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GRAZING SYSTEMS IN SHEEP REARING

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Abstract: The goal of this study was to clarify a few aspects related to grazing systems in sheep rearing: the fields in which grazing systems are relevant, the domains affected by grazing systems, the domains impacted by grazing systems, and the types of grazing systems – which are thoroughly defined and described – for the benefit of the students in animal husbandry and of the practitioners – sheep breeders. The aspects presented are meant to inspire sheep breeders and make them adopt one or more of the grazing systems presented.

• Introduction

A grazing system is “A defined, integrated combination of soil, plant, animal, social and economic features, stocking (grazing) method(s) and management objectives designed to achieve specific results or goals.” Good grazing management should include grazing distribution, grazing system, kind of livestock, proportion of livestock, proper stocking rate, and season of use.

Grazing distribution is affected by several factors: fencing patterns, forage palatability, grazing system, livestock grazing habits of kind and class, pasture size, prevailing winds, range sites and range condition class kind and combination, salt and mineral placement, shade location, stocking density, vegetation type, and water developments placement.

Sustainable grassland management plans include: adequate grazing system, adequate stocking rate, distribution by animal type, distribution by class, and other strategies that maximize the animal production per unit area based on sustainable rangeland management techniques. Adequate management strategies in sheep rearing include: controlled burning, grazing system, stocking rate, and weed control. Grazing systems affect, among others: biodiversity, botanical composition, production, soil bulk density, and water infiltration.

In their turn, grazing systems are impacted by grazing intensity, livestock breed, and management strategies

• Material and method

The material used in this study – books and articles – aimed at clarifying a few aspects related to grazing systems in sheep rearing, i.e., fields in which grazing systems are relevant, domains affected by grazing systems, domains impacted by grazing systems, and types of grazing systems – which are thoroughly defined and described. The research method use is the bibliographic one.

• Results and discussions

The best grazing system for a particular site should rely on the following: considerations of associated trade-offs/risks, cost of materials for improvements and implementation, costs of labour, “evidence that it will be able to achieve all/most of the objectives,” livestock class, livestock species, management objectives, practical considerations (availability of water, fencing), and type of vegetation grazed. It should also consider the purposes of the practice standard:

- “Improve or maintain desired species composition and vigor of plant communities;
- Improve or maintain quantity and quality of forage for grazing and browsing animals’ health and productivity;
- Improve or maintain surface and/or subsurface water quality and quantity, and riparian and watershed function;
- Reduce accelerated soil erosion, and maintain or improve soil condition;
- Improve or maintain the quantity and quality of food and/or cover available for wildlife.”

• Conclusions

The following conclusions can be drawn from the analysis above:

- Grazing systems are central in grazing management, in grazing distribution, in sustainable grassland management plans, and in adequate management strategies;
- Grazing systems affect biodiversity, botanical composition, production, soil bulk density, and water infiltration;
- Grazing systems are impacted by grazing intensity, livestock breed, and management strategies;
- There are tens of grazing systems (most of them synonyms), but the most common all over the world are: continuous grazing, deferment, high-density, short-duration grazing, prescribed grazing, rotation(al) grazing, seasonal grazing, and seasonal suitability grazing;
- The “international terminology for grazing lands and grazing animals” is not established yet (see the definitions for high-density, short-duration grazing and rotation(al) grazing.