





### Compiled by:

Mitchell Mote, Extension Agent, Rutherford County

Andrew P. Griffith, Associate Professor, Department of Agriculture and Resource Economics

Kevin Rose, Extension County Director, Giles County

Troy Dugger, Program Coordinator, Center for Profitable Agriculture



This document is designed as a guide to help new or beginning farmers understand agriculture terminology. There are many terms related to different aspects of agriculture that may not be known to those who have not been involved in farming or have very little farming experience. Many of these terms and their meaning can be found in this document. While this list is not exhaustive of all the terms used in the field of agriculture, it is prepared with the hope that the terms found in this guide will be useful and provide new and beginning farmers a foundation to better understand agriculture.

**Acidic**: A soil pH of less than 7.0. The lower the number, the more acidic the soil will be. The pH scale ranges from 0 to 14, with 7 as neutral.

**Acre**: U.S. standard unit of measurement for agricultural land. It is equivalent to 43,560 square feet.

**Aeration**: Involves the process of creating small holes in the soil, allowing air, water and nutrients to travel to the plant roots.

**Agronomy**: The science of crop production.

**Alkaline**: A soil pH of more than 7.0. The higher the number, the more alkaline (base) the soil will be. The pH scale ranges from 0 to 14, with 7 as neutral.

Alliance: An association formed for mutual benefit, such as in the beef, grape/wine or other industry (horizontal or vertical) to improve profitability with increased coordination of production, processing and/or merchandising.

**Animal Husbandry**: The proper breeding, feeding and care of farm animals.

**Annual**: A plant that completes its life cycle by growing from a seed and producing more seed for future crops before its death in one year or growing season.

**Apiary**: A place where honeybees are kept; colonies of bees in hives.

**Aquaculture**: The commercial production of aquatic plants or animals in a controlled environment.

Aquaponics: A system of aquaculture in which the waste produced by farmed fish or other aquatic animals supplies nutrients for plants grown hydroponically, which, in turn, purifies the water.

**Artificial Insemination (AI)**: The mechanical injection of semen into the womb of the female animal with a syringe-like apparatus.

**Auction**: A method of marketing livestock and/or produce through which an auctioneer sells to the highest bidder.

Auction Market/Auction Barn: A facility where livestock producers and fruit and vegetable growers bring commodities to be sold via auction. This is the most common method of marketing livestock. Auction markets primarily host live sales of livestock on the premises, while some auction markets also host video sales.

Available Water Holding Capacity (AWHC): The quantity of water held in soil that is available for plants to use. As a rule, the deeper the soil, the greater its AWHC.

Avian: Pertaining to poultry and/or fowl.

**Backgrounding**: The feeding and management of meat animals from the time they are weaned as calves until they are on a finishing ration in the feedlot.

**Bareroot**: Dormant plants, ready for transplanting, shipping or storage with exposed roots (soil removed).

**Barrow**: Male pig castrated before sexual maturity.

**Basis**: The difference between the cash market price and the futures market price of a commodity.

#### **Best Management Practices (BMP)**:

A practice or combination of practices determined to be effective and practical (given technological, economic and institutional considerations) to manage nutrients to protect surface and groundwater as well as topsoil.

**Biennial**: A plant, or portion of a plant, that completes its life cycle in two years. (Example: blackberry plants have biennial canes and perennial root systems).

**Bloat**: An abnormal condition in ruminants characterized by a distension of the rumen due to an accumulation of gases. Can occur in animals grazing lush, wet, legume pastures when they are hungry.



Boar: Intact (not castrated) male pig.

## **Body Condition Scoring (BCS)**:

The relative fatness of an animal as determined by a visual assessment of the amount of fat and muscle covering the bones of livestock. Body Condition is generally scored on a 1 to 9 scale for cattle and horses, and a 1 to 5 scale for swine, sheep and dairy animals. Regardless of species, the lower the number indicates a thinner animal. A number 1 score indicates emaciated, and the highest score indicates very obese.

**Bolting**: When a plant produces flowers or seeds prematurely instead of a crop. This is usually the result of excessive heat and sun exposure.

