

Glossary

Anaerobic digester – Storage system that stores manure under anaerobic conditions (without oxygen). Under these conditions, decomposition of organic waste by bacteria results primarily in methane and carbon dioxide biogases. The gases can be burned to generate electricity.

Animal unit (or AU) - a standardized measure used in USDA statistical and regulatory programs to allow comparisons of manure production and feed needs across species. For example, some systems define an AU to be 1,000 pounds liveweight, so that four 250-pound hogs, or 200 5-pound broiler chickens, would each constitute one AU.

ARMS – Agricultural Resource Management Survey, an annual survey of farm finances and production practices that is carried out annually by the Economic Research Service and the National Agricultural Statistics Service.

Biogas – Gases produced by the biological decomposition of organic matter.

Broiler – Young chicken grown for meat.

CAFO – Concentrated animal feeding operation, a term developed by the Environmental Protection Agency for use in regulation. Animal feeding operations are agricultural operations where animals are kept and raised in confined conditions; feed is brought to the animals rather than the animals grazing or seeking feed in pastures, fields or rangeland. Concentrated operations meet certain additional EPA guidelines for operation size and proximity to water sources.

Commercial fertilizer – A substance, containing one or more recognized plant nutrients, that is designed to promote plant growth and that is manufactured from substances, such as natural gas or phosphate rock, that have been chemically altered.

Corn silage – Corn silage is a high-energy feed, used primarily for ruminants like cattle or sheep, that is created from fermentation of the entire green plant (and not just the grain).

Crop nutrients – Sixteen chemical elements are known to be important to plant growth and survival. Three—hydrogen, oxygen, and carbon—are non-mineral nutrients while the other thirteen are minerals. Among the minerals are three primary macro-nutrients: nitrogen (N), phosphorus (P), and potassium (K). Primary macro-nutrients are often lacking in the soil because plants use large amounts for growth and survival, and they hence are often provided through fertilizers.

Dairy cow – Female cow that has had her first calf and is used to produce milk commercially.

Dry cow – A dairy cow who is not producing milk. Typically, a farmer will stop milking a cow for the two months prior to an upcoming birth, in order to relax her and build up strength for the birth.

Farrow-to-feeder – Hog operation that contains breeding females (sows) and that raises pigs from birth until they are weaned and attain a feeder weight of 30-80 pounds.

Farrow-to-finish – Hog operation that contains breeding females and that raises pigs from birth to a slaughter weight of 225-280 pounds.

Fed cattle – Beef cattle fed for slaughter in specialized operations called feedlots. Most beef cattle are raised on pasture, fields, and rangeland before being shipped to feedlots, and some are raised to slaughter weight without being shipped to feedlots.

Feeder-to-finish – Hog operation that takes feeder pigs of 30-80 pounds and feeds them to a slaughter weight of 225-280 pounds.

Feedlot – Beef cattle operation that take young cattle, weighing 400-800 pounds, and feeds them to a slaughter weight of 1100-1300 pounds. Feedlot cattle are confined in pens and fed specialized diets of grains, oilseed meals, and other nutrients.

Heifer – Young female cow who has yet to give birth. Heifers may be used as replacement cows for beef or dairy production, or they may be fed to slaughter weight and used only for beef production.

Integrator – A firm or farm that contracts with other farms to raise livestock or poultry for it. Integrators typically provide young livestock or poultry and feed to the farm; they may sell the mature animals to processors, or the integrator may also operate processing facilities.

Litter – Poultry litter consists of poultry manure; bedding material such as sawdust, sand, wood shavings, or straw; and feathers and spilled feed.

Manure – Organic matter derived from animal production, which includes feces, urine, hair or feathers, and blood. Usually used as plant fertilizer, although it can also be used as a feedstock for power generation, and processed manure may be used as bedding for livestock.

Methane – A chemical compound with the molecular formula CH_4 . The principal component of natural gas, it is also a relatively potent greenhouse gas with a high global warming potential. Livestock, primarily cows, are a source of methane.

NMP – A nutrient management plan, which specifies a set of information and conservation practices designed to use commercial fertilizers and manure effectively while protecting against the potentially adverse effects of nutrient storage and application and water and air quality.

Steer – Castrated male cattle, typically used for beef production.

Weanling to feeder – Hog operation that takes just-weaned pigs and raises them to a feeder weight of 30-80 pounds.