

Cave Ecology Short Course
Western Kentucky University
30 May–05 June 2022
Jut Wynne (jut.wynne@nau.edu)

Day 0 (30 May): Participants arrive

Participants arrive at Hamilton Valley Research Station in the afternoon/evening

Day 1 (31 May): Mammoth Cave

Morning: Orientation lecture & history of Mammoth Cave (Rick Toomey, NPS); cave ecology lecture (Jut Wynne).

Afternoon: Tour Mammoth Cave within an ecological context

Day 2 (01 June): Great Onyx

Morning: Bat sampling techniques (Wynne); Regional cave roosting bats (Steve Thomas, NPS); Setting up mist nets and harp traps; examination of bat skins.

Afternoon: Through the eyes of a cave ecologist, walking tour of Great Onyx (Rick Toomey and Jut Wynne) to search for salamanders, cavefish, crawfish, and identify other animal sign.

Evening: Emergence counts of bats with IR (*02 and 03 JUNE are alternative dates for inclement weather*)

Day 3 (02 June): Dogwood Cave

Morning: Overview of cave arthropod sampling techniques (Jut Wynne); HoboPro dataloggers deployment, maintenance, and software use

Afternoon: Cave sampling; deploy data loggers, pitfall traps, & baits; conduct direct intuitive searches.

Day 4 (03 June): Adwell Cave

Morning: Regional cave arthropod lecture (Keith Philips, WKU); examination of MACA cave-dwelling arthropods (WKU entomology lab)

Afternoon: Cave sampling; deploy data loggers, pitfall traps, & baits; conduct direct intuitive searches.

Evening: *Emergence counts of bats with IR (contingency for inclement weather)*

Day 5 (04 June): Dogwood Caves

Morning: eDNA lecture; eDNA field demonstration (Matt Niemiller, University of Alabama, Huntsville)

Afternoon: Retrieve specimens from Dogwood Cave; Organize and process specimens

Evening: *Emergence counts of bats with IR (contingency for inclement weather)*

Day 6 (05 June): Adwell Cave

Morning: Retrieve specimens from Adwell Cave; Organize and process specimens

Afternoon: Program concludes ~2pm