

# GLOSSARY

- Aestivate:** To become dormant during the summer or dry season.
- Alkaloids:** Nitrogen-containing plant compounds that can have several toxic effects on grazing animals. These compounds can be poisonous to animals, causing birth defects, loss of muscle control, or death.
- Apical Meristem:** The growth point on a plant at the tip of a shoot that causes the shoot to grow longer and can suppress growth of other stems on the plant. When the apical meristem is removed, the stem stops growing, but other stems on the plant may be stimulated to grow.
- Axillary Bud:** The growth point on a plant located at the junction of the stem and the leaf. New stems or bunches of grasses, shrubs, and trees emerge from axillary buds.
- Basal Area:** The area at the base of a plant that extends into the soil.
- Biological Control (or biocontrol):** The practice of introducing natural predators and parasites to harm an undesirable plant or animal. In the case of weed management, biocontrol usually involves introducing an insect or infectious organism, like a disease or rust, to suppress the growth or reproduction of the weed.
- Biomass:** The total weight of aboveground leaves, stems, flowers, and seeds of plants in an area. This term could include living or dead plant material depending on how it is defined by the user.
- Body Condition Score:** A value assigned to describe how thin or fat an animal is based on observation and feeling for fat deposits over the spine. Sheep and goats are generally evaluated on a 1- to 5-point scale from emaciated to obese while cattle are generally evaluated on a 9-point scale.
- Bolting:** The period of a plant's development when it begins to expand its stem to produce flowers and seeds.
- Broadleaf Plants:** Plants that generally have wide leaves and solid stems. These include forbs, shrubs, and most trees but not grasses, conifers or other plants with needles or grass-like leaves.
- Browsers:** Livestock and wildlife that feed on stems, twigs, buds, and leaves of shrubs and trees.
- Canopy Cover:** The percentage of ground area in a plot with plant leaves and stems above it. This would account for the area of the ground that cannot be seen looking from above the vegetation.
- Clonal Plants:** Plants that reproduce by underground or aboveground runners to create a group of genetically identical plants called a clone.
- Cool-Season Plants:** Plants that grow most actively in the spring and fall and generally produce seeds in late spring or early summer, then go dormant when it becomes hot and dry. These plants have a type of photosynthesis that uses a so-called "C3" pathway.
- Decadent Plant:** A plant that is dead or dying.
- Decumbent Plant:** A plant growth form where stems and leaves grow close to the ground.
- Defoliation:** The removal or loss of leaves and stems from plants.
- Detoxification:** Digestive and metabolic processes that render poisonous compounds harmless.
- Exotic Species:** A plant, animal, or microbe that is not native or endemic to an area.
- Fallow:** Farmland not planted with crops and that is kept free of weeds for a year or more to preserve and store soil moisture and nutrients for the next year's crop.
- Fine Fuels:** Dry and dormant plants with small stems (less than 1/4 inch) that readily ignite and burn quickly in dry conditions. Fine fuels include grasses, broadleaf forbs, and small shrubs.
- Firebreak:** An area cleared of vegetation that could otherwise readily ignite and spread fire. Firebreaks are often created around houses as a zone to stop or slow a spreading fire.
- Forbs:** Plants other than grasses, grass-like plants, or shrubs and trees that die back to the ground every year and are not woody. Many wildflowers and weeds are forbs.
- Fuel Load:** The amount of combustible material in an area, generally including dry and dormant vegetation that will readily burn.
- Fuel Continuity:** How evenly or patchily combustible material or fire fuel is arranged in an area.
- Grasses:** Non-woody plants that have long narrow leaves with veins that run parallel to the leaf edge. Grasses have stems that are hollow with nodes or swellings where leaves originate.
- Grazers:** Livestock or wildlife that consume mostly grasses.

**Green Bridge:** An area of green vegetation growth that creates a refuge or movement corridor for insects traveling between crop fields.

**Green Strip:** A narrow band of vegetation planted late. Maturing plants are grown or grazed to delay maturation and stay green when surrounding vegetation becomes dormant and combustible thereby creating a strip to stop or slow the spread of wildfire.

**Guardian Animals:** Donkeys, llamas, mules, and several breeds of dogs that are selected, bred, and raised to live with and protect livestock from predators.

**Herbaceous Plants:** Non-woody plants that die back to the ground at the end of every growing season. The roots may stay alive and produce stems in the next year.

**Herbivory:** The process of animals eating plants (i.e., herbivores) in an ecosystem.

**High-Tensile Fencing:** Fences created with wires that don't expand when pulled; the wire is strung tightly to resist animal movement through the fence.

**Integrated Pest Management (or IPM):** An approach to managing pest problems including insects and weeds. A key to IPM is the strategic combined use of chemical, biological, and cultural practices to suppress a pest or pests below some acceptable level of infestation.

**Intermediate Feeders:** Grazing and browsing animals, including goats, that will eat a variety of grasses, forbs, or shrubs depending on what is nutritious and palatable at the time.

**Invasive Species:** Plants, animals, or microbes that have moved into an area and reproduced so aggressively that they replace or suppress the species that naturally occurred on the area.