**Boner**: A moderate conditioned cull cow with a body condition score of 5 or 6. Most well-conditioned cows fall in this category.

**Boot**: Stage of grass maturity right before the seed head emerges.

**Bovine**: Family of animals that includes beef and dairy cattle.

**Breaker**: Highest conditioned cull cow, carrying heavy flesh and having a high dressing percent. Dressing percentage is the portion (percentage) of the live weight that remains in the carcass. Body condition score is generally 7 or higher.

**Broadcast**: Method of seeding, fertilizing or pesticide application where the material is spread in a wide pattern onto the soil surface.

**Buck**: A male goat. Also referred to as "billy."

**Bull**: A sexually mature, uncastrated bovine.

**Burndown**: A method of preparing fields for no-till seeding by using a herbicide that kills all growing vegetation.

**Calf**: A young male or female bovine animal under 1 year of age.

**Capon**: A male chicken castrated before reaching sexual maturity.

Caprine: Of, relating to, or being a goat.

**Carrying Capacity**: Refers to the number of animals a pasture can sustain without degradation during a given grazing period.

Checkoff Programs: Research and promotion programs authorized by state and/or federal law and financed by assessments. The programs are paid for by specific industry members, such as producers, importers and handlers.

Chisel Plow: A soil tillage tool that consists of a series of straight steel shanks, which when pulled through the soil, till only a narrow furrow of soil. This is considered a minimum tillage practice that helps reduce the risk of soil erosion.

**Cockerel**: A young rooster not more than a year old.

**Colt**: A male horse or pony 4 years of age or younger that has not been castrated.

**Companion planting**: The belief that two plants growing near each other produce mutual benefits.

**Compost**: Organic residues, or a mixture of organic residues and soil, that have been piled, moistened and allowed to undergo biological decomposition for use in fertilizer.

Conservation Tillage: Designed to minimize soil erosion; any of several farming methods providing for seed germination, plant growth and weed control while maintaining effective ground cover throughout the years and minimal disturbance of the soil. No-till is the most restrictive form of conservation tillage. Other practices or forms of minimum tillage would include ridge till, strip-till and mulch-till.

**Continuous Grazing**: Refers to a grazing system where animals are left to graze in a field for an extended period.

**Conventional Tillage/Seeding**: Refers to a form of field preparation and seeding where the soil is moldboard plowed and/or disked prior to seeding.



**Cover Crop**: A close-growing crop that is grown to protect and improve soil between periods of regular crops or between trees and vines in orchards and vineyards.

**Cow**: A mature bovine usually having had at least one calf.

**Cow Calf Operation**: A management unit that maintains a breeding herd and produces weaned calves.

**Creep Feeding**: The special feeding of calves during the weaning period that helps young ruminant animals transition to forage-based diets.

**Crop Residue**: The plant material left in the field following the harvest of a crop.

**Crop Rotation**: The practice of growing different crops in succession on the same land.

**Crop Year**: Generally, the 12-month period from the end of one year's harvest to the next.

**Cross-pollination**: The transfer of pollen from the anther of a flower to the stigma of another flower in a different plant of the same or different species.

**Cull**: Refers to animals to be eliminated from the livestock operation due to production and/or management reasons or to fruits and vegetables not meeting minimal market standards.

**Cultivate**: The mechanical removal or destruction of weeds competing with crops for space, nutrients, water and sunlight; also refers to plants grown intentionally as in they cultivated a variety of vegetable crops on their farm.

**Cultivation**: The act of cultivating. The act of caring for and growing plants; the ways farmers take care of crops.

**Cutting**: A plant propagation method wherein a part of a plant is cut and dipped in a rooting hormone to eventually grow into a new plant.

**CWT**: Abbreviation for hundredweight and the unit in which most prices are quoted (\$/cwt.) C for Centum — a hundred; and Wt. for weight.

**Dam**: The mother or female parent of an animal.

**Dead Heading**: The act of pinching or cutting off spent flowers.

### Deferred Grazing (Stockpiling):

Refers to a grazing practice where forages can grow for a period before they are grazed by animals.

**Direct Sowing**: Germinating seeds at the site you want them to grow, as opposed to growing them indoors before transplanting.

