


Making Cover Crops Pay

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1

Cash crop

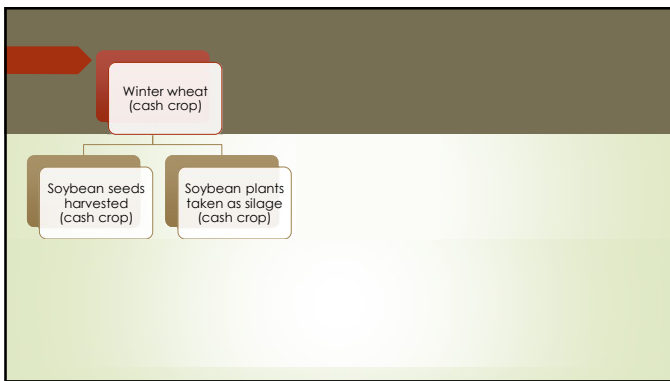
- What you intend to harvest off the land. It could be sold off farm or used on the farm for animals but in both cases it comes off.

Cover Crop

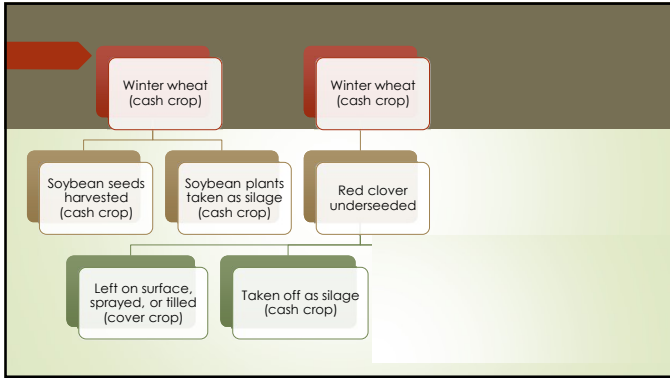
- Any crop that is planted with the intention that it will not be harvested but is left in place to benefit the soil.

Definitions

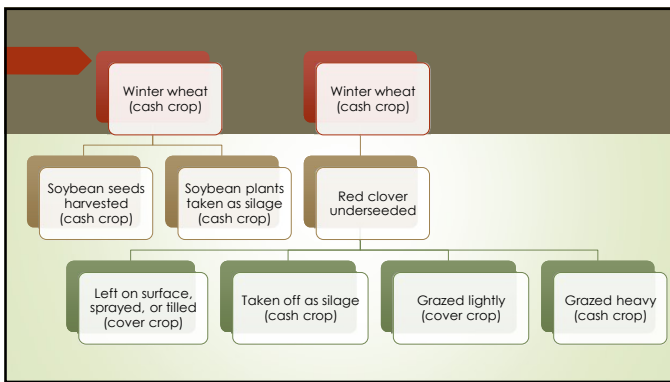
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4



5

Nutrient Removals (exports)

Crop	Yield	Nitrogen (lb/ac)	Phosphorus (lb/ac)
Peas	50 bu/ac	0	35
Wheat	40 bu/ac	60	25
Canola	35 bu/ac	65	35
Barley	60 bu/ac	60	35


Government of Saskatchewan. Nitrogen Fertilization in Crop Production. <https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/ag-business-farms-and-ranchers/crops-and-irrigation/soils-fertility-and-nutrients/nitrogen-fertilization-in-crop-production>
 Government of Saskatchewan. Phosphorus Fertilization in Crop Production. <https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/ag-business-farms-and-ranchers/crops-and-irrigation/soils-fertility-and-nutrients/phosphorus-fertilization-in-crop-production>
 Arvid Asen & Myron Birge. 2009. p. 172. Alberta Forage Manual. <https://open.alberta.ca/dataset/07226602a8summary>
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6

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Alfalfa Forage	2 ton/ac	0	28

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7

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Cow-Calf Grazing	1 pair / 5ac	2	1

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8

I am not an animal nutritionist.

The diagram illustrates a linear flow of agricultural products. It starts with 'CASH CROP' (represented by a wheat icon), which leads to 'CASH & COVERS' (represented by a clover icon). This then leads to 'CASH, COVERS & ANIMALS' (represented by a cow icon), which leads to 'ANIMALS (PASTURE)' (represented by a cow icon), and finally to 'ANIMALS (FEEDLOT)' (represented by a cow icon). Arrows indicate the direction of the flow between these stages.



