

Conservation Agriculture

LOW EMISSION FARMING

KULSTOF / HUMUS OPBYGNING



Conservation Agriculture principles

Conservation Agriculture is based on three main principles adapted to reflect local conditions and needs:



Minimum mechanical soil disturbance: Minimum soil disturbance refers to low disturbance no-tillage and direct seeding. The disturbed area must be less than 15 cm wide or less than 25% of the cropped area (whichever is lower). There should be no periodic tillage that disturbs a greater area than the aforementioned limits. Strip tillage is allowed if the disturbed area is less than the set limits.

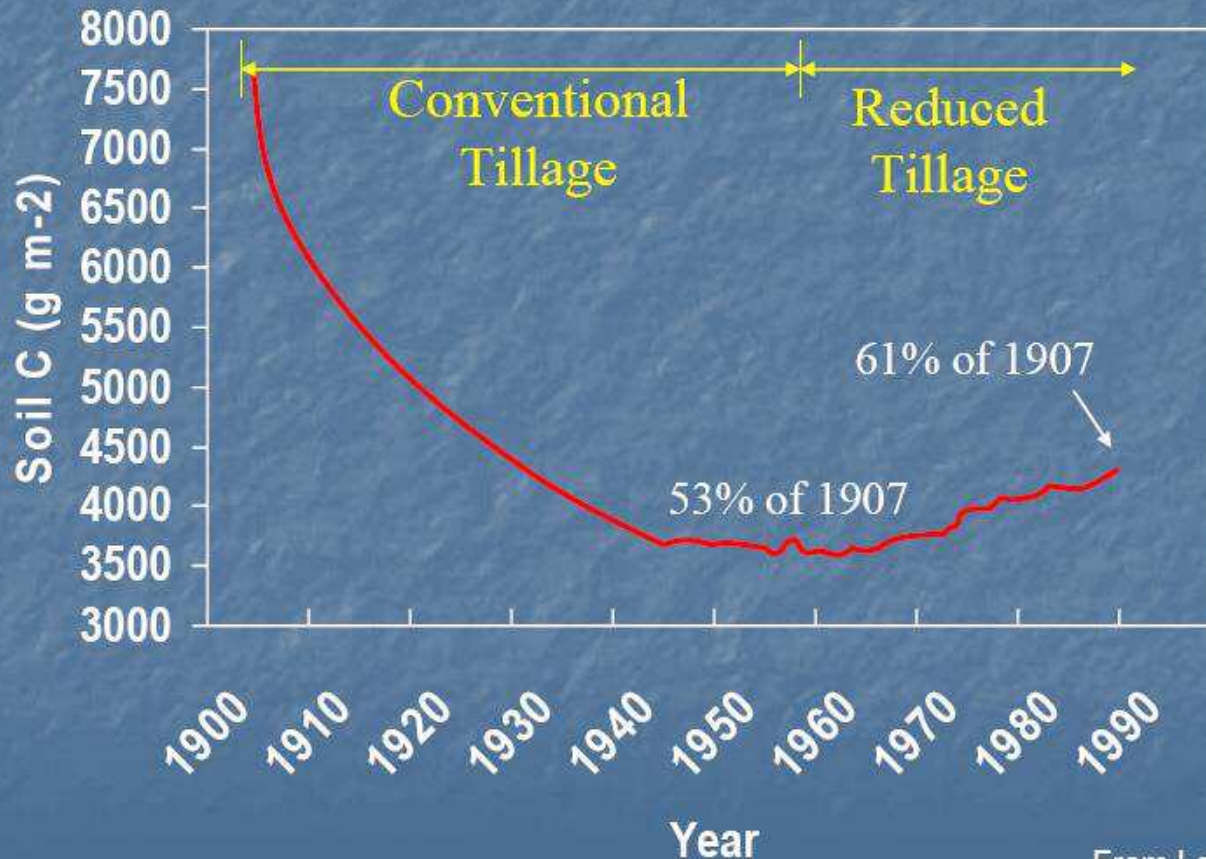


Permanent soil organic cover: Three categories are distinguished: 30-60%, >60-90% and >90% ground cover, measured immediately after the direct seeding operation. Area with less than 30% cover is not considered as CA.

