Livestock grazing management

Goal

Adoption of a grazing strategy that allows for biodiversity in extensive systems

Short description of the measure

A maximum grazing livestock density of 1.4 LU/ha of fodder surface should generally be respected, in accordance with the limit used to define extensive livestock farming and to define the eligibility to receive support for the application of extensive measures (Piva et al., 1999). In special circumstances, such as farming in High Nature Value areas, other limits should be considered (Boccaccio et al., 2009; Mountford and Peterken, 2003; Plieninger et al., 2015).

Farms with higher stocking densities must work towards a reduction of density values in order to match this limit within a given period. Farms with lower stocking densities should hold these lower densities. Overall, livestock density values should be subject to a continuous reduction over time until the optimum level is reached.

Management plans should include adequate grazing strategies and patterns, reducing the impact on the grassland and on biodiversity. Three basic grazing systems that may be adopted are:

a) continuous (the pasture is not divided in sub-pastures or paddocks and the livestock is allowed to graze all the pasture area at any given time);

b) rotational (the pasture is divided into sub-pastures or paddocks, using appropriate mobile and wildlife-friendly fences, and the cattle is allowed to graze each paddock for an adequate time period before being moved); and

c) ultra-high density, mob grazing and flash-grazing (usually in the morning, high livestock densities are allowed in a pasture for invasive species control but may also later be moved according to a rotation system).

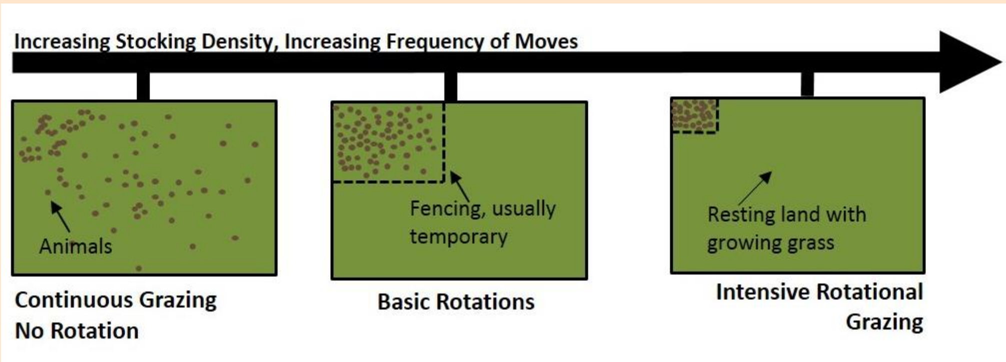

Figure 1 – Types of grazing systems according to increasing stocking density and frequency of moves. Adapted from: © The Pasture Project - Wallace Center (WC, 2019)

When invasive and undesired grassland species are to be controlled, applying flash-grazing is preferred to mechanical or chemical control methods. If an overall livestock density reduction is not viable, the application of rotational grazing is recommended. In order to ensure tree regeneration while halting the encroachment of dense shrub cover in wood-pasture systems, it is advisable to allow for time and space gaps between grazing activities.

Quality elements of soundly implemented biodiversity measures	▪ High levels of biodiversity are observed in and around the grasslands that comprise the pasture areas; ▪ Native plant species are observed as well as wild animal species that make use of that vegetation; ▪ No signs of soil compaction, erosion and degradation are observed; ▪ No signs of scrub and woodland invasion of the grasslands and meadows; ▪ High soil fertility.
Effects on biodiversity (ecosystems, species, soil biodiversity)	▪ European plant species, native to the regions where the farm is located, are present and can be observed. Examples of common species associated with grasslands, in Europe, include the maidenstears (*Silene vulgaris*) or the common poppy (*Papaver rhoeas*) among many others; ▪ In some regions, the presence of endemic species of wild flowers may be viable through adequate grazing.
Other positive effects/benefits for the farmer	▪ The presence of more pollinating species or larger populations of these species may benefit other crops present in the farm; ▪ Less compacted, less eroded soil, benefiting from the action of soil bacteria and invertebrates, may exhibit higher levels of fertility and productivity; ▪ An optimum, intermediate level of grazing can maximize primary production and hence stocking rate.
Indicator/key data	▪ Existence of a grazing management plan and/or strategy with designated grazing system; ▪ Observable livestock densities below equal to or less than 1.4 LU/ha of fodder surface; ▪ Observable presence of native wild plant and animal species, as expected for the biogeographic region in question.
References	▪ Boccaccio, L., Brunner, A., Powell, A., 2009. Could do better - How is EU Rural Development policy delivering for biodiversity? BirdLife International, Brussels. ▪ Mountford, E.P., Peterken, G.F., 2003. Long-term change and implications for the management of wood-pastures: experience over 40 years from Denny Wood, New Forest. For. An Int. J. For. Res. 76, 19–43. ▪ Piva, G., Bertoni, G., Masoero, F., Bani, P., Calamari, L., 1999. Recent progress in animal production science. Proceedings of the Aspa 13th Congress (Piacenza, 21-24 June 1999). FrancoAngeli, Milan, Italy. ▪ Plieninger, T., Hartel, T., Martín-López, B., Beaufoy, G., Bergmeier, E., Kirby, K., Montero, M.J., Moreno, G., Oteros-Rozas, E., Van Uytvanck, J., 2015. Wood-pastures of Europe: Geographic coverage, social–ecological values, conservation management, and policy implications. Biol. Conserv. 190, 70–79. ▪ WC, 2019. The Pasture Project - Wallace Center [WWW Document]. URL http://pastureproject.org/pasture-management/rotational-grazing-systems/#

Further information: [Knowledge Pool]

This Action Fact Sheet belongs to the training package for product and quality managers of companies and was developed within the project LIFE Food & Biodiversity (Biodiversity in Standards and Labels of for the Food Industry). The main objective of the project is to improve the biodiversity performance of standards and sourcing requirements in the food industry by helping standard organisations to integrate efficient biodiversity criteria into their schemes and motivating food processing companies and retailers to include comprehensive biodiversity criteria into their sourcing guidelines.

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