

## **Dolines and cats: remote detection of karst depressions and their application to study wild felids' ecology**

Authors: Špela Čonč<sup>1</sup>, Teresa Oliveira<sup>2</sup>, Ruben Portas<sup>2,3</sup>, Rok Černe<sup>4</sup>, Mateja Breg Valjavec<sup>1</sup>, Miha Krofel<sup>2</sup>

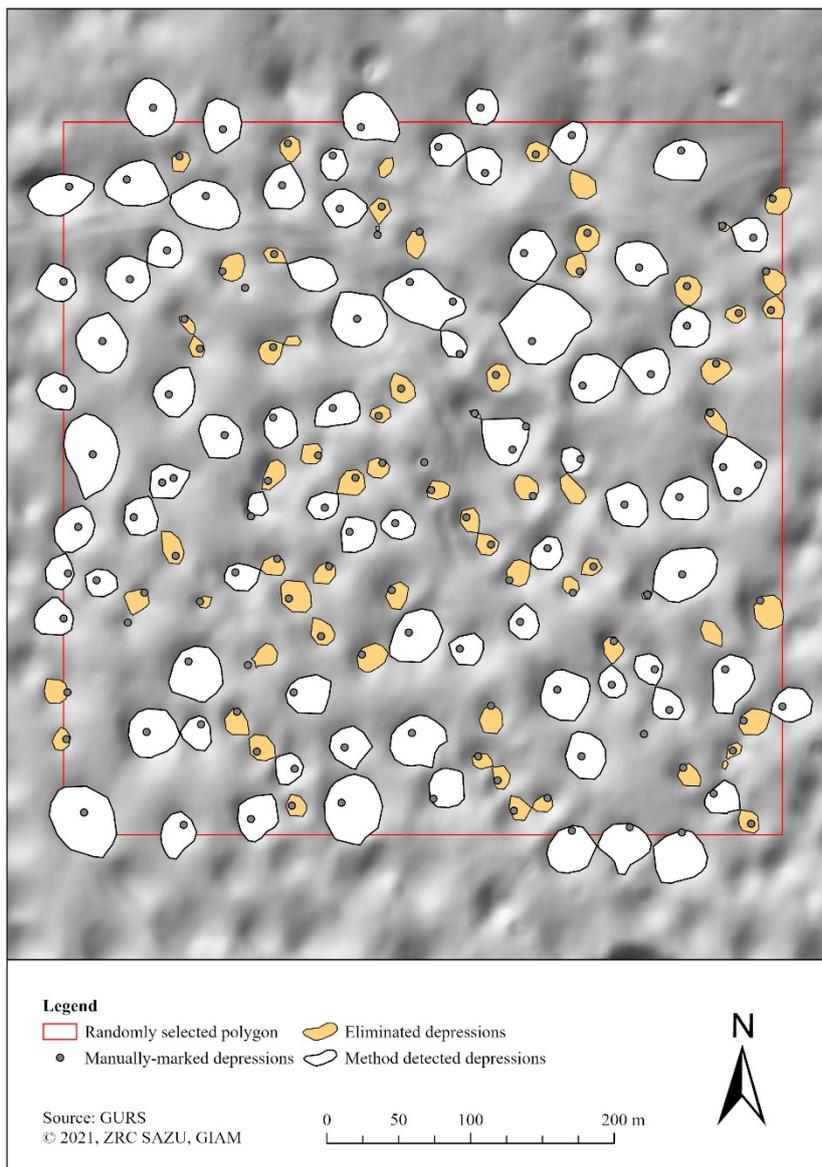
<sup>1</sup> Anton Melik Geographical Institute Research Centre of the Slovenian Academy of Sciences and Arts, Novi trg 2, 1000 Ljubljana, Slovenia

<sup>2</sup> Department of Forestry, Biotechnical Faculty, University of Ljubljana, Večna pot 83, 1000 Ljubljana, Slovenia

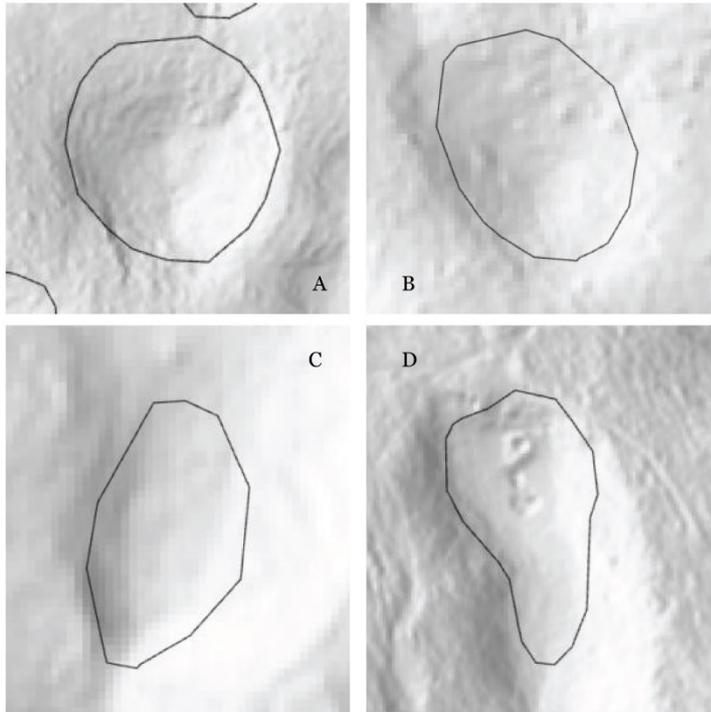
<sup>3</sup> Leibniz Institute for Zoo and Wildlife Research, Department of Evolutionary Ecology, Alfred-Kowalke-Straße 17, 10315 Berlin, Germany

