

AT THE RIGHT TIME AT THE RIGHT PLACE: considerations for focal species field studies for refined risk assessments of birds & mammals



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INTRODUCTION

The current guidance on 'Risk Assessment for Birds and Mammals' by EFSA [1] strengthens the need to put more effort in the identification of the most **vulnerable species per feeding group (infrequently observed but clearly present)** as the most appropriate focal species (FS). Therefore, some **crucial aspects** should be considered when planning and conducting **field studies** in order to **identify FS**.

A **stepwise approach** is suggested to cover all relevant species that might occur in a crop, introducing new steps to identify potential species and identify study regions where crop area and species distribution are both as abundant as possible.



STEPWISE APPROACH

Identification of the distribution of the crop and the potential FS candidate (from literature)

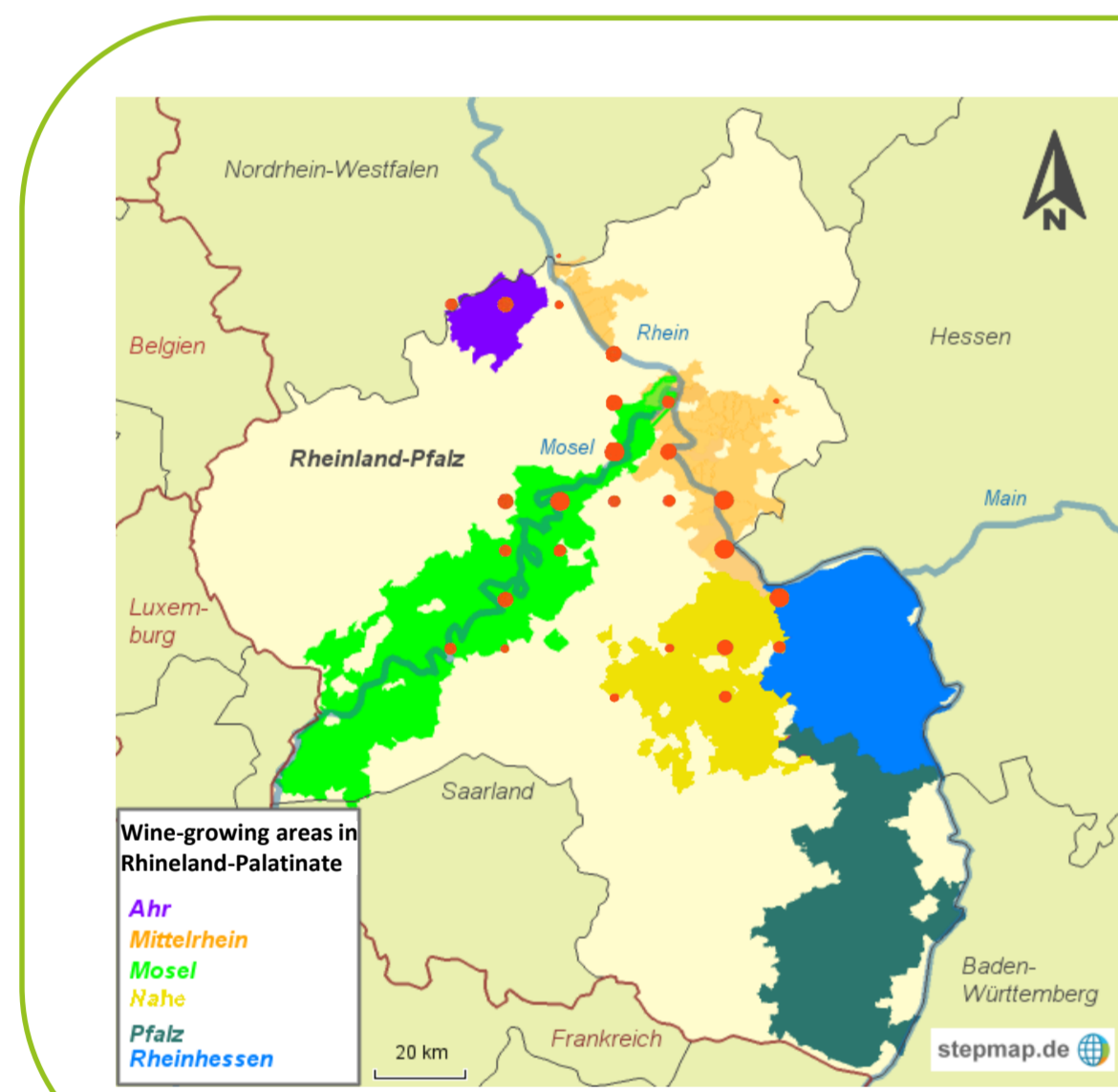
Study fields selection

Appropriate survey techniques and calculations

Information about the distribution of the crop and the potential FS candidate

As a first step, through literature research and expert knowledge, all species that may potentially use the crop during the period relevant for the risk assessment should be listed. Consequently, rare or sparsely distributed species are not avoided. Subsequently, the cultivation area in the region should be identified. All the information needs to be merged to identify potential study regions where the cultivation area and the listed species are as abundant as possible. Timing is an important factor to be considered, e.g.: for a seed treatment application the bird or mammal community present at the time of drilling is relevant.

Study cases of regionally occurrence: the Rock bunting and the Bluethroat



The **Rock bunting** is sparsely distributed in the wine-growing areas in Rhineland-Palatinate region in Germany where the species occupies especially vineyards on hillsides [2].



Fig. 1. Distribution wine growing [3] and the Rock bunting [4] in Rhineland-Palatinate



The **Bluethroat** can use secondary habitats, e.g. oilseed rape fields [5].

However, the species only occurs if those fields where reed would grow under non-cultivated conditions.

Study field selection

The identified potential study region is the most appropriate in terms of crop and species abundance. The study fields selected in the region should include different landscape and surrounding characteristics.

Appropriate survey techniques

To assess all the potential species inside the study fields and other suitable habitats in the surroundings, the most appropriate survey method should be selected:

- **Scan sampling or point counts** over long periods (at least 3 hours), for birds and some mammal species.
- **Transect counts** repeated frequently (at least 5-7 times) when the crop prevents sufficient visibility, for bird and some mammals.
- **Trapping or camera traps**, for small mammals and bird communities.

CONCLUSIONS

Since the revised GD emphasised the need to consider 'regionally specific' species as well as the vulnerability of potential FS candidates, an improved approach for the preparation, conduct and data analysis of FS-studies is suggested:

- All species that may potentially use the crop during a certain period should be listed and the cultivation area in the region should be identified. This allows the identification of potential study regions where the cultivation area and the listed species are as abundant as possible.
- The study fields selected in the region should cover different landscape and surrounding characteristics.
- The most appropriate survey method should be selected (scan sampling or point counts, transect counts, trapping) and improved approaches of the data analysis can be applied

References:

- [1] European Food Safety Authority (2023). Guidance Document on Risk Assessment for Birds & Mammals on request from EFSA
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- [3] Sitemap.de (03.03.2023)[<https://www.stepmap.de/landkarte/weinanbaugebiete-in-rheinland-pfalz-iii-VfcE2rtpuQ-i>]
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- [5] Krüger, T., Ludwig, J., Pfützke, S. & Zang, H. (2014): Atlas der Brutvögel in Niedersachsen und Bremen 2005-2008. Naturschutz Landschaftspf. Niedersachsen, Heft 48, 1-552 + DVD, Hannover