



# Vegetation maps based on remote sensing are informative predictors of habitat selection of grassland birds across a wetness gradient

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Résumé en anglais	<p>Vegetation is a major environmental factor influencing habitat selection in bird species. High resolution mapping of vegetation cover is essential to model the distribution of populations and improve the management of breeding habitats. However, the task is challenging for grassland birds because microhabitat variations relevant at the territory scale cannot be measured continuously over large areas to delineate areas of higher suitability. Remote sensing may help to circumvent this problem. We addressed this issue by using two methods. We (i) mapped the continuous Ellenberg index of moisture and (ii) identified 5 vegetation classes distributed across the wetness gradient. These two methods produced consistent output maps, but they also provided more information about vegetation structure, and possibly trophic resources. In spite of the apparent uniformity of meadows, our data show that birds do not settle randomly along the moisture and vegetation gradients. Overall birds tend to avoid the driest vegetation classes, <i>i.e.</i> the highest grounds. Thus, vegetation maps based on remote sensing could be valuable tools to study habitat selection and niche partition in grassland bird communities. It is also a valuable tool for conservation and habitat management.</p>
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