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## Site Characteristics

- 6-8 hours of sun (preferably more)
- Water available for irrigation
- Soil that can be adequately improved
- Fencing/gates

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## Soil Preparation

- Organic Matter/Compost (up to 4" deep)
- Check pH - 6.5-7.0 is best – add soil sulfur if needed
- Nitrogen
- Phosphorus
- Till to homogenize
- Irrigate to settle
- Allow to dry
- Rake to level



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Broadfork

Trenching Shovel

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Fresh Alfalfa Cubes

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Alfalfa Cubes that have been wetted twice

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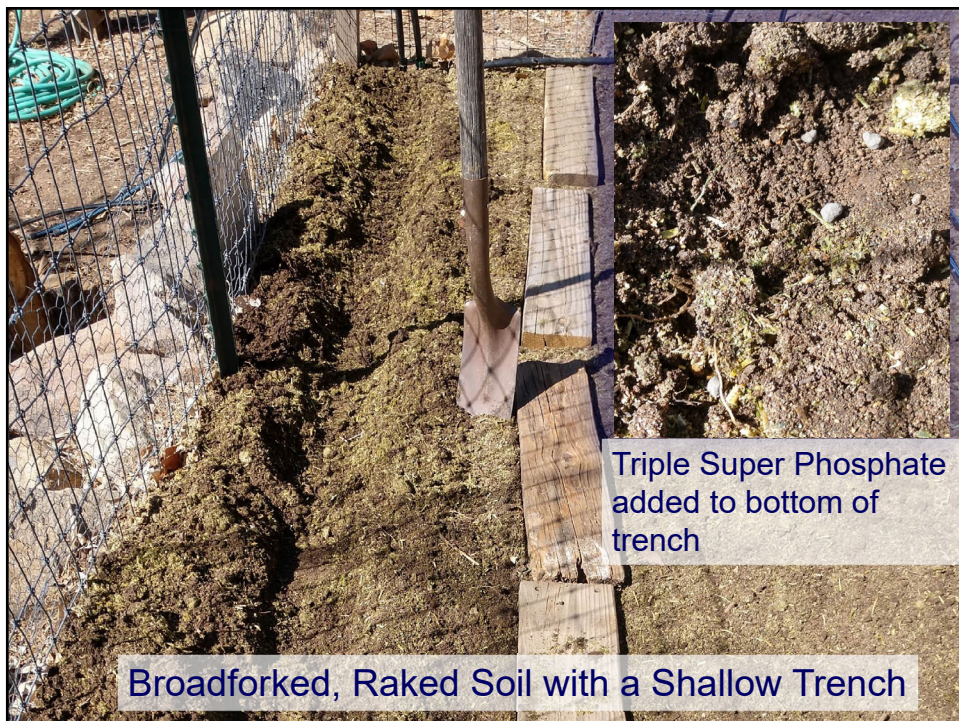


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Broadforked/Raked Soil with Alfalfa Incorporated

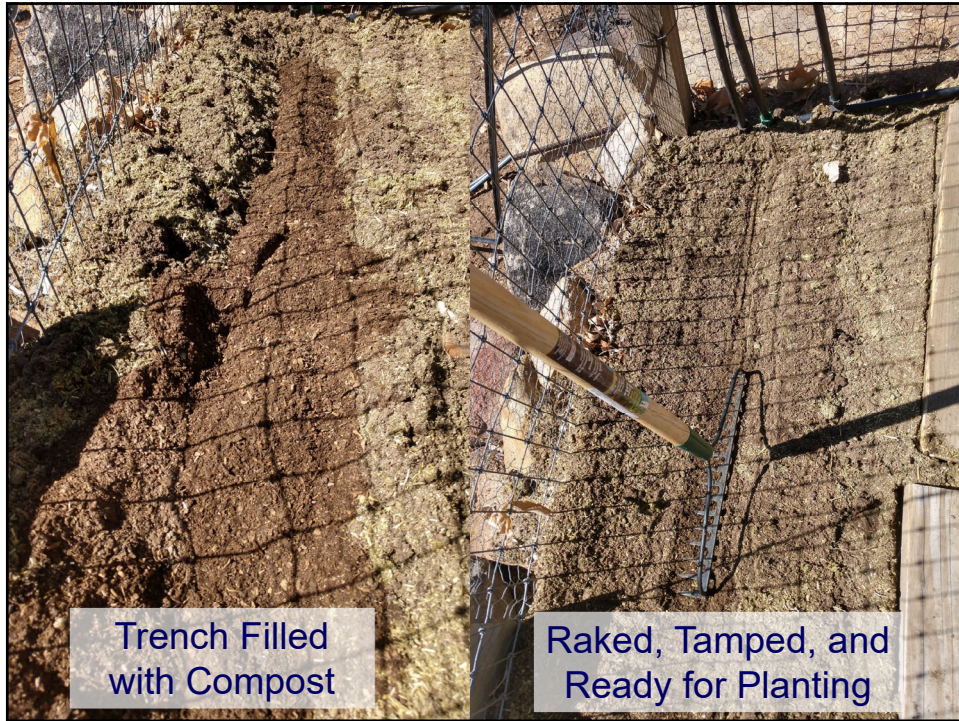
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Triple Super Phosphate added to bottom of trench