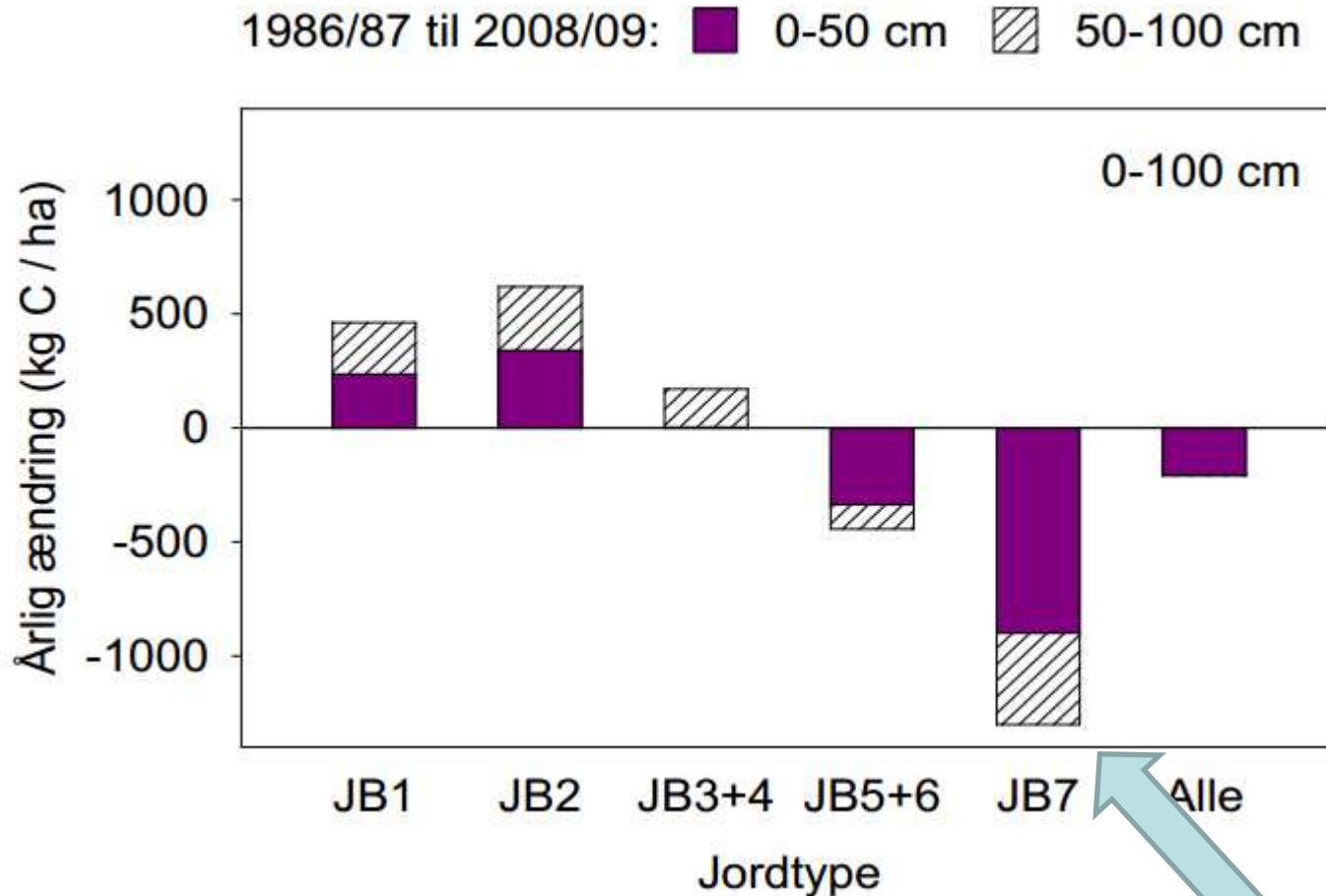


Species diversification: Rotation/association should involve at least 3 different crops. However, repetitive wheat, maize, or rice cropping is not an exclusion factor for the purpose of this data collection, but rotation/association is recorded where practiced.

