

All Plants and Animals live in Ecological Communities

The community is an important
basis for developing our
understandings



Karst has a distinctive set of communities

- 📁 The surface community: plants, birds, mammals, reptiles, etc.
- 📁 Many of these will be found equally in neighboring non-karst areas
- 📁 Some will be found only the karst or only elsewhere at a long distance
- 📁 Some will also enter into the caves



Visitors to the cave:

- 📖 May fall in by accident: important to the cave community only as potential food
- 📖 Others [Trogloxenes] enter the cave as part of a daily cycle
- 📖 Bats to shelter and sleep
- 📖 Snakes to eat the bats
- 📖 People to look and inquire



Then there are permanent residents . .

- 📁 There may be found elsewhere, e.g.,
in leaf litter [Troglophiles]
- 📁 Others only occur in the caves and are
specially adapted to underground life
[Troglobites]



They survive by eating:

- 📁 Bacteria, fungi
- 📁 Other permanent residents
- 📁 Food contributed by the troglodenes
e.g., bat guano; or falling or being
washed into the cave from outside



Four major types of cave community

📁 Terrestrial species

📁 Freshwater Species

📁 Anchialine species

📁 Microbiota: bacteria and nanobia



Management for biodiversity conservation:

- 📁 Maintain normal environment, especially micro-climates
- 📁 Prevent floor trampling
- 📁 Avoid pollution or sedimentation
- 📁 Limit invasive species
- 📁 Sensitive tourism development