**Disc or Disk Harrow**: A harrow with sharp-edged slightly concave discs mounted on horizontal shafts and used to cut clods or debris on the surface of soil or to cover seed after planting.

**Doe**: A female of the goat, deer or rabbit family. Female goats with kids are sometimes referred to as nanny goats.

**Double Cropping**: Raising two different crops on the same area within one growing season.

**Dressed Weight**: The weight of a carcass following removal of hide and entrails.

**Dry Cow**: A dairy cow that goes out of the milk production herd during the last 45-90 days of pregnancy. The dry period is an important resting period for the dairy cow, where fresh udder tissue is formed in readiness for lactation, and it provides an important opportunity to rid the udder of many potential pathogens that can cause mastitis.

**Dry Matter**: Refers to the part of feed that is not water.

**Endophyte (fungus)**: Any type of fungus living in a plant (endo, within; phyte, plant) without causing harm to the plant's appearance.

**Erosion**: The process by which soil is moved from one location to another by wind or water.



**Equine**: Of, relating to, or resembling a horse or the horse family.

**Everblooming**: A flower that produces a continual supply of blooms throughout a season.

**Ewe**: A mature female sheep.

Fall Calving Season: A defined calving season where calves are born in late summer to early fall. Utilized because it generally occurs during the warm, dry months of the year, and calf prices are usually at their seasonal high at the time of weaning.

**Family**: One group used in classifying organisms. Families consist of several similar genera (plural for genus).

**Farm**: Any agricultural tract of land, with improvements, generating \$1,000 or more in sales, or that normally would have been sold in the year, can be listed as a farm in the U.S. census.

Farm Service Agency (FSA): A branch of the USDA. The FSA administers farm commodity, crop insurance, credit, environmental, conservation and emergency assistance programs for farmers and ranchers.

Farrow: To give birth to a litter of pigs.

Fat/Fed/Finished/Live Cattle: Steers and heifers fed a nutrient-dense ration for the purpose of growing the animals, usually for 90-180 days in a feedlot or until they reach a desired slaughter weight.

**Feeder**: Refers to a meat-type animal of sufficient age and weight to be put into a feedlot for finishing prior to slaughter.

Feeder Cattle Grades: A grading system for feeder cattle to predict the slaughter weight endpoint to a desirable fat-to-lean composition. Frame size and thickness are the two criteria used to determine feeder cattle grades.

**Feed Grain**: Any of several grains most commonly used for livestock or poultry feed, such as corn.

**Feedlot/Feed Yard**: An animal feeding operation used to intensively feed and grow cattle for finishing.

Fertilizer: One that fertilizes; specifically: a substance (manure, plant and animal byproducts, chemical mixtures, etc.) used to make soil more fertile by supplying plant nutrients.

**Fescue Toxicity**: Refers to the toxic effects to animals resulting from the grazing of tall fescue infected with endophyte fungus.

**Filly**: A female horse or pony up to 4 years of age that has not foaled.

**Finishing**: Refers to the process of feeding out feeder animals in a feedlot until they reach slaughter weight.

**Flash Grazing**: Refers to the process of heavily stocking an area of pasture for a very brief period. This is done to prevent excessive growth of the forage.

**Foal**: Of a horse (equine), up to 1 year old.

**Fodder**: Most often refers to the corn stalks and leaves left in the field following grain harvest, which can be used as a coarse animal feed.

**Forage**: Vegetative matter, fresh or preserved, that is gathered and fed to animals as roughage; includes alfalfa hay, corn silage, pasture and grass-based hay.

**Founder**: The inflammation in the foot of a horse, sheep or goat. This is also known as laminitis. It can be caused by overeating grain, green forage, cold weather, severe concussion or excessive stress.

Frame Score: Score based on visual evaluation of skeletal size of a beef animal or by measuring hip height (from the ground to top of hips) and is calculated as a function of age.

**Freshening**: When milk production begins in a cow after a calf is born.

**Full Sun**: If a plant requires "full sun" then it needs at least six hours of direct sunlight each day to thrive.

Fungicide: A chemical substance used as a spray, dust or disinfectant to kill fungi infesting plants, animals or seed. Fungicides may be derived from natural (organic) or synthetic (inorganic) sources.



