TARGETED GRAZING

By: Mikie McDonnell, California Rangeland Trust Stewardship Specialist

GRAZERS

When it comes to targeted grazing, the most important thing is selecting the right animal for the job. To select the right animal, it is important to analyze the types of vegetation that are present in the specified area. Animals consume foods that their stomachs allow for them to eat and digest properly, and when it comes to grazers, not all are created equally.



Goats

Goats are known as browsers, they have a narrow, strong mouth with a tongue designed for chewing branches and stripping leaves from woody stems. Goats are used widely across the United States to graze the densely thicketed, woody areas. Their small mouths allow them to be selective with their grazing, which in turn gives them a higher quality diet, compared to cattle. Relative to their weight, goats have larger livers than cattle and sheep, so they can better process plants that contain secondary compounds like

tannins, that are found in wooded plants. Goats are agile; they can stand on their hind legs to reach branches and other high growing forages. Their athletic nature enables goats to handle rougher and steeper terrain unlike cattle or sheep.



Cattle

Cattle primarily consume grasses. They can handle a large range of forages that are low in quality, due to their frame size and mouth shape. Cattle have a large muzzle with lips and a tongue that are used to grasp at the food they are consuming. Cattle have a large frame size, which does not allow them to graze terrain that is rough and steep. Because of the size of their mouth, cattle typically cannot be selective when they are foraging. Because they ruminate their feed, they can easily break down low-quality roughage. This quality

makes them superior to sheep and goats when managing fibrous and thick herb-filled vegetation.



Sheep

Sheep possess a narrow muzzle and a large rumen stomach, relative to their size, which allows them to graze selectively in large amounts. Because their mouth is so small, they typically graze closer to the ground and they take bites to specific parts of the plant, such as small leaves or buds. Sheep's small body design make them superior to cattle when grazing flat to the ground forage. They primarily consume forbs, which are plants with large leaves and visible flowers. Typically, because of their size, sheep cannot graze large dense forage,

but are ideal to travel in rough terrain. Unlike cattle, they graze steeper areas, but they will avoid wet or marshy areas.

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MEDUSAHEAD RYE: Taeniatherum caput-medusae

Classification: Grass

Grazing Objective: Graze early to prevent sedding and reduce mulch.

Description: This is a winter-annual grass that can grow 6 to 10 inches talland is low-quality roughage. It starts growing in the fall, from one root, several stesm will sprout. The plant produces a dense spike of individual florels that are 1 to 4 inches long.





YELLOW STARTHISTLE: *Centaurea solstitialis* Classification: Forbs

Grazing Objective: Graze heavily twice a year to prevent flowering and consistently to deplete seeding.

Description: This is a winter-annual plant that can range from 10 inches to 6 feet tall. The plant produces single or multiple branches that are a gray-green color. When it flowers, the head is a bright yellow color with sharp thistles at the base of the flower.

HIMALAYAN BLACKBERRY: Rubus armeniacuss

Classification: Woody Plants

Grazing Objective: Graze year round to maintain the plant's depletion.

Description: This plant blooms June to August. The roots sprouts a red-colored stem that can grow up to 20 feet tall. The leaves are a deep green with serraded edges. When the plant flowers, a white, five-petaled flower blooms. When not grazed properly, this bush will outgrow and push out other native plants. Once the berry is formed, the seeds can be spread by birds and other wildlife.



Information and Photos Provided by:

Targeted Grazing Handbook, https://www.webpages.uidaho.edu/rx-grazing/handbook. htm.

Washington State Noxious Weed Control Board University of Nebraska, Institute of Agriculture and Natural Resources University of CaliforniaCooperative Extension

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MATCH THE GRAZERS

Draw a line to match the grazer to the plant species that they would be most suited to control. Explain your decision under each animal. Answers found in activity video.





MEDUSAHEAD RYE







HIMALAYAN BLACKBERRY