Historic Loss of Soil Carbon



From Lal et al., 1998



Svarer til 3,5 t CO₂/ha årligt

Conservation Agriculture – grønne marker året rundt

Fotos den 4-11-2020



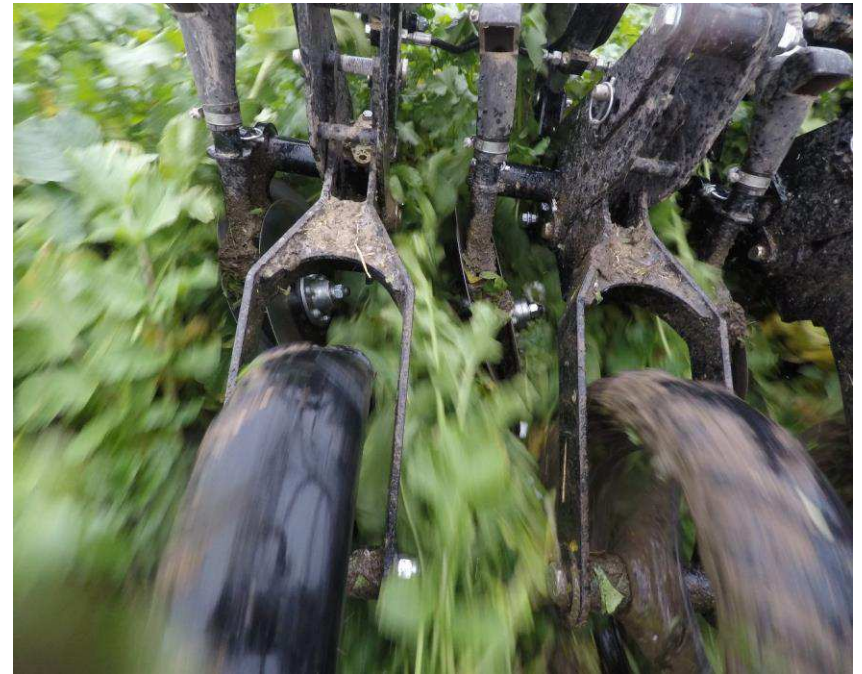
Praksis i **pløjende bedrifter**
Efterafgrøde nedpløjes efter 20. oktober
CO₂ optag stoppes



Conservation Agriculture
Efterafgrøder med bælgplanter vokser
og laver fotosyntese / CO₂ optag
(Analyser viser op til 6.500 kg CO₂/ha)
Holder på næringsstoffer

Conservation Agriculture – såning uden forstyrrelse af jorden

Jordbearbejdning ”afbrænder” jordens kulstof til
luftformigt CO₂ – derfor kan direkte såning bevare
jordens kulstof som humus



Conservation Agriculture – såning uden forstyrrelse af jorden

Forår i nedvisnet frøgræs



Conservation Agriculture -

Nedsætter det samlede **dieselforbrug med 40%**

(Andelen til afgrødeetablering nedsættes med ca. 75%)

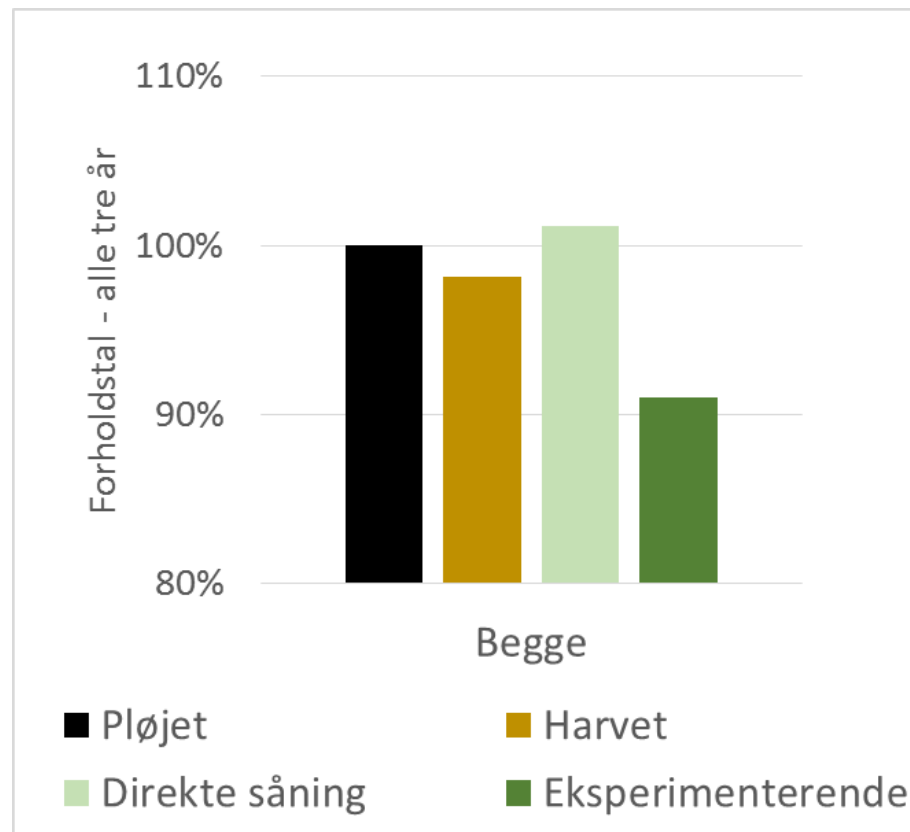
(Grønne Marmer og Stærke Rødder projektet
2020 projekt, Agrobi & KU)

