

Best Practice examples on natural carbon sinks in agriculture

Category: Projects & Cooperations

Field: Healthy soils



© Boerennatuur Vlaanderen

Name	Woodchips
	Boerennatuur Vlaanderen
Country	Belgium
Biogeographical	Atlantic
Region	
Region	Flanders
Landscape/ Eco	Differnet areas in Flanders
system type /	
protected area	
Size / Scope	13.626 km ²
Agricultural Use	45% - 6.164,94 km²
Best-practice / main idea	Woodchips to improve soil quality
Involved	Farmers, municipalities, provinces, research institutions,
Stakeholders/	
Partners	
Duration	Since 2018
Goals	Improving soil quality and C-storage though working in
	wood chips in agricultural soil

Best practice – projects & cooperations, effective: .11.12.24



How it works/ Activities	Landscape management, e.g. trimming hedges produces wood chips. To make landscape management affordable, a local valorisation of the wood chips is being search for. One of the valorisation opportunities is the incorporation of the wood chips in the field. This provides carbon storage, improved soil quality and, in the process, better crop production.
	We recommend farmers to incorporate the wood chips after the main crop (August – Oktober), to use a shallow incorporation with no tillage and to use a cover crop afterwards because of the nitrogen immobilisation that occurs. Wood chips should be applied every 4-5 years (depending on the crop rotation). Sufficient heartwood is needed, instead of just small branches.
Measures addressing the climate	By working in the wood chips, carbon is stored in the ground. We recommend farmers to use 10 - 15 tons of wood chips per 1ha. This will store around 5,1 tons of carbon dioxide.
Measures addressing biodiversity, water, soil	 There are many benefits from incorporating woodchips into the soil, both for the farmer and for society: Biodiversity: The wood chips come from sustainable landscape management. This management is necessary to maintain and improve biodiversity in agricultural areas. Soil: The farmer brings in organic matter, boosting soil life. Water: Through the contribution of organic matter, the water balance in the soil will improve, making it more resistant in drought periods, but also allowing water to seep in during wet periods. All the benefits will eventually increase the soil quality and with this also the crop production
Funding / Financing	Through projects (local, Flemish)
Transferability	This technique has already been tested in several regions in Flanders and can be adopted by other countries/regions.
Role of landcare organizations	Landcare organizations can guide and advise farmers in the application of this technique. Important is the legislation that states whether wood chips can be used as a soil

Best practice – projects & cooperations, effective: .11.12.24



	improver on cropland. Landcare organizations can guide farmers through legislation, advise governments, search for suitable subsidy measures,
Further information	More information and different projects can be found on the website of Boerennatuur.be
Contact	info@boerennatuur.be
	https://www.boerennatuur.be/



© Boerennatuur Vlaanderen