Sustainable Rangeland Management: Achieving a balance between Traditional Agricultural Uses with Non-Agricultural uses on Montana Rangelands.

Background: Rangeland in Montana and across the nation contributes immensely to a sustainable agricultural economy. Montana's number one "industry" is agricultural production, and the number two "industry" is tourism. Rangeland provides forage and habitat for domestic livestock and wildlife. Recently there has been increasing demands on the rangeland for a multi use concept. Multi use includes hunting, precious metals, fuel (gas, coal) exploration and recreational uses such as; access to fishing, bird-watching, hiking, snowmobiling, cross-country skiing, trail bike/ATV riding. Today, management methodologies vary greatly while attempting to balance rangeland uses that result in maximized benefits to all.

Montana alone has approximately 93.2 million acres. Rangeland in Montana is located in the short grass prairie and mountain regions. Of that, there are approximately 36.3 million acres of Private Rangeland, 31.2 million acres of Public Rangeland, 3.7 million acres of Dryland Pasture, and 454,000 acres of Irrigated Pasture. Rangeland and Pastureland in Montana would comprise about 70% of the total land area – this would include the prairies, mountain parklands, forested areas with 25% or less canopy openings, alpine plant communities, wetlands, introduced tame pastures - dryland and irrigated.

History: Rangeland has seen major changes from the large bison herds on the prairies during the 1800's, to the homesteading days during the early 1900's, to the multi uses and management of today's rangeland. Native prairie once covered nearly a quarter of the continental United States, providing a home for specially adapted, diverse plant and animal life. Prairie ecosystems thrive on the intermittent disturbance brought by frequent fire and the irregular mosaic of vegetation carved out by the periodic passage of native grazers (bison, elk, mule deer, white-tailed deer, and antelope). These disturbance and subsequent renewal have shaped the life cycle of every native prairie organism.

As our knowledge of Rangeland has increased, it became evident that what helps the rancher is often good for wildlife. In this grazing-dependent ecosystem, many species of both plants and animals rely on the presence of large grazing animals. Properly managed rangeland can provide a sustainable agriculture economy and healthy rangelands for future generations.

Definitions:

- Rangeland – land on which the plant community is comprised of predominately native or indigenous grasses, grasslikes (e.g. sedges), forbs and/or shrubs. Rangeland includes natural grasslands, savannas, shrublands, most deserts, tundra, alpine communities, coastal marshes and wet meadows.
- Pastureland – grazing lands comprised of introduced or domesticated native forage species that are used primarily for the production of livestock. They receive periodic renovation and/or cultural treatments such as tillage, fertilization, mowing, weed control and may be irrigated. They are not in rotation with crops.
- Grazing Management – the manipulation of grazing and browsing animals to accomplish a desired result.
- Ecological Site – a distinctive kind of land with specific soil and physical characteristics that differs from other kinds of land in its ability to produce distinctive kinds and amounts of vegetation and in its ability to respond similarly to management actions and natural disturbances.
- Stocking Rate – the amount of land area allocated to each animal unit for the entire grazing period in one year.
- Homestead Act of 1862 - An act passed by Congress in 1862 promising ownership of a 160-acre tract of public land to a citizen or head of a family who had resided on and cultivated the land for five years after the initial claim.