



Estimated reading time: 8 minute(s)

Rational grazing in livestock farming is the progressive and efficient pasture management system that complements plant physiology principles with the nutritional needs of an animal, while improving soil through ecological processes.

Animal nutrition encompasses both feed quality and quantity available.

Hypothetically, grazing is the meeting of cow and grass (Voisin, 1988). Hence, bringing us to the gist of today's discussion on rational grazing in livestock farming.

Rangeland deterioration continues to be a major problem in farming communities worldwide, therefore **strategies on how to maintain and utilize them sustainably is still a subject under discussion to date.**

Pasture must be capable of rejuvenating after being cut by grazing animals or the sharp blade of a mower. The process of photosynthesis aids plants to regrow over again, however, in an uncontrolled area, this may not be the case.

In addition, cattle and sheep need to meet their **daily requirements**, which is achieved through continuous grazing without exploiting the



ranch. André Marcel Voisin was the pioneer of rational grazing for livestock farming, enunciating for laws as a guideline to achieve all the possible benefits.

The four laws of rational grazing for livestock farming developed by André M. Voisin in the 1950s

First law: The Law of rest

- A sufficient interval of time must pass between grazing periods for grass to attain maximum productivity during grazing. This allows roots development which act as feed reserves, for the continuous growth of grass. Hence farmers will obtain a healthy sward ready for re-grazing.

Second law: The Law of occupation

- The time interval spent on a paddock must be short, in order for the animals not to re-graze the same grass continuously. The second law suppresses **selective grazing** by animals, often seen when animals stay on a paddock for prolonged interval.

Third law: The law of maximum yield

- Cattle with high nutritional requirements must be strategically allowed to harvest great quantities of grass of the highest quality. Often seen among dairy herds, whereby the top milk producers are let to graze on the best pastures which enhances higher milk yield.



Fourth law: The law of regular yield

- An illustrated example: if a cow is to give regular milk yield, she must not stay more than three days on the same paddock. Milk yield will be maximum if the cow stays on one paddock for only a day.

What can a farmer grow in order to enhance rational grazing?

- Lucerne
- Wheat
- Ryegrass
- Big bluestem, etc.

Ways of managing rational grazing for livestock farmers

- Educational and practical oriented seminars for farmers, to equip them with the knowledge of rational grazing, which may cut costs on feed and is key to good [rangeland management](#).
- Simple set up by erecting poles, fences and water points to achieve rational grazing.
- Keep manageable herd numbers per paddock to minimize overgrazing, which often leads to land degradation.
- In a communal setup, where land is shared, farmers are encouraged to practice paddocking.

To sum it all up, as a farmer ensure that introduction of grazing animals to young immature pasture must be suppressed, in order to allow full growth that can be grazed on, and has yet potential for re-growth.



References

<https://www.grass-fed-solutions.com/rational-grazing.html>

Voisin, A. (1988). Grass productivity. Island Press.

Get the Farm Management App

Try now our powerful Farm Management tool
Full functionalities and free plan forever

[Ok. Take me there! Discover all Features](#)