**Ladder Fuels:** Shrubs and small trees that create a layer of combustible vegetation between the ground and the tree crowns, allowing wildfires to spread into the upper tree canopy.

**Lignified:** Plant stems that are made hard like wood as the result of the deposition of lignin in the cell walls.

**Monitoring:** A repeated assessment of land and vegetation conditions over months or years to determine if land management objectives are being met.

**Monoculture:** A natural or cultivated area where a single plant dominates the plant community.

**Morphology:** The form or structure of an animal, plant, or microbe.

**Multi-Species Grazing:** Grazing more than one type of livestock (i.e., cattle, sheep, goat, or horses) on the same unit of land. The grazing can occur at the same time or at different times and still be considered multi-species grazing.

**Native Species:** Plants, animals, fungi, and microorganisms that are endemic and occur naturally in a given area or region.

**Noxious Weeds:** A subset of weeds that are designated by weed control organizations or agencies as legally requiring treatment whenever they are encountered.

**Orchard Floor:** The soil and vegetation between the rows of trees or vines and under the canopy of an orchard crop.

**Ovipositing:** The laying of eggs, especially referring to insects laying eggs.

**Palatability:** How desirable or appealing a specific plant is to an herbivore. Highly palatable plants are sought and readily consumed.

**Phenology:** The timing of growth and reproduction throughout the year or growing season.

**Photo Points:** Permanent locations from which to take photographs to monitor site conditions over time.

**Photosynthesis:** The chemical process in plants by which sunlight is captured to convert carbon dioxide and water into sugar compounds and subsequently starches and other plant carbohydrates.

**Phytochemicals:** Refers to any plant compound, though is generally used to describe plant compounds that can be toxic when eaten by herbivores.

**Post-Ingestive Feedback:** The sensory feedback gained by an animal after eating a plant. The feedback can be negative, such as nausea, or positive, such as an energy boost or hunger suppression.

**Predation:** When an animal (i.e., predator) hunts and kills another animal.

**Prescribed Grazing:** The controlled harvest of vegetation with grazing or browsing animals managed with the intent to achieve management objectives. The term can refer simply to planned grazing or to a very specific time and amount of grazing by a specific species.

**Prescribed Fire:** The use of a controlled burn in a given area to achieve a desired result or to satisfy a management plan.

**Rest Rotation Grazing System:** A planned grazing system that allows for a full year of rest from grazing for pastures on a rotating basis. This system requires at least three pastures and one herd. The rotation sequence for each pasture is usually to defer (fall graze), then rest (no graze), then spring graze.

**Rhizomes:** An underground scaly root-like stem that extends away from the base of a plant and gives rise to new plants.

**Secondary Compounds:** Plant compounds that appear to play no role in the growth and reproduction of the plant (i.e., primary compounds), but can be repulsive to herbivores and play an important role to protect the plant from grazing or browsing. Secondary compounds include alkaloids, tannins, and terpenes.

**Seed Set:** The stage in a plant's life, after flowering, when it produces seeds.

**Senescence:** The aging and dying of leaves at the end of the growing season.

**Shrubs:** Woody plants with several stems, rather than a central trunk, and a relatively low growth habit compared to trees.

**Silviculture:** The art and science of growing trees.

**Slash:** Residue such as limbs or bark from trees or shrubs left on the ground after storms, forest harvesting, or management practices.

**Stem Internode:** The area on a plant stem between two nodes. (Nodes are swollen areas where leaves and branches are attached.)

**Stocking Rate:** The number of animals, usually livestock, that graze a given area of land for a specified period of time. Generally expressed in animal unit months per acre.

**Stubble Height:** The height of stems or leaves that remain after a grazing period.

**Tannins:** Naturally occurring plant compounds found mostly in shrubs and forbs that reduce forage value by forming insoluble complexes with proteins when eaten.

**Targeted Grazing:** The application of livestock grazing at a specified season, duration and intensity to accomplish specific vegetation management goals. The term "targeted" refers to the specific plant or landscape that is the aim of controlled grazing practices.

**Terminal Bud:** The bud, or growth point, located at the end of the plant shoot or twig.

**Terpenes (including monoterpenes):** Organic compounds found in many trees and shrubs that kill rumen microbes and cause damage to the grazing animal when eaten. Several of these compounds are also called "essential oils" because they have an odor or "essence" giving plants like pines, juniper, or sagebrush their distinctive odor.

**Transects:** Measures in plots or on points along lines that can quantify plant cover, density, or abundance.

**Understory Vegetation:** The grasses, forbs, or shrubs growing on the ground surface under the canopy of trees.

**Urban/Wildland Interface:** The zone where houses and other human structures meet or intermingle with undeveloped rangelands and forest wildlands

**Utilization:** The proportion or degree of current year's forage production that is consumed or destroyed by herbivores (including insects).

**Warm-Season Plants:** Plant that grow most actively in the warmest season of the year. These plants have a so-called "C4" type of photosynthesis that allows them to grow throughout the summer and produce flowers and seeds in late summer or early fall.

**Wether:** A castrated male sheep or goat. Equivalent to the term "steer" for cattle.

