

# LTSER Silva Gabreta – Glacial lakes



LTER site: **Glacial lakes** (complex site, part of LTSEER Silva Gabreta)

Major ecosystems: lakes, mountain spruce forests

Available data since: **1979** (1871)

Site coordinator: Jiří Kaňa | [jiri.kana@centrum.cz](mailto:jiri.kana@centrum.cz)

Institution: Biology Centre ASCR, Institute of Hydrobiology

Area: 2.6–18.8 ha (lake areas); 67 and 89 ha (experimental catchments)

Altitude: 918–1087 m a.s.l.

Annual precipitation: ca. 1450 mm

Temperature (air): ca. 3.8°C

Other site category: National Park, Biosphere Reserve

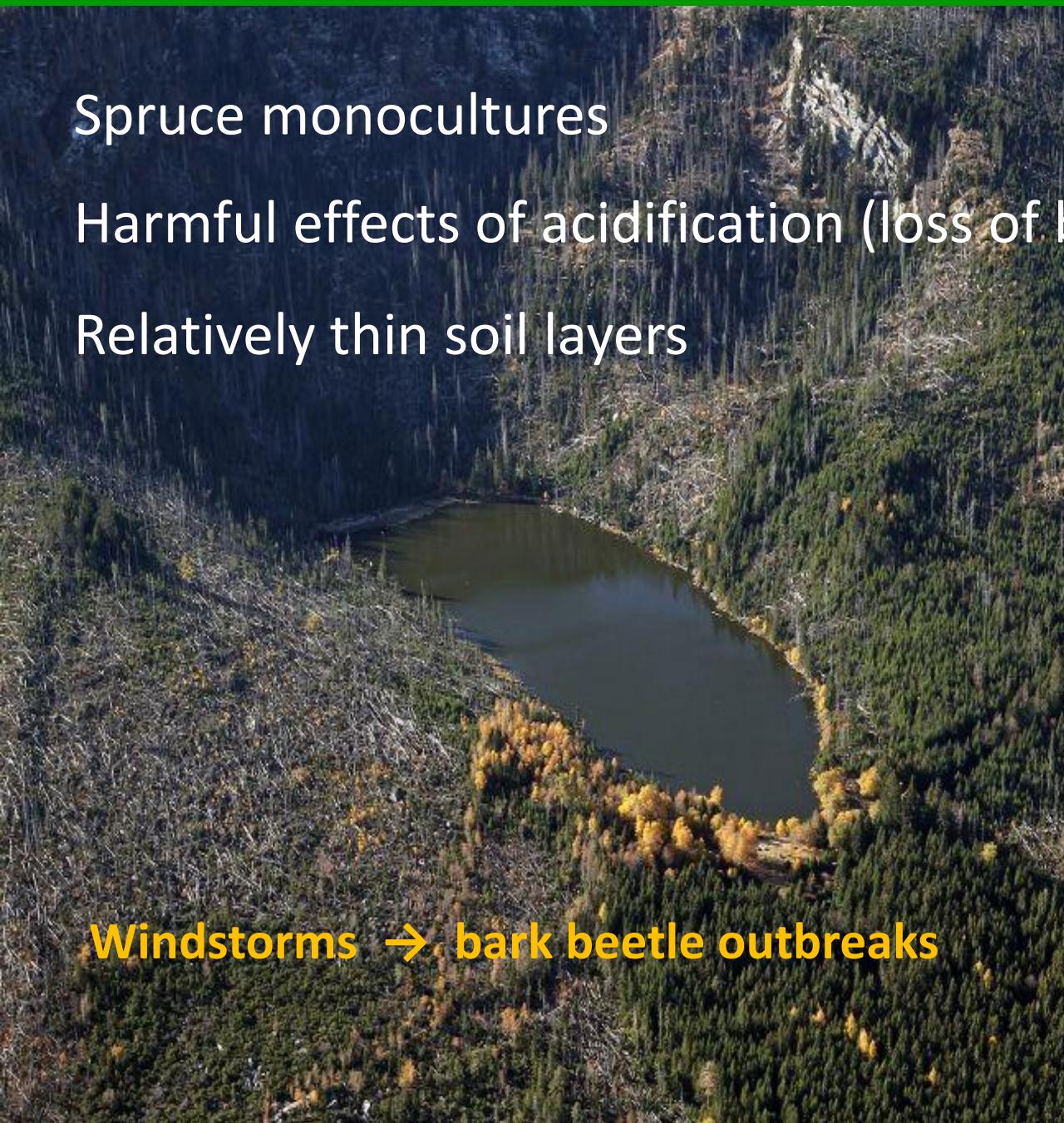
# Catchment sensitivity to disturbances

Spruce monocultures

Harmful effects of acidification (loss of base cations, toxic aluminum)

Relatively thin soil layers

Windstorms → bark beetle outbreaks





# Šumava (Bohemian Forest, Böhmerwald)

National park since 1991

Core zones with no intervention regime

Concept of wilderness and wild forest

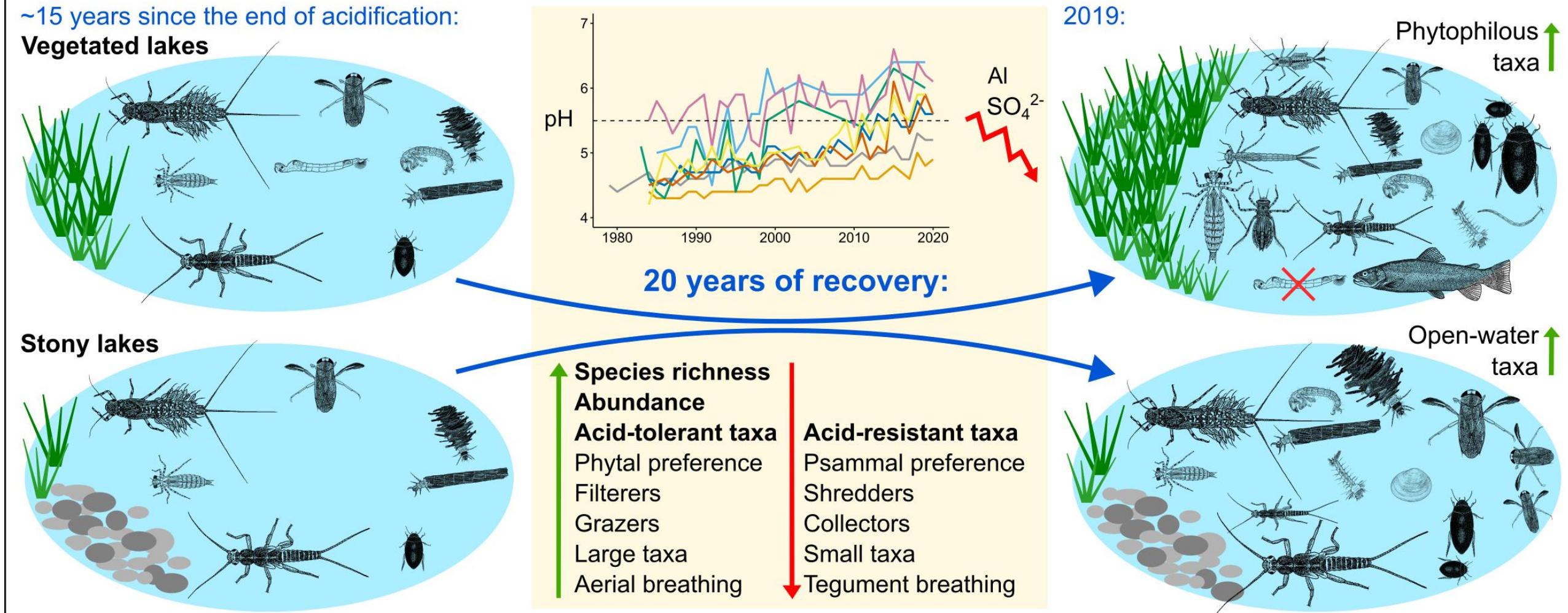
*Subject of social controversies*



Vítejte v poušti...