Furrow: Refers to a trench made in the soil by tillage equipment.

Gelding: A castrated male horse.

Genus: A group of closely related species of plants.

Germinate: The beginning of growth in a seed; to sprout.

Gilt: A young female swine that has not given birth.

**Genetically Modified Organism** (GMO): They are the result of a specific type of plant breeding where precise changes are made to the plant's DNA to give it characteristics that cannot be achieved through traditional breeding methods. Realistically, GMO refers to turning off or moving a gene from one place to another within the plant or inserting a gene from another source.

## Good Agricultural Practices (GAP):

Good Agricultural Practices are voluntary audits that verify that fruits and vegetables are produced, packed, handled and stored as safely as possible to minimize risks of microbial food safety hazards.

Graded Feeder Calf Sale: A sale in which feeder calves are graded and grouped - based on muscling, frame score, color and weight - to form larger uniform lots for sale.

Grass Fed: Livestock raised solely on grass, pasture or other forages.

Grass Tetany: A metabolic disorder of cattle and sheep grazing on lush grass pastures. It is characterized by magnesium deficiency.

#### Greenbelt or Greenbelt Law:

Common term for the Agricultural, Forest and Open Land Act of 1976. This law allows qualified land to be taxed based on its present use, not at its market value.

Hardy: A plant capable of withstanding freeze and/or frost exposure without means of protection.

Hardiness Zone: A geographically defined zone determined by temperature that categorizes which plants can thrive where; hardiness zones are designated by a number (1-11), such as zone 7. Gardening books and websites can help in determining hardiness zones.

Hay: Forage harvested during the growing season and preserved for later feeding.

Heifer: A young female cow that has not calved.

Heirloom: An open-pollinated plant variety that has remained unchanged through hybridization for at least 50-100 years.

Hen: An adult female chicken or turkey.

Herbicide: Any agent used to destroy or inhibit growth of plants. A herbicide may be derived from organic or inorganic materials.

Horticulture: The art and science of cultivating plants.

Humus: The part of soil created from decomposed plant matter.

Hybrid: The crossbreeding of two plants of different species or varieties with distinct characteristics.

**Hydroponics**: Growing plants without soil; using mineral nutrient solutions in a water solvent.

Insecticide: An agent that controls or destroys insects. An insecticide may be derived from organic or inorganic materials.

**Intensive Grazing**: Refers to a grazing system by which a pasture is heavily stocked for a small number of days then allowed to rest before being grazed again.

Kid: A young goat.

Lamb: A young sheep.

Legumes: A family of plants with the ability to fix nitrogen in the soil, thus reducing the amount of nitrogen fertilizer needed for a crop.

**HYDROPONICS** 



Liming: Refers to the addition of limestone or other basic (alkaline) material to raise the soil pH.

Litter: Live birth of multiple offspring of animals at one time from the same mother.

Loam: Rich soil consisting of approximately 25 percent clay, 50 percent silt and less than 50 percent sand; considered ideal soil for gardening and agriculture.

Load Lot: 48,000 to 50,000 pounds of live animals. A common lot size when marketing feeder cattle due to weight limits when hauling cattle using a semitrailer truck.

Mare: A female horse or pony.

Moldboard Plow: A farm tool having one or more heavy blades to break the soil and cut a furrow prior to sowing. Soil is inverted or turned over in the process.

Muscling: Amount of lean meat in a slaughter animal or carcass and estimated on the live animal by thickness of forearm muscle and hind quarters.

**Natural Resources Conservation** Service (NRCS): A branch of USDA. NRCS is the primary federal agency working with private landowners to help them conserve, maintain and improve natural resources. The Agency emphasizes voluntary, science-based conservation; technical assistance; partnerships; incentive-based programs; and cooperative problem solving at the community level.

Naturalized: To plant randomly and without a pattern.

Nitrogen: A chemical element essential to all life forms. Nitrogen is important for plant and animal growth.