Samme økonomiske bundlinje som traditionelt



Conservation Agriculture -

CarbonFarm projektet (FRDK, AU, ØL) viser flotte udbytter hos to forsøgsværter

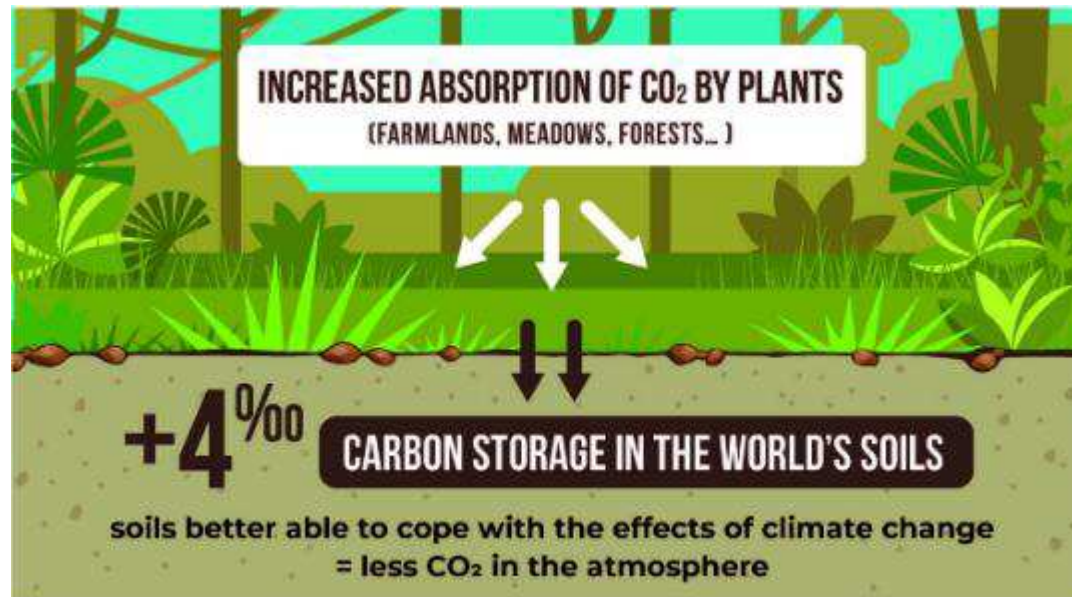


Conservation Agriculture -

4 per 1000 projektet

<https://www.4p1000.org/>

- This initiative is part of the Global Climate Action Plan (GCAA) adopted by the UNFCCC at COP 22 as a follow-up to the COP 21 Lima-Paris Plan of Action and contributes to the goal of reaching a land-degradation neutral world.



Danmark har underskrevet, men hvad sker der?

Conservation Agriculture –

Carbon Trading – nu en realitet!

Commoditrader starter nu handel med
CO2 kvoter:

<https://commoditrader.com/da/commodicarbon/>

commoditrader

commodicarbon Funktioner Services Priser

Log ind Opret bruger

Vi hjælper landbruget, så vi som samfund kommer tættere på klimamålene.

12 % af jordens 13 mia. hektar er dyrket af landmænd. Landbruget kan som et af de eneste erhverv optage CO2 fra atmosfæren og lagre det i jorden via planternes fotosyntese.



Conservation Agriculture - et paradigmeskifte