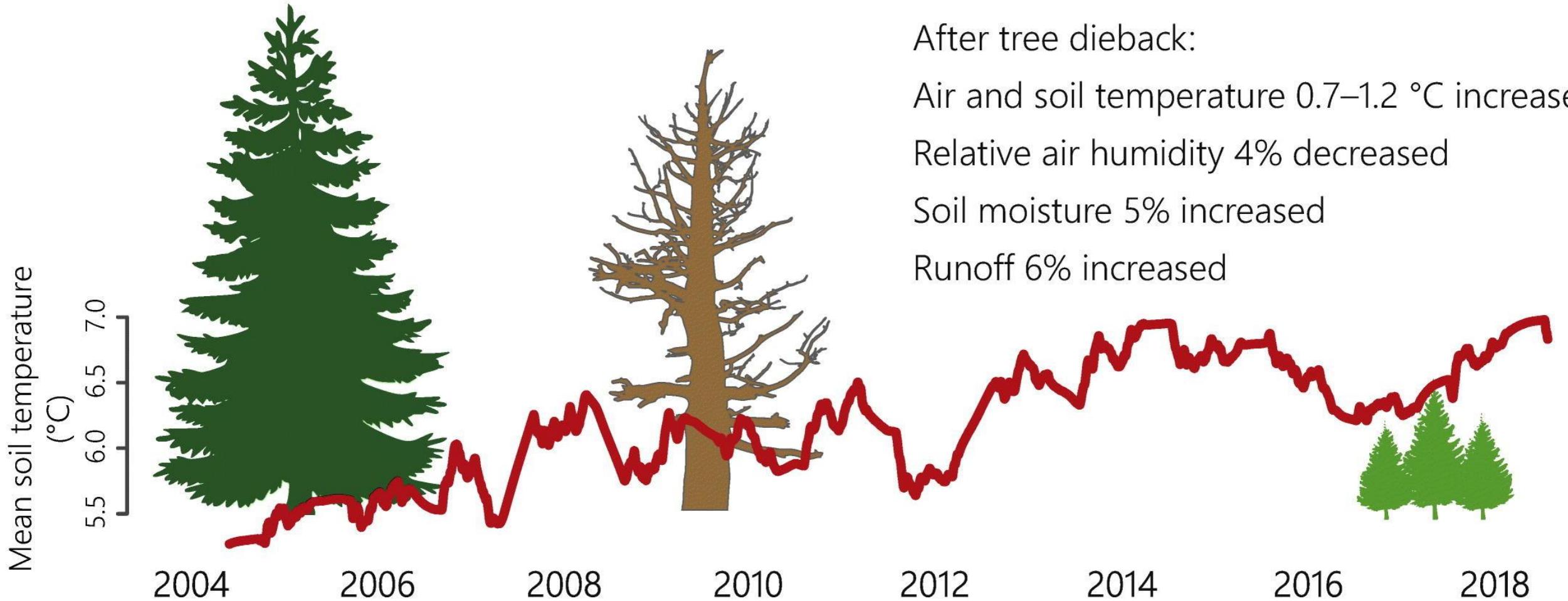


# Chemismus a oživení jezer

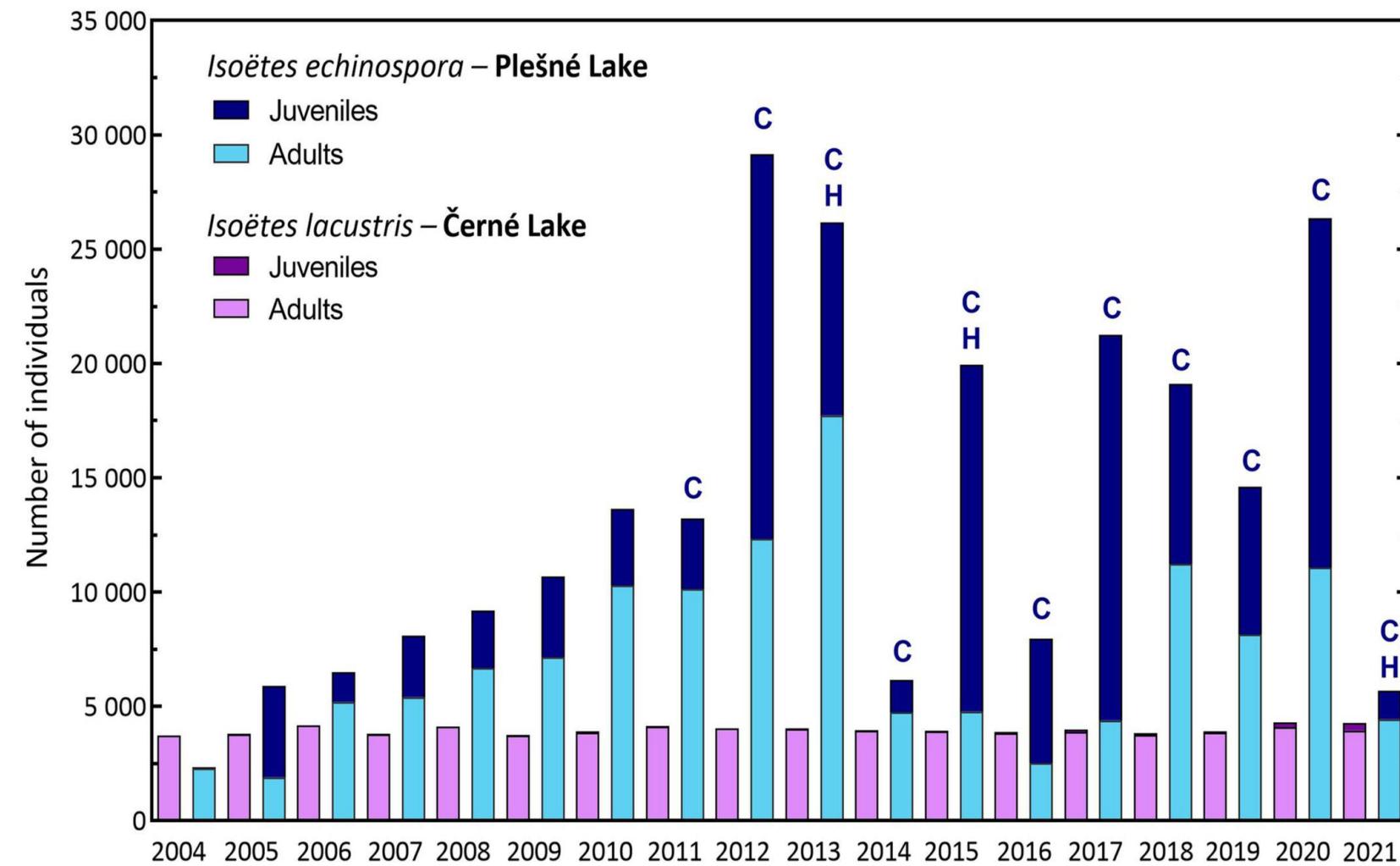


PETRUŽELOVÁ J., BOJKOVÁ J., SYCHRA J., DE DONNOVÁ S., VRBA J., POLÁŠKOVÁ V., SEIFERT L., ŠORFOVÁ V., KOPÁČEK J. (2023): Accelerated recovery of lake macroinvertebrates in the third decade since the reversal of acidification. Sci. Total Environ. DOI: 10.1016/j.scitotenv.2023.164553

# Dlouhodobé sledování klimatických dat



Kopáček J., Bače R., Hejzlar J., Kaňa J., Kučera T., Matějka K., Porcal P., Turek J. (2020) Changes in microclimate and hydrology in an unmanaged mountain forest catchment after insect-induced tree dieback Science of the Total Environment 720 : 137518.  
DOI: [10.1016/j.scitotenv.2020.137518](https://doi.org/10.1016/j.scitotenv.2020.137518)

Aquatic quillworts, *Isoëtes echinospora* and *I. lacustris* under acidic stress—A review from a temperate refuge

# Půdní chemismus

