





Light fields – low seed densities

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| Goal | <p>Support of wild herbs in the field</p> <p>Support of food supply and breeding grounds for field birds</p> |
| Target group | <p>Farmers who grow any kind of arable crop, especially cereal.</p> |
| Description of the measure | <p>Light sown fields constitute valuable habitats for many wild flora and fauna species.</p> <p>Sowing densities shall be reduced to 50–60 % of the conventional densities on at least one plot by one or two working width (5–6m). Also possible and biologically particularly valuable is a larger implementation of the measure in terms of area. From an implementation width of 20 m or an area-wide implementation of the measure, sowing densities may only be reduced to 70–80 % in order to prevent severe yield losses.</p> <p>The following should also be noted:</p> <ul style="list-style-type: none"> ▪ No harrowing on the target area, as this could destroy the wild herbs on the field and the nests of the field birds. ▪ No catch crop. ▪ Grass herbicides should only be applied until 31th March. ▪ Usages of herbicides for broadleaf weeds should be avoided. ▪ If possible, do not apply N fertilizer. |
| Suitable sites | <ul style="list-style-type: none"> ▪ In general, on all soils ▪ Preferably on good soil; soil with low income level |
| How a good implementation looks like | <ul style="list-style-type: none"> ▪ Visually noticeable lower crop density in comparison to the rest of the plot ▪ During vegetation period: presence of wild herbs |
| Effects on biodiversity (ecosystems, species, soil biodiversity) |  <p>Promotion of light demanding wild herbs (rare species are more common in winter crops): They have more light and less competition in the part of the area without sowing and can develop better there.</p> |
| |  <p>Promotion of the field birds: they avoid high growing and dense cultures. For breeding, they need light cereal stands with low height of vegetation. If wild field herbs will settle within the drill gaps then the birds will find food and can build their nests under the herbs.</p> |
| |  <p>Through a wider range of flowering plants, more insects will be present.</p> |
| |  <p>Promotion of hare: it likes to eat herbs and finds protection within the light field.</p> |

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| Other positive effects/benefit for the farmer | <p>Cereal species and wild herbs are used to grow together on fields and developed a “plant community” whereby mutual interactions arose, e.g. increase of water availability, improvement of soil by nitrogen bonding.</p> <p>There are hints that the cereals can achieve a better nutrient intake when wild herbs are present.</p> |
| Indicator/key data | <ul style="list-style-type: none"> ▪ Total size of area (ha) with low seed densities ▪ Frequency (every year, two years etc.) |
| Risk and further recommendations | <p>Problem weeds such as corn thistle (<i>Cirsium arvense</i>), bearbind (<i>Convolvulus spec.</i>) and dock (<i>Rumex spec.</i>) may be combated locally with a backpack sprayer or by hand.</p> <p><u>Please note:</u> in certain cases no wild herbs will appear on the plots even though the farmer has implemented the measure in good quality. This depends on the low seed potential of wild herbs in the soil and/or in the surrounding. However, that wild herbs will not appear on the plot can only be determined after several years of implementation of the measure.</p> <p><u>In case field birds/skylarks shall be specifically promoted:</u></p> <p>If wild herbs will not establish by their own in the drill gaps, gaps may be sown with a special seed mixture containing wild herbs in November or in February/March in winter cereals or in March in summer cereals. It is also possible to sow in catch crops to provide forage for field birds.</p> |
| Timeframe (When to start a measure and anticipated time for implementation) | <p>When to start: with the sowing of winter or spring cereal until harvest</p> |
| Additional special resources/equipment/skills needed | <p>None</p> |
| Reference | <ul style="list-style-type: none"> ▪ www.landwirtschaft-artenvielfalt.de ▪ www.franz-projekt.de/massnahmen ▪ "Ackerwildkräuter erhalten und fördern" - Netzwerk Blühende Landschaften www.fischermuehle.info/fix/doc/NBL-40-Ackerwildkr%20uter-0711.pdf ▪ www.lel-bw.de/pb/,Lde/Startseite/Unsere+Themen/Ackerwildkrautaecker ▪ BUND Naturschutz in Bayern e.V. – Ackerwildkräuter fördern – Infos und Tipps für die landwirtschaftliche Praxis ▪ BfN-Skript 351 – Ackerwildkrautschutz – Eine Bibliographie - ▪ www.schutzaecker.de ▪ 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 advisors 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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