Exploring Prehistoric Vegetation and Agriculture Dynamics Using Annually Laminated Records from Southern Europe

Under special conditions, lake sediment archives preserve the environmental history of the surrounding area in annually laminated layers. This allows to study vegetation dynamics and land use processes with high chronological precision. In the best case, the lake sediment time series can be matched with archeological and historical records. The joined environmental and societal evidence will allow to gain better insights into causes and effects of prehistorical societal changes, including climate vulnerability and resilience e.g. through technological innovations.

Methods: pollen, macrofossil and charcoal analysis, numerical techniques

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Lago di Monticchio in the Basilicata region of Southern Italy. This volcanic crater lake contains sediment that reaches back for more than 100'000 years. Picture: Willy Tinner