

Best Practice examples on natural carbon sinks in agriculture

Category: Projects & Cooperations

Field: Healthy soils



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Name	Association for Innovation and Sustainable Agriculture
Country	Czech Republic
Biogeographical Region	Continental, Pannonian
Region	The entire Czech Republic
Landscape/ Eco system type / protected area	Arable land
Size / Scope	50,000 hectares; the foundation of the association is formed by 30 progressive and innovative farms
Agricultural Use	Arable land, main production crops
Best-practice / main idea	The greening of 3 m strips track rows of sprayers provides a wide range of non-production function of agriculture. Greening sprayers belts are used in most field crops in convention agriculture, but they can also be used in organic farming.



	With properly managed technology, crops can be grown without a decrease in production, eliminate erosion and support the biological services of flowering belts in production crops
Involved Stakeholders/ Partners	Farmers, research institutions, environmentalist, beekeepers, hunters, the public
Duration	Since 2021
Goals	<ul style="list-style-type: none"> - Improvement of soil quality - support of biodiversity - extension of non-production elements on arable land in production conditions
How it works/ Activities	<ul style="list-style-type: none"> - The farmers from the society are looking for effective and multifunctional practices, responding to current findings in science and research and the development of modern technologies and digital tools, and adapting agronomic practices to reduce negative impacts on the environment and eliminate the effects of climate change. - Farmers share their experiences with each other and spread them to other interested farmers.
Measures addressing the climate	<p>Greening strips with diverse mixtures of flowering species</p> <ul style="list-style-type: none"> - activate the development of soil biodiversity and - promote carbon sequestration in the soil.
Measures addressing biodiversity, water, soil	<p>There are many benefits from greening of strips track rows of sprayer into the soil, both for the farmer and for society:</p> <ul style="list-style-type: none"> - Biodiversity: the used of non-productive areas is based on the conditions of the EU CAP. However, the support of biodiversity is influenced by their distribution and the size of the arable land. Regular distribution of flowering non-productive areas in track rows of sprayer when greening is involved at the same time with the main crop, supports the development of beneficial insects, soil life and vertebrates. Precision technologies ensure that



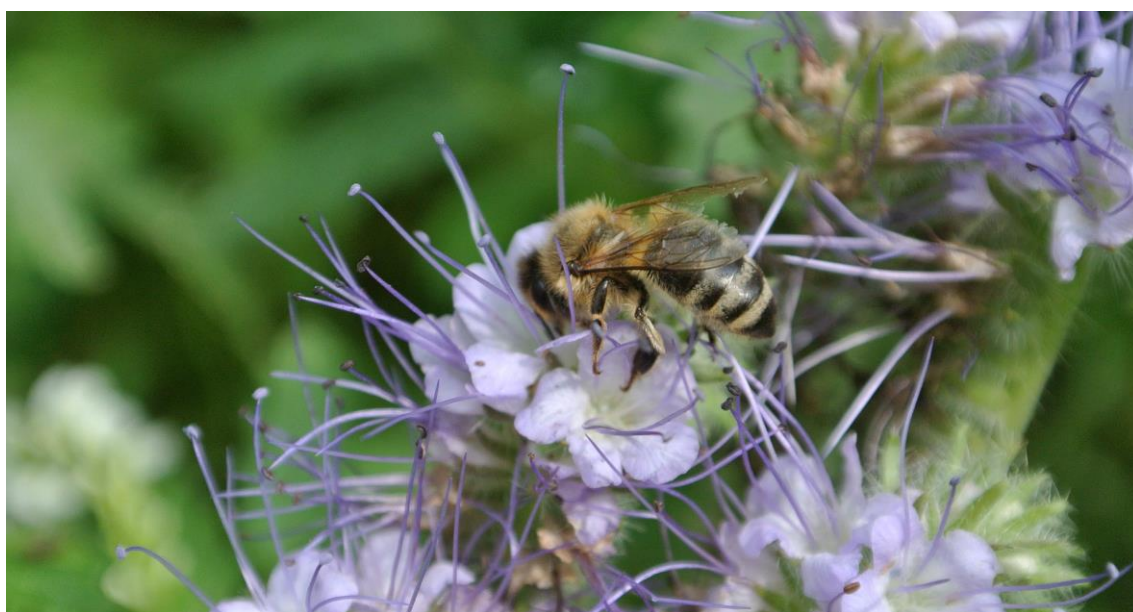
	<p>these zones remain free from the fertilizers and pesticides</p> <ul style="list-style-type: none"> - Soil: reduces the risk of erosion by seeding and consolidating the sprayer wheel tracks. In the colourful flower strips without the application of fertilizers and pesticides, it creates incubators for the spread of soil microorganisms and macrofauna to the remaining production areas. Multi-year use will improve, carbon sequestration. - Water: Reducing erosion protects water sources from pollution. Organic matter improves the water balance in the soil making it more resistant in dry periods and allowing water to seep in during wet periods. - All benefits ultimately increase soil quality and thus crop production
<p>Funding / Financing</p>	<p>It is one of the options how farmer can fulfil the conditions of the premium whole farm eco - scheme under Common agriculture policy. Farmers get payment for the area of non-productive features that include also greening strips.</p>
<p>Transferability</p>	<ul style="list-style-type: none"> - All favourable technique has not only been offered to all members of the initiative, but also to other farmers within the Czech Republic. - “Green track lines” invented by one of the farmers has been accepted as one of the official non-productive options of eco – scheme fulfilment. All approaches developed within initiative are tested and approved in the practice and are fully transferable.
<p>Role of Landcare Organizations</p>	<ul style="list-style-type: none"> - Landcare organizations can guide and advise farmers to get inspired by approaches developed within activities of the initiative or eventually even to join this initiative. - They can support the integration of good practice into policy (CAP) or legislation.

Further information	More information and different projects can be found on the website of www.siuз.cz
Contact	polakova@siuz.cz

Author: Václav Zámečník, Czech Society for Ornithology and Martina Poláková, SIUZ



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