

**THE ROLE OF CLIMATE IN CAVE ROOST SELECTION**

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Caves are one of the preferred roosts used by bats in different periods of their lives. In Romania, there are more than 12,000 registered caves, but only few caves are inhabited by bat colonies. In order to understand why bats choose a cave for installing their colonies, a topoclimatic study was performed. Temperature and humidity were registered in two neighbouring caves from the North-Western part of Romania during an annual cycle. The spatial distribution of the seasonal and annual values of measurements and also the thermal amplitudes were statistical processed. The results of the study were corroborated with the bat dynamics in the selected caves. In addition, these caves were characterized from geomorphologic, hydrologic and ventilation point of view and also from structural substrates offered to roosting bats.