No-Till Farming: Designed to control soil erosion, a farming practice leaving the soil undisturbed except for fertilization and seeding operations.

Oddlot: Refers to livestock with a physical trait that does not match other livestock in a group.

Open Pollination: Plants whose seeds develop through random, natural pollination such as wind, field movement or insect activity - not through human involvement.

Organic: A fertilizer, pesticide or plant food that is of animal or vegetable origin; plants grown without the use of synthetic chemicals.

Organic Farming: A production system completely excluding the use of synthetically compounded fertilizers, pesticides or growth regulators.

**Ornamental**: Plants grown for aesthetics, decorative and/or an attractive appearance.

**Ovine**: Of or relating to sheep.

Overgrazing: Refers to the process of allowing animals to graze a pasture for long periods of time without giving the plants an opportunity to recover.

Paddock: A subdivided section of pasture used to more efficiently graze a large field.

Perennial: Plants living for multiple growing seasons.

Pesticide: Any substance used to control or kill pests, such as insects, weeds, animals, or microbes; may be organic or synthetic.

Pinching Off: The periodic removal of new, freshly grown leaves from a plant to encourage growth.

**Pistil**: The female sexual reproductive, seed-bearing organ of a flower, consisting of an ovary, style and stigma.

**Pollination**: The transfer of pollen from the stamen (male part of the flower) to the pistil (female part of the flower), followed by fertilization (germination of the pollen grain), growth of the pollen tube down the style and into the ovule where a sperm cell fuses with an egg, resulting in the formation of a seed.



Porcine: Of, affecting, or resembling a pig or pigs.

Poult: A young turkey of either sex, usually of less than 2 months of age.

Primal: The initial cut of meat from a carcass during butchering.

Pullet: A female chicken less than a year old, or a young female chicken before she begins to lay eggs.

Preconditioning: Completing one or more management practices such as dehorning, castration, weaning, vaccination and training cattle to eat from a feed bunk.

Pruning: The process of trimming a shrub, tree or bush by cutting away dead or overgrown branches or stems to increase fruitfulness and growth or to maintain a certain size or shape.

Purebred: An animal having parents of the same breed that are eligible to be recorded with a registry association.

Quality Grade: An evaluation of the degree of marbling (intramuscular fat) and degree of maturity affecting the tenderness, juiciness and flavor of beef, pork or lamb.

Raised Bed: An elevated garden bed offering better drainage, aeration and warmer soil than a conventional bed.

Ram: An uncastrated male sheep.

Rooster: An adult male chicken, also known as a cock.

Row: Several objects arranged in a usually straight line (i.e., a row of corn) also, the line along which such subjects are arranged (i.e., the corn was planted in parallel rows).

Ruminants: Livestock such as cattle, sheep and goats. Their digestive system is unique, allowing them to better use high roughage feedstuffs, including forages. They possess a four-compartment stomach designed to ferment feedstuffs and provide energy.

Seedling: A plant that has just emerged from its seed with its first root, stem and leaves.

Self-pollinating: Plants not requiring pollen from another plant to produce fruit.

Shoat: A weaned young pig of either sex.

**Shrink**: The loss of body weight an animal experiences when gathered, transported or held in a pen (overnight) to be transported the next day.

Side Dressing: A method of fertilization where a little fertilizer is applied to soil near a plant.

Sire: The father or male parent of an animal.

Sludge: Solid sediment left over from industrial wastewater treatment plants that is commonly used as a fertilizer or livestock food additive because it contains high levels of nutrients; however, it may contain high levels of heavy metals and pollutants.

Soil Depth: The effective depth of a soil for plant growth is the vertical distance into the soil from the surface to a layer essentially stopping the downward growth of plant roots. The barrier layer may be rock, sand, gravel, heavy clay, etc.

Sow: A female hog that has produced at least one litter of pigs.

Spring Calving Season: A defined calving season where calves are born in late winter and early spring. A spring calving season is often utilized because of cool-season forage availability immediately following calving and it allows producers to wean and market calves prior to winter, which means the producers do not incur winter feeding costs for the calves.

**Springing**: A cow starting to make the changes, meaning calving is close, especially noting the udder beginning to fill with milk prior to calving.

