



VILICUS  
FARMS

*Stewards of the Land*



# Hill County, MT

*~1,580 MI northwest of St. Louis*

- **“Big Sky Country”**

- MT population 1.05 M; 82% of MT is “Frontier”
- Hill County population 16,000; area 2,916 MI<sup>2</sup> = “Frontier” (< 6 persons/MI<sup>2</sup>)
- Larger than states of Delaware and Rhode Island

- **40 MI to Havre, MT (pop. 9,800)**

- **~150 MI to Great Falls, MT (pop. 59,000)**

- **~100 MI to Medicine Hat, AB (pop. 63,000)**

- **Typical crop mix: Wheat – fallow**

- **Average Farm size: 1,992 acres**

- **Typical Farmland Value: \$800/acre**

- **Annual precipitation: 11”**

# Who we are, Where we came from...



## 2018 Crop Plan:

- 7,309 Total acres
  - 3,816 (52%) harvested for seed/sale;
  - 1,564 (21%) green manure cover crops;
  - 1,929 (26%) non-crop conservation area
    - Native rangeland;
    - CRP; and
    - Field Borders & Conservation Strips



# Our “farming philosophy”:

*Vilicus, Latin for “steward of the land”*

- Do NOT grow food using poisons;
- Nature is the best teacher;
- Farming is the highest and best calling;
- Farmers must be professional land stewards;
- Farming can (and must) be practiced in a manner that improves the soil and associated natural resources;
- Tillage is the “ART” of farming; and
- The best “fertilizer” is the farmer’s boot-prints

*(adapted from Wendell Barry)*

# Farming Practices

A photograph of a farmer walking across a large, open field under a blue sky with scattered clouds. The field is a mix of dark, tilled soil and green vegetation. In the foreground, there are several yellow flowers and green plants. The text is overlaid on the left side of the image.

- Certified Organic
- Transitioning to Biodynamic
- Diverse Crop Rotations
  - 5-year; 7-year; and “perennial phase”
- Strip Farming
- Field Borders
- Pollinator-friendly plantings
- Inter-cropping
- Continuous Cropping
- Cover Crops/Green manures







# Crop Rotations

## 5-year

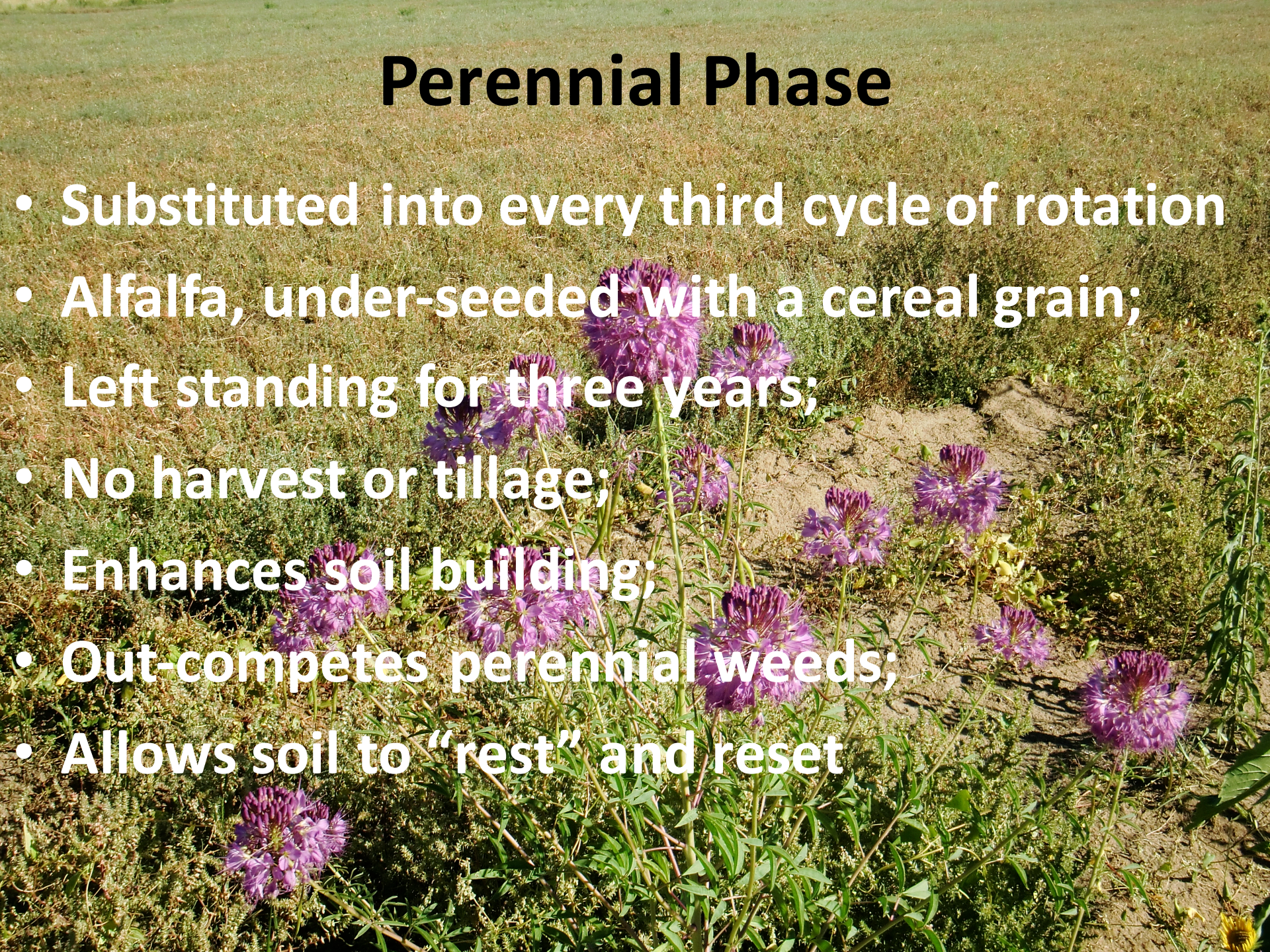
- **Lite Grain:** spelt, emmer, Kamut, oats, etc.
- **Green Fallow:** clover, vetch, peas, etc.
  - *Crop terminated at flowering and incorporated as green manure; also incorporate feedlot manure*
- **Heavy Grain:** “modern grains” (spring or winter wheat, etc.)
- **Green Fallow:** buckwheat, cocktail mix, clover, etc.
  - *Crop terminated at flowering and incorporated as green manure*
- **Spring Legume:** peas, lentils, vetch, etc.

