



# I'm coming home! Evidence of homing capabilities within a highly anthropized landscape by the brown bear (*Ursus arctos*)

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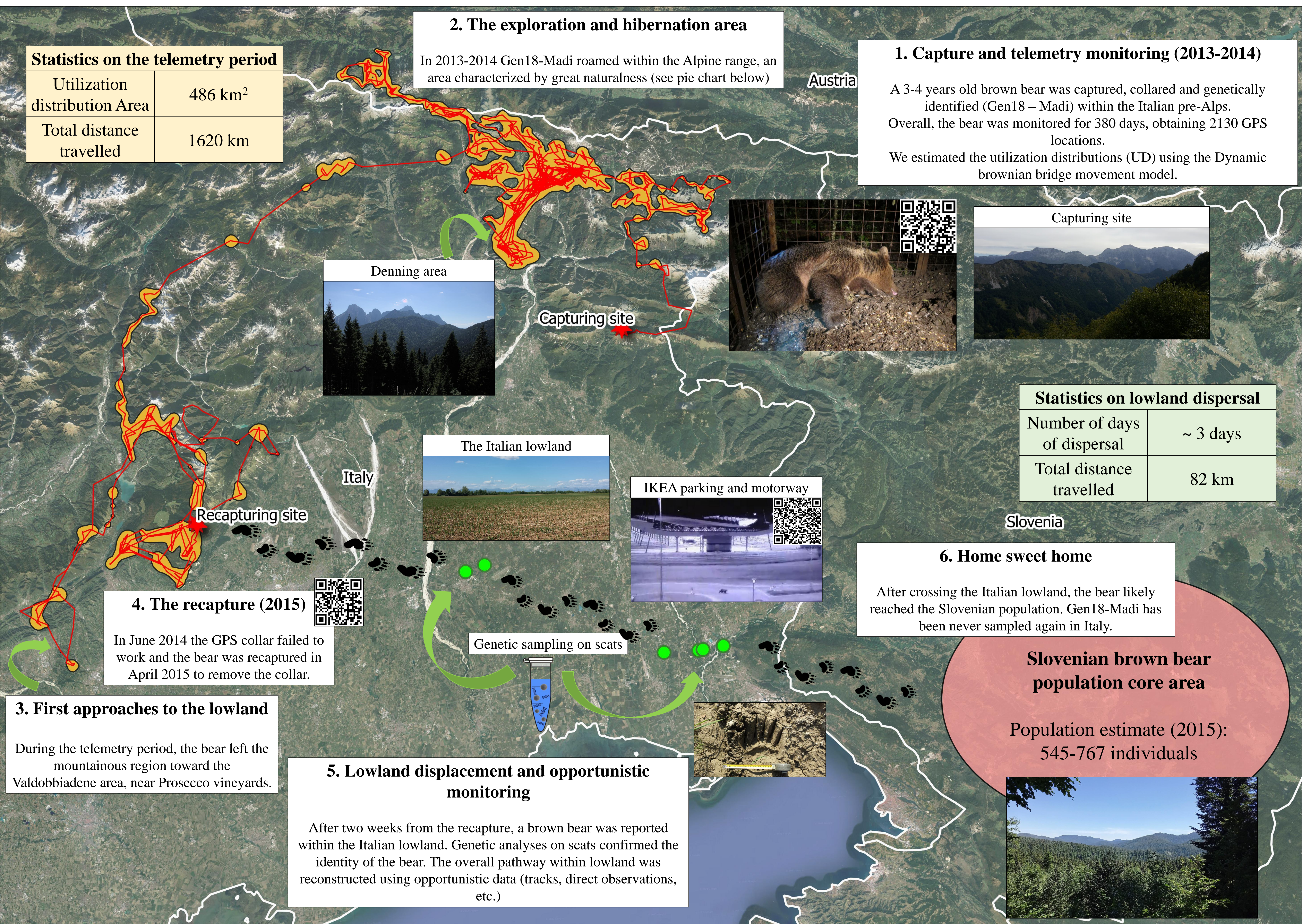
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## BACKGROUND

Homing is the ability of an animal to navigate towards an original location through unfamiliar areas. In Europe, brown bears avoids anthropic areas, but under specific scenarios (e.g., dispersal), they may show homing capabilities toward human dominated landscapes.



We used as a case study the movement patterns of a dispersing brown bear from Slovenia in north-eastern Italy, the expansion area of the Dinaric-Pindos population, that crossed the Italian lowland to return toward its natal area.



## RESULTS AND CONCLUSION

Using a multidisciplinary approach we were able to confirm the identity of the bear and to rawly estimate the landcover types used, highlighting that even a large carnivore can cross highly anthropized areas during homing displacements. In face of this case study, reasons ahead of the decision to use the least suitable path (but the shortest) to return to the natal area, instead of using the most favourable one (Alpine range, as done by other collared bears; n = 5) should be investigated, as well as the brown bear homing capabilities especially in terms of public safety (i.e., road accidents).