

T712P

Habitat suitability analysis on the golden jackal for the Netherlands.

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The aim of this study was to investigate how many golden jackals (*Canis aureus*) family groups will be able to live in the Netherlands and where these would be located. First the habitat requirements of the golden jackal were assessed by means of a literature study. This information was used to perform a Habitat Suitability Analysis (HSA). Factors such as diet, roads, habitat size, land use and potential wolf territories were taken into account to assess the quality of the each 25x25 meter area as part of potential habitat for golden jackal. 5 rules were established based on the literature study:

1. Diet is not a limiting factor, but rather a density depending factor.
2. Urban areas are not used as resting spots but will be visited during the night.
3. The territory of a family group in highly suitable areas is 6 km² and in suitable areas is 12 km².
4. Roads are barriers but these are not insurmountable.
5. Presence of wolves makes an area uninhabitable for the golden jackal.

The main two limiting factors for the golden jackal seem to be urban areas (excluded in this study) and the presence of wolves. Maps were created in which the most likely core areas, highly suitable areas and suitable areas were recognized.

The core areas consisted of high quality areas of at least 6 km² consecutive area without any roads. Highly suitable areas were the same as core areas except that primary and secondary roads were allowed. The suitable areas consisted of lower quality area and were therefore at least 12 km² of consecutive area. The results showed that core areas can support more than 100 family groups, while the highly suitable areas can support an additional 50 family groups. The remaining suitable areas can support up to around 1200 more family groups. In total the Netherlands could support around 1450 golden jackal family groups. Reestablishment of wolves could decrease these numbers to around 800 golden jackal family groups. This study did consider as many parameters as possible and used conservative parameter settings; therefore it is likely that these estimated suitable areas will be higher in reality.

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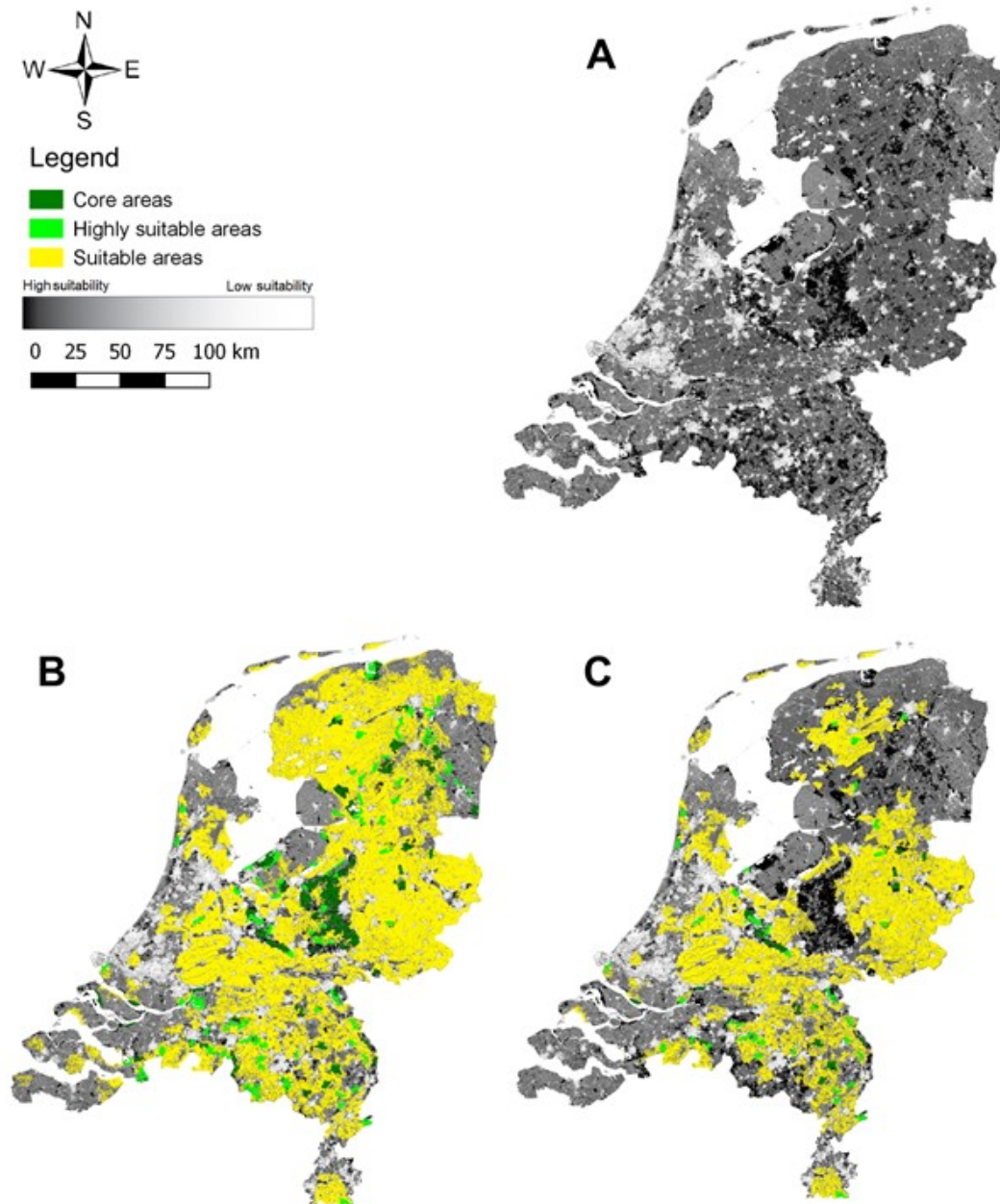


Figure T712P.1: 3 maps of potential golden jackal habitat: **A.** The Netherlands mapped based on habitat suitability. **B.** The Netherlands mapped based on habitat suitability including core areas, highly suitable areas and suitable areas. **C.** The Netherlands mapped as B but excluding potential wolf territories.