# 7-year

- **Lite Grain:** spelt, emmer, Kamut<sup>®</sup>, etc.
  - **Green Fallow:** clover, vetch, peas, etc.  
*Crop terminated at flowering and incorporated as green manure*
  - **Heavy Grain:** “modern grains” (spring or winter wheat)
  - **Green Fallow:** buckwheat, cocktail mix, clover, etc.  
*Crop terminated at flowering and incorporated as green manure*
  - **Spring Legume:** peas, lentils, vetch, etc.
  - **Broadleaf/Oat:** oats, buckwheat, flax, **mustard**, etc.
  - **Green Fallow:** clover, vetch, peas, etc.
- 
- A dog with white and brown patches is sitting in a field of green crops, looking towards the left. The dog is wearing a collar and a harness. The background is a dense field of green plants, likely the crops mentioned in the text.

# Perennial Phase

- Substituted into every third cycle of rotation
- Alfalfa, under-seeded with a cereal grain;
- Left standing for three years;
- No harvest or tillage;
- Enhances soil building;
- Out-competes perennial weeds;
- Allows soil to “rest” and reset



# Business / Marketing Practices

- Use **DIVERSITY** to manage risk
- **CONSERVATION Pays...** **SOIL** is our most important resource
- Production  $\neq$  Profit (Net is not Gross)
- **TIMING** is critical
- Do what others won't (or don't) do...
- Organic Certification... Biodynamic
- Specialty Crops
- Production Contracts
- Multiple Buyers
- Grow our own seed

# Sustainability

- Diversity is the key
  - 15 – 20 crops
  - 8 – 12 Buyers
  - Spring, summer and fall-seeded crops
  - Grain, pulse and broadleaf crops
  - Additional income sources
  - Diverse perspectives (staff, friends, partners, visitors)
- The farm is a self-sufficient organism
  - Grow the fertility (and seed);
  - Be your own agronomist;
  - There are NO solutions in a bag!
  - The easiest revenue to earn is what you don't spend



***When we see land as a community to which we belong, we may begin to use it with love and respect...That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics. That land yields a cultural harvest is a fact long known, but latterly often forgotten."***

***Aldo Leopold, 1948***



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