

► Project *brief*

Thünen Institute of Rural Studies

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Impact of ecological focus areas on achieving biodiversity goals in arable landscapes (ÖVForsch2)

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- **Overall, the current CAP is not sufficient to achieve the proclaimed nature conservation goals.**
- **Due to the introduction of EFA fallow land and strips, the fallow share on arable land has increased, but is still far below the level before 2007.**
- **For upgrading fallow lands, EFA and AECM should be provided in a way that makes their combination more attractive for farmers. Significantly more than 10 % of the agricultural area should be reached with ecologically valuable measures.**
- **Significantly more than 10 % of the agricultural area should be reached with ecologically valuable measures in order to make a significant contribution to achieving the national goals for the protection and promotion of biodiversity in agricultural landscapes.**

Background and aims

The intensification of agriculture has led to a sharp decline in biodiversity in the agricultural landscape. To counteract this, various agricultural policy tools have been and are being implemented, such as the voluntary agri-environmental and climate measures (AECM) that have been on offer since the 1980s. Since 2015, so-called Greening has been mandatory for receiving 30 % of direct payments and includes specifications for crop diversification, grassland preservation and the ecological focus areas (EFA) examined as part of the BfN project ÖVForsch2. With the new funding period of the CAP from 2023, the EFA introduced in 2015 will be included in the extended conditionality (mandatory for all farms). In addition, the so-called eco-regulations are introduced. In Germany, these will be measures lasting one year without an approval procedure. These new funding instruments build on the experience of previous Greening and the EFA.

Approach

The present research project continues the research carried out in the previous project "Nature conservation design of ecological focus areas - practical manual and scientific monitoring" (ÖVForsch). In order to analyze the implementation of EFA in Germany, IACS data from the federal states of Berlin/Brandenburg, Hesse, Lower Saxony, North Rhine-Westphalia and Rhineland-Palatinate for the years 2010 to 2018 were primarily evaluated. Furthermore, landscape ecological and faunistic field studies were carried out, the focus of which was on the avifauna.

Results

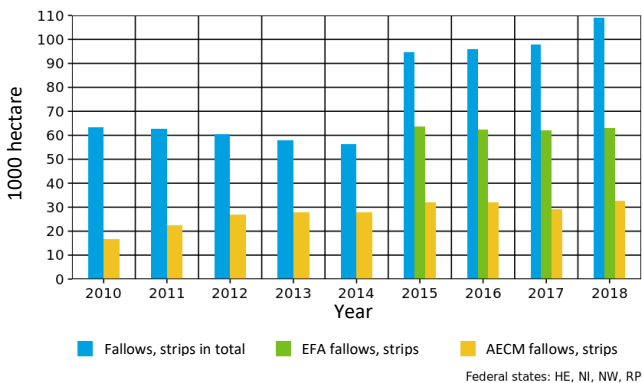
Between 2015 and 2019 there were hardly any changes in the implementation of the EFA in Germany. Ecologically valuable EFA, i.e. fallow land and all kinds of strips, had a total area of 230,000 to 250,000 ha (unweighted). Evaluated with their weighting factor, these areas occupy around a third of the EFA area (38%), unweighted it is 17 to 19 % and thus less than 2 % of the arable area in Germany (2015 to 2019).

The overall extent of ecologically valuable fallow land and strips in the federal states of HE, NI, NW and RP decreased by 11 % from 2010 to 2014 and showed a sharp increase of almost 70 % from 2014 to 2015 (Figure 1). The share of AECM fallow land and strips in all fallow land and strips increased continuously between 2010 and 2014, but decreased in 2015 with the introduction of EFA fallow land and strips. There was a slight increase in absolute terms, however.

In certain cases and federal states, fallow land and strips can be funded both as EFA and as AECM and thus ecologically upgraded: this applied to only 7 % of all fallow land in 2015 and 4 % in 2018 (no figure, federal states NI, NW, RP).

With the introduction of EFA, the proportion of fallow land on farmland increased. However, between 2015 and 2019 it amounted to less than 3 % of the arable land in Germany (of which around two thirds were EFA fallow land) and was thus far below the value of the years before 2008. For comparison: in 2003 the proportion of fallow land in arable land was almost 8 %. Thus, the decline since 2008, induced by the abolition of the economic set-aside and the increased demand for arable land due to the Renewable Energy Act, could not be offset by the greening.