9

Short term goals (High payback potential)

- Hold the soil in place
- Protect sensitive crops (nurse crops)
- Hold onto nutrients

Medium term goals (Chance of payback)

Long term goals (Less certain direct payback)

Goal Ranking

10

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- Unlock tied up (ex. phosphorus)
- Lower pest pressures (weeds, insects, disease)
- Increase water infiltration
- Break up compaction layers

Long term goals (Less certain direct payback)

Goal Ranking

11

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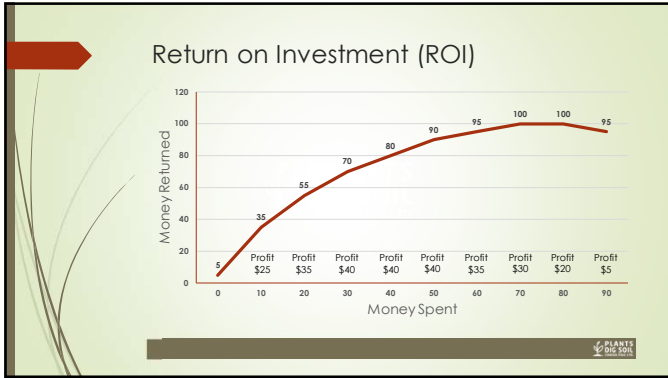
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Long term goals (Less certain direct payback)

- Increase the organic matter (carbon) of the soil
- Increase water holding capacity
- Have a more stable nutrient supply
- Increase the stability of crop yields

Goal Ranking

12



13

Short, Medium, and Long Term ROI

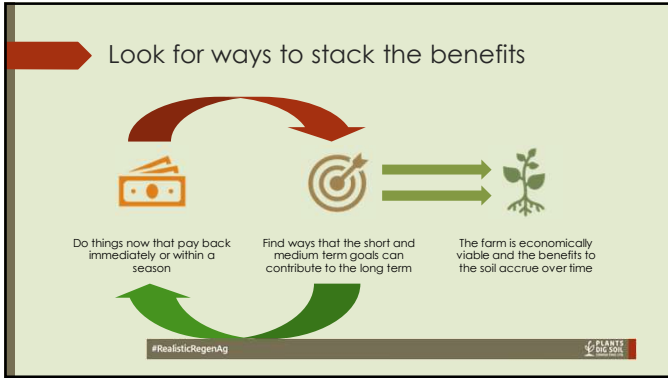
<h4>Standard Inputs</h4> <ul style="list-style-type: none"> Weed control <ul style="list-style-type: none"> Herbicide (conventional) Flaming (organic) Money spent to solve a problem <ul style="list-style-type: none"> Less weeds & more crop The "tool" disappears <ul style="list-style-type: none"> Herbicide breaks down (days, months, or maybe years) and may harm the soil microbes for a period (long or short) Heat and emissions dissipate to the atmosphere contributing to carbon footprint of farm 	<h4>Cover Crop</h4> <ul style="list-style-type: none"> Weed control <ul style="list-style-type: none"> Crowds out undesirables Money spent solves a problem <ul style="list-style-type: none"> Less weeds & more crop The "tool" lingers <ul style="list-style-type: none"> While growing helped contribute to aggregates (soil structure) with exudates feeding microbes When dead provides cover to the surface preventing erosion Small portion turned into stable organic matter for decades or centuries lowering carbon footprint
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14

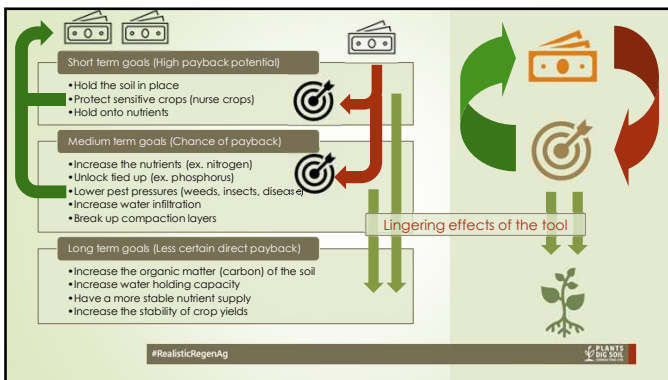
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15



16



17

Plants Dig Soil™

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Profitable From the Start: Cover Crops for the Pros

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Commentary on the most important regenerative agriculture news.

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#RealisticRegenAg

18
