Population monitoring and management

Implementation of monitoring methods for dormice with emphasis on the forest dormouse (*Dryomys nitedula*) and the hazel dormouse (*Muscardinus avellanarius*) in Croatia

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In Croatia, there is a general lack of arboreal small mammal monitoring. This results in a deficiency of population as well as distribution data on arboreal dormice, making strategic planning and conservation measures almost impossible. As part of the Operational Program Competitiveness and Cohesion 2014-2020, the Republic of Croatia implemented a national monitoring program for the forest dormouse (*Dryomys nitedula*) and the hazel dormouse (*Muscardinus avellanarius*). Both species were categorized in the last Croatian Red List as Near Threatened (NT) and are included in Appendix IV of the EU Habitat Directive. Croatia is required to report every 6 years on the conservation status of these species. As part of the national monitoring project, various methods were tested and implemented, including live traps, nest boxes, camera trapping, and footprint tunnels. Camera trapping was tested across the entire known and potential distribution ranges for both species in selected 23 quadrants (10x10 km). Cameras were placed on trees with feeding platforms approximately 2 m above the ground and were deployed during the dormice active season from May to September. In each quadrant, ten cameras were placed in a transect, at least 300 m apart, and were recording for the following 10 days. Additionally, all four methods were tested in one quadrant where both dormice species occur, to test their efficiency. Cameras proved to be highly effective in detecting the presence of the target species as well as other two dormice species (*Glis glis* and *Eliomys quercinus*) present in Croatia.