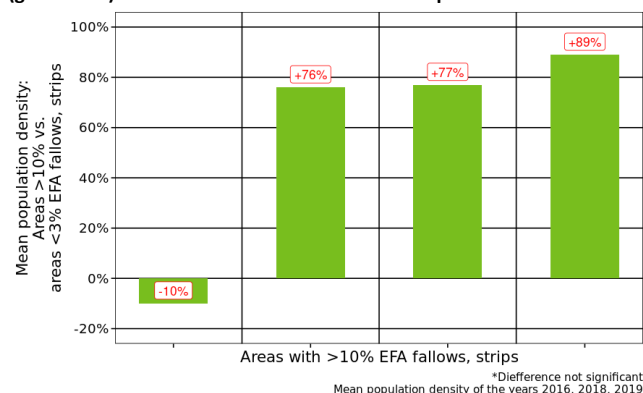
Figure 1: Development of the EFA and AECM fallows and strips as well as the fallows and strips in total from 2010 to 2018.



Source: Baum et al. (2022), page 51

Areas in which EFA fallow land and strips accounted for more than 10 % had a significantly higher breeding bird density than the comparative areas with an average of less than 3 %; except for ground breeders of the open landscape. Structural agricultural birds such as stonechats, red-backed shrike and marsh warblers benefited significantly from EFA fallow land and strips (Figure 2).

Figure 2: Mean differences in breeding bird density in areas with >10 % (green bars) versus <3 % EFA fallow land and strips.



Source: based on Baum et al. (2022), page 112

Recommendations

The data analysis and field observations have shown that from an environmental point of view there have been some

improvements from the EFA Greening schemes, but only to a very limited extent. Based on the results, we recommend the following for EU agricultural policy:

- In order to achieve more for biodiversity in the agricultural landscape, exemptions of farms from the greening obligations transferred to the extended conditionality from 2023 should be limited.
- Efforts should be made to establish ecologically valuable measures (off-crop and in-crop) on well over 10 % of agricultural land.
- The EFA measures (or comparable successors) must be more demanding: ecologically less valuable measures should be deleted, others modified (e. g. no use of pesticides, promotion of flowering mixtures). Pure deadweight effects should be avoided and payments made based on performance.
- Ecologically valuable EFA (or comparable successors) must also be attractive in intensive regions in order to counteract high pressures on biodiversity there.
- EFAs (or comparable successors) are to be exempted from the five-year regulation in order to allow longer periods for fallow land and strips without the arable land becoming permanent grassland. A cut-off date regulation would be more suitable, according to which existing permanent grassland would be subject to the maintenance regulation, but new land created after the cut-off date would not.
- In addition to unproductive measures, ecologically sensible productive measures such as the cultivation of grain with an extended sowing distance or light grain should be promoted more strongly.
- It should be more attractive to combine EFA (or comparable successors) and AECM in order to further upgrade existing areas.
- Offers of advice and information are important in order to increase the effect of the individual measures.
- Clear targets must be defined for the EFA measures (or comparable successors).

The scope and quality of the measures are the decisive characteristics for making a positive contribution to biodiversity in the agricultural landscape. Accordingly, it is essential to provide incentives for the large-scale implementation of high-quality measures.

Further information

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Publications

Baum S, Chalwatzis, D, Böhner HGS, Oppermann R, Röder N (2022) Wirkung ökologischer Vorrangflächen zur Erreichung der Biodiversitätsziele in Ackerlandschaften. Endbericht zum gleichnamigen Forschungsvorhaben, 2017 bis 2021. BfN-Skripten 630, Bonn. <https://bfn.bsz-bw.de/frontdoor/deliver/index/docid/1071/file/Skript630.pdf>

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Röder N, Ackermann A, Baum S, Böhner HGS, Rudolph S, Schmidt TG (2019) Small is beautiful? Is there a relation between farmed area and the ecological output? - Results from evaluation studies in Germany: paper prepared for presentation at the 172nd EAAE Seminar "Agricultural Policy for the Environment or Environmental Policy for Agriculture?"; May 28-29, 2019, Brussels. 15 p

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