Tips on Pasture Management After Fire and Drought

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This summer has been a particularly long and dry one. On top of that, many have lost their pastures to fire. Your grazing management practices can help buffer the consequences of drought and fire. In order to keep your pastures in good condition and producing the best quality of feed, there are a number of principles to keep in mind.

1) Plant Needs

- Grass plants need to have enough leaves in order to capture sunlight, grow and then store food in the root system. The leaves are basically the food factory. The roots anchor the plants to the soil, take up water and nutrients, and if healthy, enable the plant to survive stress from drought, fire, cold, heat, and grazing. During drought, and fire recovery, healthy root systems are essential to extract the remaining soil moisture.
- Regrowth is delayed when a grass plant is grazed too close to the ground. It uses up root reserves to recuperate. If continually grazed too close the plant becomes weaker and weaker. As the roots become weaker, they can be easily pulled up by the grazing animal. Death for the plant can result. During a drought, the plant is under additional stress of not having enough water to grow. When burned by fire, all the leaves have been removed and the plant has to start over. Heavy grazing plus drought plus fire creates a "triple whammy" on the plant.
- A good rule of thumb in grazing is the "take half, leave half" principal. Graze a pasture so that half of the current year's growth has been eaten. Take the animals off when they have reached this point. This is generally about 4 inches of stubble in northern Idaho. Turn animals out on a pasture when the perennial leaf height is at least 6-8 inches.
- Animals can safely graze the regrowth on grass plants when the grass has recovered from either grazing or fire. This means the plant has built back up its root reserves and has green leaf to spare. For many of the grass plants in this area, that means when the green leaves regrow 6-8 inches. Animals should be removed when the stubble height is no less than 4 inches. This will

provide protection to the plant for the winter and have it ready for growing in the spring.

• One of the most effective and fastest ways to achieve a healthy pasture is to allow periodic growing season rest. This means allowing the grass plant to grow until it produces seed. This doesn't have to happen every year.

2) Animal Needs

- Pastures that are kept in good condition will provide high quality forage for the grazing animal. Those pastures where appropriate use levels have been adhered to, will often have better forage when a drought occurs or will recover faster after a fire. That's because healthy plants have roots which are able to extract moisture needed for growth.
- Resting one pasture during the growing season and keeping it for the fall, will also act as a "grass bank", giving the animals a place to come when forage is scarce in other pastures. Animals forced to hunt for forage on very short grasses will not be getting the nutrition they need.

3) Soil and Water Needs

- Keep the soils covered. Going into winter, it's important to leave enough stubble height in a pasture so that when the winter and early spring rains come the soil will not be washed away. This is particularly true where grazing occurs near streams and rivers. It's also important to keep soil and manure from washing into the creeks and rivers, spoiling water quality and aquatic habitat.
- Leaving a stubble height of 4 inches on the majority of grass plants will help reduce erosion as well as keep the plant healthy. Plan your grazing management so that there will be litter on the ground to feed and shade the soil. Litter on the soil surface will lower soil temperatures to conserve water in the dry season.
- The year following drought or fire should be devoted as much as possible to improving plant vigor and restoring protective vegetation and litter. If a pasture has been burned, giving it a rest from grazing fall through mid-summer is a recognized and highly recommended grazing practice.

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