

Implementation and maintenance of field margins

Goal

Provide species-rich habitats and foraging sites

Short description of the measure

Margin types: field margins can be very diverse, beginning with sites with natural regeneration (NR); grass or wildflower sown, pollen and nectar mix, wild bird seed mix, annual set-aside or conservation of the headland. Longer term and less disturbed field margins, such as sites with natural regeneration or wildflower sown field margins, appear to provide the most consistent environmental benefit.

It's advisable to allow natural regeneration or to focus on the conservation of the headland, and if no diverse flora establishes itself, a wildflower mixture should be sown in.

Different **margin widths** are specified for different Field margins and purposes e.g. spray drift vs. runoff of pesticides. For Natural Regeneration and Wild Flowers, at least 3 m. width is advisable.

If a flower mix is sown in, than from the conservancy point of view:

- Flowering mixtures must be autochthon, i.e. that species are indigenous to a given region or ecosystem
- Flowering mixtures should include a variety of different species
- Field margins are rather perennial because of their higher species- and structural diversity, i.e. different heights and flowering dates/durations
- Goal is a rather extended flowering period with a high structural diversity, which can be achieved by including into the seed mixture plant species flowering at different times of the season

Management:

- No use of pesticides or fertilizer
- Annual mixtures are not mown at all
- Biannual mixtures are mown not more than once
- Perennial mixtures: mowing rather late after flowering
- if necessary If some of the weeds gets dominant punctual manual mowing or leaning of this weeds will be important.
- It is important that flower strips get only mown or mulched partly instead of all in once, e.g. 10–50 % could be left aside for insects
- Cutting height should be as high as possible, at least 7–10 cm from the ground
- Avoid cutting when the soil is moist, to prevent further compaction
- Mulch should be removed

<p>Timeframe</p> <p>(When to start a measure and anticipated time for implementation)</p>	<p>For the Mediterranean region, the time of sowing is dependent on favourable weather conditions for germination, which is in general in autumn. In temperate regions, sowing periods depend on the seed mixtures:</p> <p>Perennial flower mixtures should be sown in April/May or September. The autumn sowing provides colorful flowers already in spring of the next year. Duration is recommended on about 5 years.</p> <p>Biennial mixtures should be sown beginning from April (in case there is no risk of problem weeds germinating in summer) or later in July until September.</p> <p>Annual cultivations should be sown in April or May.</p> <p>Mowing should take place as late as possible in the year in order to allow also late-flowering plants to ripen fruits (late September).</p>
<p>How auditors can assess if the measure has been implemented in a good quality?</p>	<ul style="list-style-type: none"> ▪ Structural diversity of the strips and plots (not a sole grass community) ▪ Mown in September after flowering ▪ After mowing, 10–50 % of the area must remain uncut <div data-bbox="359 1014 1289 1644"> </div> <div data-bbox="363 1693 1244 1749"> <p>Pic. 1: Positive example: Field margin sown with a diverse flowering mixture</p> <p>Pic. 2: Top: Field margin with grass Pic. 3: Bottom: negative example - bare soil</p> </div>
<p>Additional information the auditor need for verification (if any)</p>	<p>To verify if the seeding material is autochthon, the certificate of the seeding material may be checked.</p> <p>Important to know: Optical and ecological occurrence of flowering areas can be quite different. A certain amount of grass is tolerable.</p>

Effects on biodiversity (ecosystems, species, soil biodiversity)	 <p>Promotion of wild herbs (only in the non-sawn case)</p>
	 <p>Margins provide protection and refuge for insects, hare and partridges during agricultural work on the field.</p> <p>Margins along fields and paths are habitats and wintering grounds for many insects. Useful animals such as ichneumonids, forest bees, flower flies among others are thereby promoted. Birds such as red-backed shrike, brown linnet and partridge have a forage ground in these structures.</p> <p>Margins also serve as step stones and connect open countries for butterflies, grasshoppers and other insects.</p>
	<p>Field margins are used for foraging, nesting, feeding, as shelter or for migration and movement by various species.</p>
Indicator/key data	<ul style="list-style-type: none"> ▪ Size in ha ▪ Minimum width of 3m
References	<ul style="list-style-type: none"> ▪ www.landwirtschaft-artenvielfalt.de ▪ Promotion of biodiversity in fruit plantations – NABU; REWE and Lake Constance Foundation, 2015 ▪ www.ecpa.eu/reports_infographics/multifunctional-role-field-margins-arable-farming ▪ Stiftung Rheinische Kulturlandschaft, DBU: Abschlussbericht Maßnahmen- und Artensteckbriefe zur Förderung der Vielfalt typischer Arten und Lebensräume der Agrarlandschaften, 2018

Further information: [Knowledge Pool](#)

This Action Fact Sheet belongs to the training package for auditors of standard organisations and companies and was developed within the project LIFE Food & Biodiversity (Biodiversity in Standards and Labels of for the Food Industry). The main objective of the project is to improve the biodiversity performance of standards and sourcing requirements in the food industry by helping standard organisations to integrate efficient biodiversity criteria into their schemes and motivating food processing companies and retailers to include comprehensive biodiversity criteria into their sourcing guidelines.

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