## Ecology, physiology and behaviour

## Den use in captivity: insights from two bears

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Brown bears in captivity could provide valuable insights into their den-related behaviour. We monitored two brown bears (*Ursus arctos*), a male and a female in the Nature and Animal Conservation Centre (Zoo Centre) in Dobrich City, Bulgaria, during the denning period. The bears lived together in an enclosure with two dens dug by the bears and yearly used. From November to March 2022 and 2023, camera traps were installed in front of each den to record the behaviour of the two individuals near the dens. The study revealed details about the den chronology, when each bear enters and exits as well as some individual differences between both individuals. A hierarchy regarding den use, with the female being dominant, was established. These findings enhance our understanding of den-related behaviour and may help to improve the welfare of the brown bear.

