

# Farm Tools



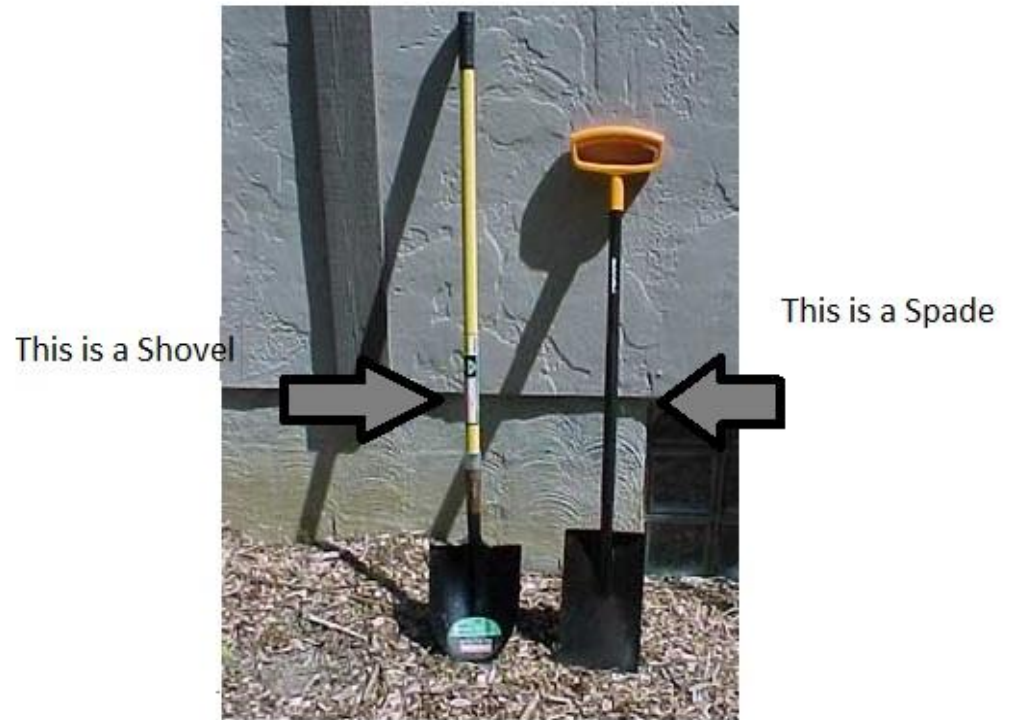
# Learning Objectives

- Identify various tools by name
- Become familiar with safety measures required for each tool
- Learn about the proper technique for using each tool as well as their various uses
- Understand maintenance of each of these tools

# Hand Tools in the Garden

- Shovel vs. Spade
  - A shovel is a basic digging tool with various head shapes depending on its use. The shovel head always comes to a point.
  - A spade is similar to a shovel but has a square head. They are often favored for digging shallow holes as well as moving around loose material.

[more on shovels, spades, & shoveling](#)



- Trowel
  - a one-handed tool that resembles the shovel and spade. Due to its size, the trowel is favored when making more detailed/precise holes in the soil. Trowels are most used for transplanting or planting seeds in a garden.



- Hoe

- This tool has a longer neck but a small head with various shapes depending on its use. The hoe is a common tool in gardening for making very shallow holes or even lanes in the soil as well as leveling out the ground and uprooting weeds.

Standard Garden Hoe: average hoe used for various tasks



Collinear Hoe: narrow blade used for slicing weeds



Scuffle/Stirrup Hoe: Blade cuts through tough weeds fast and in both directions



Dutch Hoe : blade designed to push/pull weeds just below the surface

Loop Hoe





- # Rake

Rakes are used to comb the top of your garden and pick up loose material. The garden rake's "teeth" can dig into the ground to pull up loose material, moving around mulch and removing weeds. The leaf rake gently moves lighter materials to the desired locations.



**Garden Rake**

[Garden/Gravel Rake](#)

**Lawn Rake  
OR  
Leaf Rake**

[Lawn or Leaf Rake](#)

- Cultivator

- similar to the rake, a cultivator has thick metal “teeth” that can pull up loose top soil and other material. Digs deeper into the ground than rake so does not drag leaves/mulch/weeds as well.



# Pruning Tools

Used to cut or prune plants and trees



Pruner



Folding hand saw



Shears or loppers

[Tree Pruning Tools](#)



# Wheelbarrow

- Used to move material from one place to another



# Garden Hand Tool Safety

- Using many of these tools can be strenuous work and can cause back pain, make sure to take breaks and stretch periodically.
- Check the terrain you are working with is clear of wires and underground cables/pipes.
- Wear sturdy close-toed shoes as well as gloves to prevent hot spots and blisters from forming.
- Consider wearing long pants to cover the skin completely.



# Garden Tool Maintenance

There are many tasks that require your attention in a garden, so there will be times when you need to put down your tools. When doing so:

- Place the tool in plain sight and tell those around you where you left it.
- If you have something to lean it up against, do so with the metal edge facing away. This prevents someone stepping on the tool and getting hurt.
- Although most of the above tools can handle rain or a single storm, long term exposure will damage your tools. So it is better to properly store them in the first place rather than leave them out overnight.



# Garden Maintenance

- Long-term storage
  - Have your garden tools organized (by type or use) and stored in a place that protects from the weather.
  - Tool racks in sheds or garages are often used. Here's [another idea!](#)



# Cleaning & Sharpening

- Removal of debris
  - It is important to remove any dirt or debris that you may have collected while working with the tools. This prevents wear and other damage to the tool.
- Examining the tool
  - Look over your tool and pay attention when using it to evaluate its quality. You can often feel when a tool is not performing as well as it should, this is a sign that either maintenance needs to be done or you may need a new tool.
- Sharpening edges
  - [Whetstones](#): small rectangular stone used for small blades and edges
  - [Dremel](#): an electric handheld device with a variety of head attachments that are useful for sharpening complicated edges and grooves (i.e. saws, mower blades)
  - [Bench sharpening](#): a composite wheel that rotates at high speeds (adjustable) and has a number of coarseness levels and wheel types.