<sup>4</sup> Slovenia Forest Service, Večna pot 2, 1000 Ljubljana, Slovenia

**Supplementary file - List of figures and tables.**



*Figure S1: Comparison of automatic-detection method with visual recognition based on shaded relief. Eliminated karst depressions did not fit to size criteria, i.e. depth was < 2 m and diameter < 10 m.*



*Figure S2: Shape of depressions according to elongation values: circular or sub-circular (A), elliptical (B), sub-elliptical (C), elongated (D).*

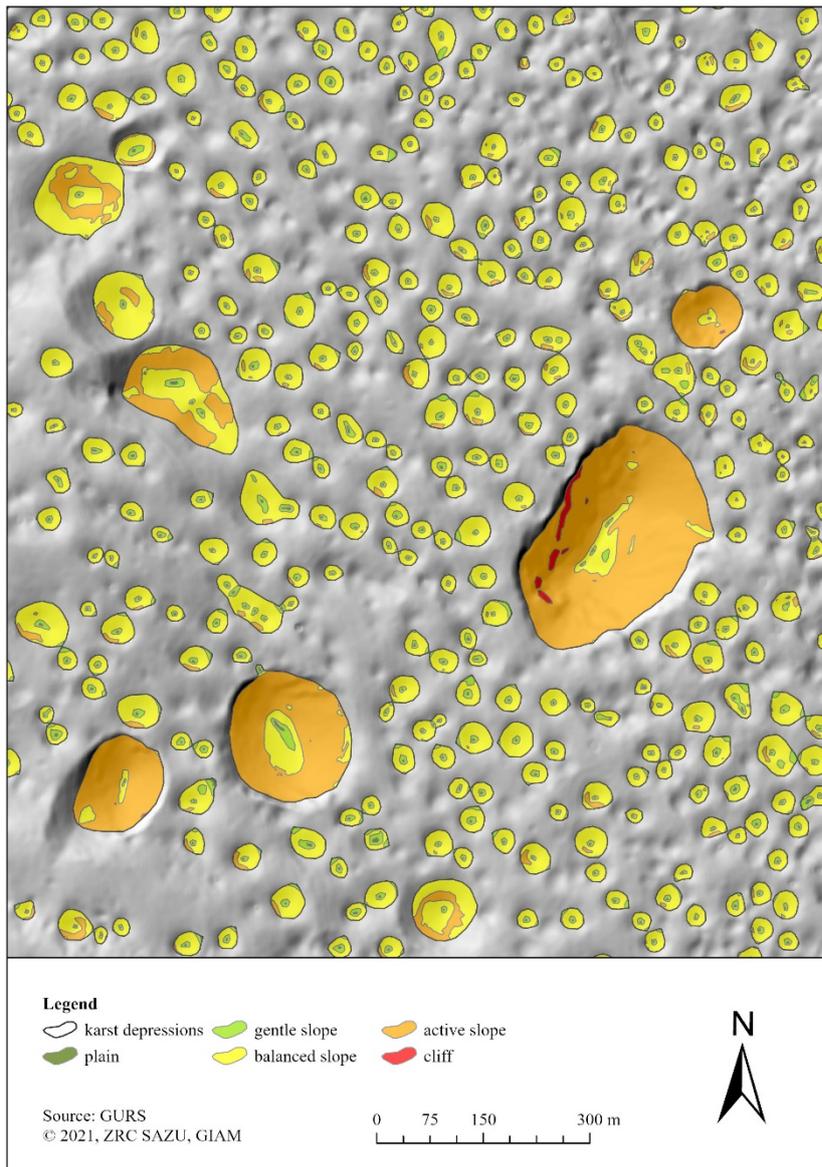


Figure S3: Map of geomorphological characteristics of karst depressions based on slope.

Table S1: Range of values [Min-Max] and associated median [median  $\pm$  IQR] for each covariate per species, for both used and available points.

<b>Lynx</b>				
	Dist_depressions (used)	Dist_depressions (available)	Dist_roads (used)	Dist_roads (available)
Min – Max	0.0 – 960.0	0.0 – 1504.8	0.4 – 913.5	0.3 – 1006.3
Median $\pm$ IQR	25.0 $\pm$ 50.0	39.0 $\pm$ 113.8	180.1 $\pm$ 209.5	170.6 $\pm$ 242.1
<b>Wildcat</b>				
	Dist_depressions (used)	Dist_depressions (available)	Dist_roads (used)	Dist_roads (available)
Min – Max	0.0 – 277.8	0.0 – 298.3	< 0.1 – 637.8	0.6 – 678.2
Median $\pm$ IQR	32.2 $\pm$ 58.3	37.71 $\pm$ 66.2	217.0 $\pm$ 255.2	185.2 $\pm$ 228.6