Broadforked, Raked Soil with a Shallow Trench

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## Cool Season Cover Crop and Green Manure

- Plant combination of hairy vetch (a legume) and cereal rye in the fall (October)
- Inoculate vetch seeds with appropriate inoculum (seed catalogs have it) so it will fix maximum amount of N
- Mow and turn into soil 3-4 weeks before planting



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## Hairy Vetch



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## Cereal Rye



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## Cover Crop in April



Nodules formed by Rhizobium

Cereal rye and hairy vetch cover crop

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## Mowed Cover Crop



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## Determining Spacing

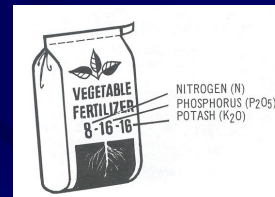
- Know size of mature plant and space accordingly (L x W x H)
- Can get creative with vertical dimension
- 4<sup>th</sup> Dimensions: L x W x H x Time
- Seed packets instructions are a starting point

A photograph of a garden bed with various plants, including large green leaves in the foreground and rows of plants in the background.

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## Fertilizers

- Some crops have high nitrogen requirements and side dressing N in mid-season is recommended
- Organic fertilizers provide timed release effect
- Inorganic fertilizers may be used too
  - Timed-release products (osmocote, etc.)
  - Urea
  - Triple Super Phosphate
  - Others...



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## “Organic” Fertilizers

- Homemade Compost
- By-products (feather, hoof, horn, bone, blood, fish, etc.)
- Alfalfa Meal
- Green Manure
- Manures and Guanos
- Seaweed



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## Manures

Manure	N%	P%	K%	Availability
Cattle	2-3	0.5-1	1-2	moderate
Horse	1-2	0.5-1	1-2	slow
Swine	2-3	0.5-1	1-2	rapid
Poultry	3-4	1-2	1-2	rapid
Sheep	3-4	0.5-1	2-3	moderate



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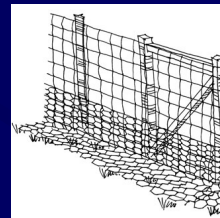
## Fencing

**Rabbits** - three foot tall chicken wire fence with 1-inch hexagonal mesh buried a few inches

**Deer** - 6 to 8 feet tall fence, mesh or electric could be considered, many designs

**Raccoon** - combination of rabbit and deer fence

**Squirrels** – completely covered cages



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## Irrigation

- Drip Tape
- Soaker
- Microsprinklers
- Mulch to conserve water



The slide features a dark blue background with the title 'Irrigation' in yellow. Below the title is a list of four irrigation methods: Drip Tape, Soaker, Microsprinklers, and Mulch to conserve water. To the right of the list are three images. The top image shows a black thin wall drip line connected to a black polyethylene (PE) plastic pipe via a connector, with a wooden ruler for scale. The middle image shows a microsprinkler head in operation, spraying water onto purple flowers. The bottom image shows a close-up of a black drip tape buried in dark soil next to a green plant.

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## Planting Times

- **Warm Season Crops** – plant beans, squash, tomatoes, peppers, eggplant, cucumbers, etc. after soil has warmed (mid-May in Prescott and late April/early May in VV).
- **Cool Season Crops** – generally root crops and/or leafy green crops – some have dual planting seasons – check “Ten Steps to a Successful Vegetable Garden Publication”.
- Corn and potatoes can be planted early spring with frost protection.



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## Season Extenders

- **Cold frames** – good for winter greens
- **Floating Row Cover** (reemay, frost cloth) is great for starting early spring crops and for protecting crops from birds and grasshoppers
- **Hoop houses** work well for season extension, but need to be opened up in the heat of summer
- **Walls of Water** – great for early planting of warm season crops



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## Vegetable Crops – A to Z

See Handout



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