# Field-Scale Implements

- Used on larger plots of crops.
- Replaces the work done by horses, humans, or other animals.
- These machines can till soil, plant seed, harvest, thresh grain, bale hay, move and remove items—eliminating some back-breaking work for farmers.
- The key is to know when to use them, how to use them, and how to fix them when they break down.



# Field-Scale Implements

- Tractors
- Manure spreaders
- Cultivators
- Tillers
- No-till seeders

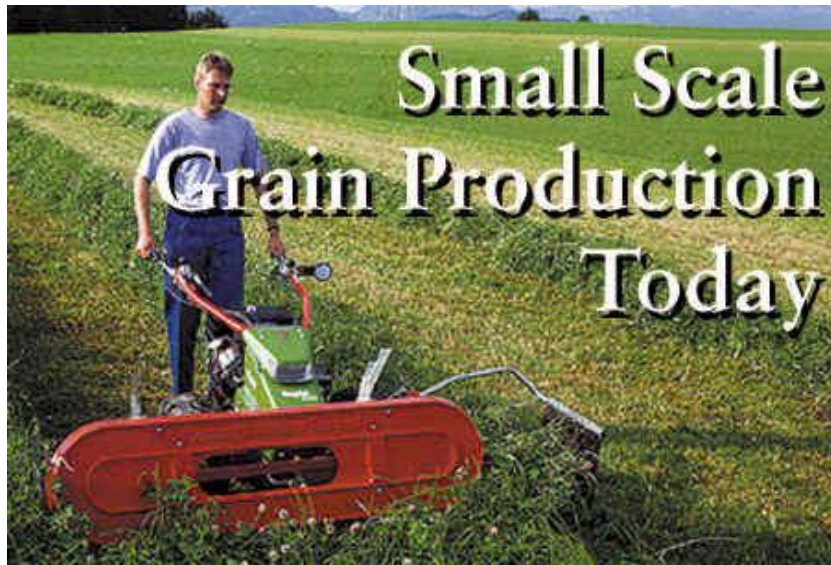
# Tractors

- Serves multiple purposes which include plowing, tilling, discing, harrowing, and planting. Maximizes output, minimizes labor- can play an important role on a small farm if the operation is large enough to justify its use



# Walk Behind Tractor

- This tool can be utilized in a variety of different ways including tilling, mowing, and cultivating , with lower fuel use than a full size tractor [walk behind tractor in action](#)





# Manure spreader

Evenly distributes  
manure for proper  
fertilization of crops.

[restoring an old horse  
drawn manure spreader](#)

[new small manure spreader](#)



# Tiller (rotary hoe)

- Tilling is the process of preparing the soil for planting by agitating it and opening it up.
- Machines like the ones shown here move the soil, level it, and remove old plants.
- Power take-off (PTO) required to operate tractor drawn models



Walk behind



Tractor drawn



# No-till seeder

- Tilling can often disturb the soil too much, which decreases moisture, nutrients and causes erosion.
- No till planting uses seeders like these to place the seed in the soil without opening it up too much.





# Cultivator

- Stirs up and moves the soil around.
- It is used before planting to aerate the soil or carefully, once the plants are in place, to take out weeds.



# Wheel Disc Cultivator

- After soil has been initially worked up, wheel shaped discs are used to further break up and aerate the soil
- Like most other field-scale machines it can be either horse-drawn or tractor pulled

[Discing a Garden](#)



# Livestock Tools & Equipment

- Halters
- Stanchions
- Chicken Coops
- Animal Care Tools
- Hay Handling
- Fencing Tools

# Halters

- Used to lead or tie up an animal.
- Halters circle around the nose → under the chin → behind the ears, then fastened to a rope or chain to lead.



# Stanchions

- Vertical structures built to hold animals in place during milking or veterinary care
- A feeding trough is placed in front of them so they can eat while being milked.





# Movable chicken coop (chicken tractor)

- A house for female chickens to protect them from bad weather and predators.
- This coop has an open-air patio so the hens can get some fresh air to stay healthy when weather permits.
- Wheels make it a mobile home.





# Animal Care Tools

- Hoof trimmers & hoof pick
  - Hoof care important to hoof health

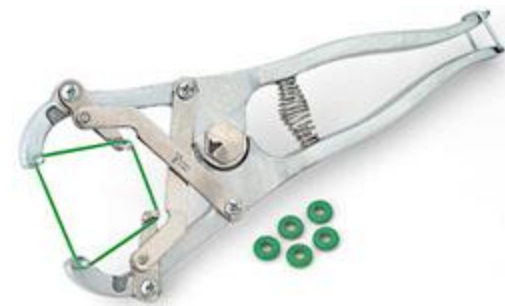


Goat or  
sheep  
hoof  
trimmer



- Castration & tail docking
  - Bloodless elastrator can be used when animal is young

Picking out a horse's feet



# Hay handling



Large round bale stacker



Large bale spear



Hay elevator makes loading small square bales of hay in the loft easy!

[Making Small Square Bales](#)

# Fencing Tools



Post hole digger



Crimp tool



Comealong



Homemade fence stretcher



Fencing tool

[Field Fence Installation Part 1](#)

[Field Fence Installation Part 2](#)

# Self-Review Questions

- Why is it important to properly store tools when they are not being used?
- Why is a well-maintained tool safer than a rusty, dirty, or dull edged tool?
- Which tools are best for weeding?