Staking: The practice of driving a support into the ground next to a plant to support its growth.

Stallion: An uncastrated mature male horse or pony.

**Stamen**: The male reproductive organ of a flower, consisting of a filament and a pollen-containing anther.

Steer: A male bovine castrated before reaching sexual maturity.

Stocker Cattle: Cattle weaned and placed on grass or a growing ration prior to entering the feedlot.



**Stocking Rate**: Number and classes of animals grazing an acre of land for a specific time.

**TAEP**: Tennessee Agriculture Enhancement Program – A cost-share program administered through the Tennessee Department of Agriculture.

**TDA**: Tennessee Department of Agriculture.

Thinning: To reduce the number of excess seedlings (discarding the weakest ones) to allow better air circulation and increase light for foliage, thereby encouraging remaining plants to thrive. In fruit crops, thinning involves removal of some of the fruit to allow the remaining fruit to attain better size and quality and to enable the plant to initiate fruit buds for cropping in the following year.

**Till**: To work soil in preparation for planting a crop.

**Tillage**: The act of tilling the soil. Tillage includes turning with a plow, disking, harrowing, dragging, etc. Normally tillage involves significant disturbance of the soil.

**Transplant**: To remove plants from one place and replant them in another (or from a container into the ground).

**Trellis**: A support system for plants allowing the positioning of shoots, foliage and fruits for maximum interception of sunlight, air and spray circulation and ease of management.

Tom: A male turkey.

**Top-dress**: To apply a material such as fertilizer, manure, compost, etc., to the surface of the soil.

**Turning Plow**: A plow designed to pulverize a ribbon of earth a few inches wide and turn it over so that surface trash is buried. The turning plow uses a moldboard to do the turning.

**Udder**: Mammary gland.

**Under Grazing**: The poor pasture management practice allowing vegetation to become over mature before animals have an opportunity to graze.

**Unit (of Fertilizer)**: Amount necessary to give 1 pound of the desired nutrient.

**USDA**: United States Department of Agriculture.

**UT-TSU Extension**: An educational arm of each university assisting farmers, families, youth and communities to improve their quality of life and solve problems through the application of research and evidenced-based knowledge.

Vermiculite: A lightweight, flaky mineral called "mica" that has been heated to the point of expansion. The sponge-like granules are then capable of holding both water and air. This amendment is added to potting mixtures and container gardens to improve root growth due to aeration and moisture retention.

Video Sales: A marketing method where cattle are video recorded on the farm, and the video is broadcast via satellite television, internet and/ or a smartphone. Buyers participate in the public auction by telephone or computer. These sales are generally hosted by a marketing agency at their place of business.

**Waterlogged**: Soil that is saturated with water.

**Wean**: To separate calves from their mothers (cows), allowing the cows to recover their body condition and allow for specialized feeding of the calves.

**Weed**: A plant growing in the "wrong place."

Wether: A castrated male sheep or goat.

**Yearling**: Livestock between 1 and 2 years of age.



Profitability Comparison, 2017. https://extension.tennessee.edu/publications/ Documents/W419.pdf

A Beginner's Guide to Agriculture Terminology and "Lingo," n.d. Fayette County, University of Kentucky Cooperative Extension Service.

Holland, Rob., Loveday, Dwight. Improving Communications with Your Beef Processor, 2014. https://extension.tennessee.edu/publications/Documents/ PB1820.pdf

Bates, Gary. Tall Fescue: Endophyte-Infected or Endophyte-Free?, 1998. https://extension.tennessee.edu/publications/Documents/sp439a.pdf

2017 Census of Agriculture. United States Department of Agriculture, National Agricultural Statistics Service. https://www.nass.usda.gov/Publications/ AqCensus/2017/





These Beginning Farmer Materials have been developed in order to be an aid to UT-TSU Extension agents working with individuals as they launch their pursuit of an agricultural enterprise. The effort to develop these materials was a project of the University of Tennessee Center for Profitable Agriculture and a group of county Extension agents. This project was made possible in part by the USDA Rural Development Rural Business Development Grant.







# UTIA.TENNESSEE.EDU

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.