeangros, Delphine Piccot, Anna Bigmann

4th July 2019

**ETH zürich**

**Nachhaltige Mobilität:  
Das Hunziker Areal in der  
Stadt Zürich**

USYS TdLab Transdisziplinäre Fallstudie 2019

Katja Dunkel und Delphine Piccot

USYS TdLab  
STIFTUNG MERCATOR SCHWEIZ

## Who can attend

- MSc students from USYS (priority) and other ETH-Departements like BAUG, MTEC, ISTP
  - Limited number of students (15-25)
  - Send a letter of motivation (2 pages) referring to:
    - Why are you interested? What do you want to learn? What would you be able to contribute?
- latest by January 31, 2022, to [michael.stauffacher@usys.ethz.ch](mailto:michael.stauffacher@usys.ethz.ch) and [pius.kruetli@usys.ethz.ch](mailto:pius.kruetli@usys.ethz.ch)
- Criteria of selection: letter of motivation; student's expertise; mix of MSc/major background; gender mix

# tdCS 2022

## «Biosphere Entlebuch – culture & environment»

- Cooperation with UNESCO Biosphere Entlebuch
  - Research coordinator Florian Knaus and accompanying group
- Integral part of the research concept 2021-2024
  - Two student case studies are planned (2022 and 2024) as well as complementary Bachelor's and Master's theses at the ETH
- Content-related starting point "Culture and Environment"
  - Principle: Research topics are developed together with the region
  - First meeting of accompanying group (see next slide) on 23 November was a central occasion for this
  - Broad view of culture, from music/theatre to local identity and everyday practices

# tdCS 2022

## accompanying group

- Linus Arnet, Entlebuch, Jungwächtler, Musiker und Musiklehrer
- Christine Bouvard, Schüpfheim; amtierende Gemeindepräsidentin, Präsidentin Musikschulen:
- Hans Dieter Hess, Vorsteher Dienststelle Landwirtschaft und Wald des Kantons Luzern:
- Ruth Koller Unternährer, Mitglied Kommission Förderfonds Kultur, Region Luzern West
- Josef Küng, Schüpfheim; Redaktor Entlebucher Anzeiger
- Rita Kuster, Schüpfheim, Leiterin Entlebucherhaus und Mitglied der Kommission Kulturfonds Luzern West
- Silvia Limacher, Flühli, Drogistin, Chrütlimacherin, Gemeinderätin
- Philipp Muff, Schüpfheim, Leiter Jugendarbeit
- Inger Muggli-Stokholm, Rektorin Kantonsschule Plus, Schüpfheim
- Claudia Riegger, Entlebuch; Brattigkommission, Verein Freunde der Biosphäre
- David Schnider, Flühli, Inhaber Heubödi, Landwirt, Vorstand Sörenberg-Flühli Tourismus
- Eveline Stadelmann-Krummenacher, Escholzmatt, Jodlerin
- Ruedi Tschachtli, Rektor Landwirtschaftsschule BBZN Schüpfheim
- Petra Wey-Hofstetter, Entlebuch; Pflegschaft Heiligkreuz

# tdCS 2022

## who is involved?

- 15 to 25 students from different ETH degree programmes or specialisations (environmental and agricultural sciences; environmental engineers; MTEC; ISTP; etc.)
- The following persons coach and support the students
  - Prof. Dr. Michael Stauffacher (responsible lecturer, Co-Director TdLab, ETH Zurich)
  - Florian Knaus, MSc ETH (scientific coordinator, Biosphere Entlebuch)
  - Dr. Pius Krütli (Co-Director TdLab, ETH Zurich)
  - Sandro Bösch (administrative, organisational support, TdLab)

# tdCS 2022

## supporting partners

- The 2022 case study is supported by the following experts in cultural studies, arts science and the arts
  - Prof. Irene Vögeli & Prof. Patrick Müller, MA Transdisciplinarity, Zurich University of the Arts (ZHdK)
  - Prof. Dr. Boris Previšić, Director, Uri Institute Cultures of the Alps at the University of Lucerne
  - Prof. Dr. Bernhard Tschofen, University of Zurich, ISEK - Institute for Social Anthropology and Empirical Cultural Studies
  - Mira Hirtz, Maximilian Grünewald, Dr. Frank Raddatz, Bela Rothenbühler, Initiative for Applied Melancholy

→ We organise several iterations of exchange



# Time table

## important phases and dates

- Preparation (until mid-February 2022)
  - First meeting of the accompanying group (23.11.2021) to clarify framework
  - Information (7.12.2021), **application (31.1.2022)** and selection of students
- **During semester (23 February to 1 June 2022 - weekly Wednesday slots, 14h15-18h00, plus approx. 2 hrs. homework per week)**
  - Familiarisation with topic and case, exchange and encounters **on site (block days, Fri 18 to Sat 19 March)**, outline of possible research ideas
    - Discussion with **accompanying group on 6 April (19h00-20h30, Schüpfheim)**
  - Definitive version of research plans, ethics application, preparation of field phase
- **Block weeks (13 to 29 June 2022 – full day)**
  - Data collection, data analysis and preparation of scientific report
  - **Final presentation of the case study to all interested parties: Tuesday, 28 June (19h00-20h30, Schüpfheim)**
- Follow-up (until approx. February 2023)
  - Preparation of a brochure for the population (by volunteering students, paid RA)

## Further info

- General info on tdCS approach
  - <https://tdlab.usys.ethz.ch/teaching/tdcs.html>
- Info on former tdCS
  - <https://tdlab.usys.ethz.ch/teaching/tdcs/former.html>
- First info on the tdCS 2022
  - <https://tdlab.usys.ethz.ch/teaching/tdcs/current.html>
- See as well 701-1502-00L Transdisciplinary Case Study
  - <http://www.vorlesungsverzeichnis.ethz.ch/Vorlesungsverzeichnis/lerneinheit.view?semkez=2022S&ansicht=ALLE&lerneinheitId=157347&lang=de>

# Q&A