

Layout of parcels for rotational grazing

The aim is to ensure the animals always have a sufficient quantity of good quality grass and to make sure the pasture is in the best condition. Dividing the surface area into the parcels restricts the amount of grass available for the animals' needs and reduces waste.

by **Pauline DOLIGEZ** | 16.05.2016 |

Translated from french by : Alison Drummond

Technical level   



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Why divide land into sub-parcels?

Subdividing land into parcels is a key aspect of rotational grazing.

- The parcel which is in the best condition (the greenest) is given to the animals.
- Less advanced parcels are left to rest so that they can grow back.
- More advanced parcels are protected (reserved) for harvesting.

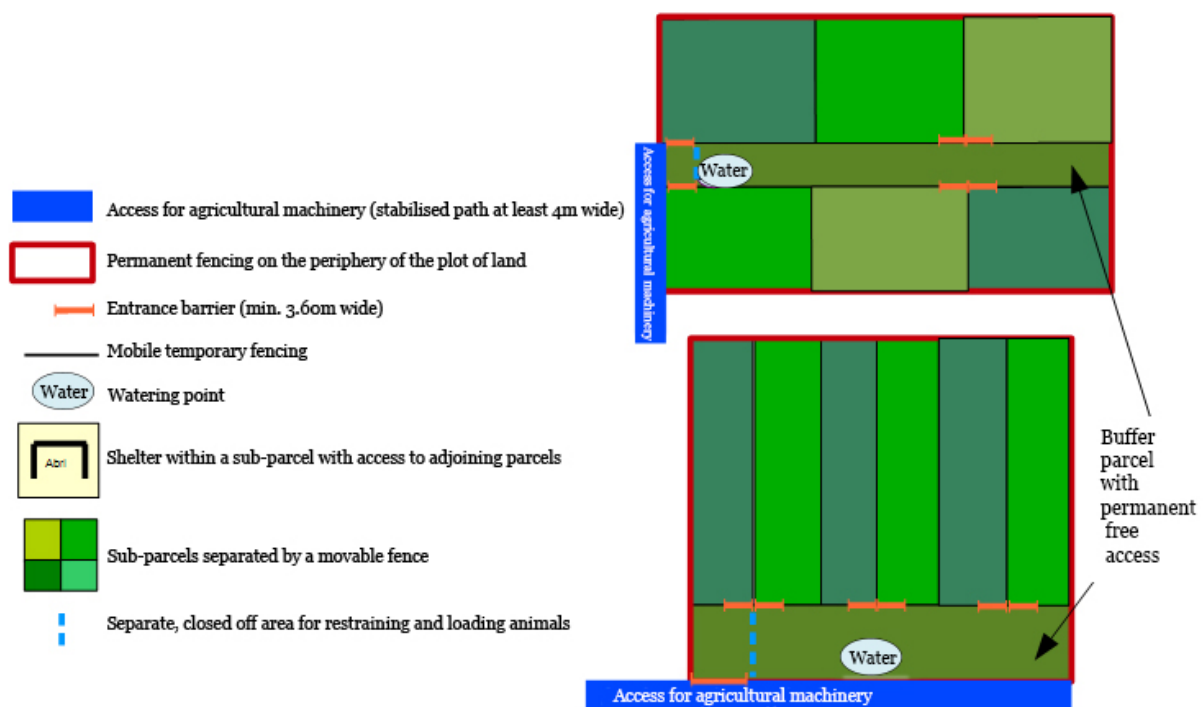
The plot of land available for the animals should be divided into at least four to six sub-parcels to give each parcel a **rest period of at least three weeks** during the rotation.

Several things need to be taken into account. Each sub-parcel must offer:

- A source of food which is appropriate for the animals that will graze on it. Abundant grass at the right stage for farm animals, and an area that is less productive for animals that are overweight.
- Access to a source of water.
- Access to an artificial or natural shelter so that the animals can protect themselves from the sun and insects in the summer, and the wind and rain in winter. If the natural shelter consists of trees, the bark of the trees must be protected. Sub-parcels with no shelter and a simple fence around them are to be avoided.
- Practical access to the parcel.
- Stabilised access for the provision of food if necessary.

For safety reasons, a permanent fence is needed around the edge of the parcel. Internal fences can be mobile. This makes it possible to remove them for mechanical procedures such as harrowing, spreading compost or fertiliser, harvesting, etc. and also to adjust the size of the parcels to the needs of the herd and to the growth of the season's grass. Parcels that are smaller in spring can be expanded in summer. This mobile fence must consist of two electrified wires or ribbons. A third wire may be necessary if the animals are of very different sizes (such as ponies).

Examples of how parcels can be divided



Rotating pasture

How to plan a good layout

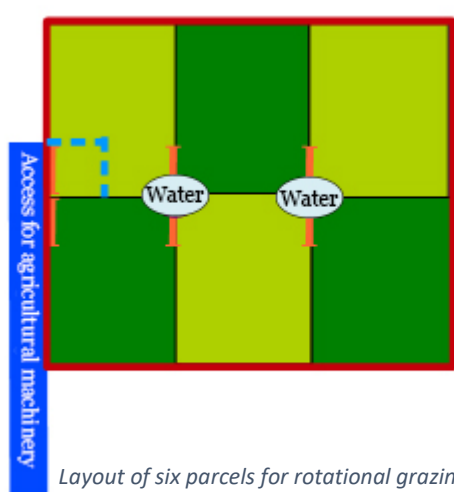
Priorities

Sub-parcels that are square or rectangular in shape make it easier to manoeuvre equipment (harrow, fertiliser, mowing equipment). A square shaped sub-parcel is best for ensuring that the area that the horses use and trample down is spread across the plot of land.

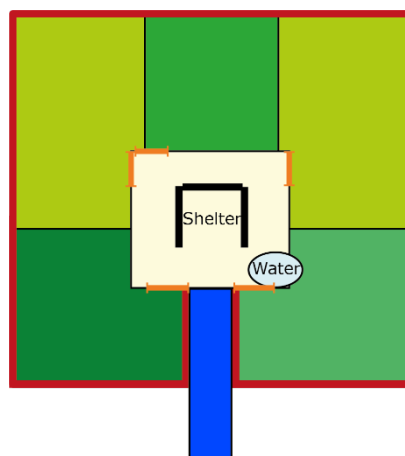
Dividing the parcels perpendicular to the slope forces the horses to graze in the lower areas.

Stabilised access for a tractor to the edge of the shelter or parcel makes it possible to feed the animals without going into the parcel and damaging the ground in winter.

The shelter should be oriented according to the prevailing winds and sized according to the number of horses grazing together in the sub-parcels.



Layout of six parcels for rotational grazing



Basic area divided into five sub-parcels

Example of the Ecurie du Thaurion (23): Livery yard for sport-leisure horses

1 herd consisting of two adults + two foals aged 2/3 years old

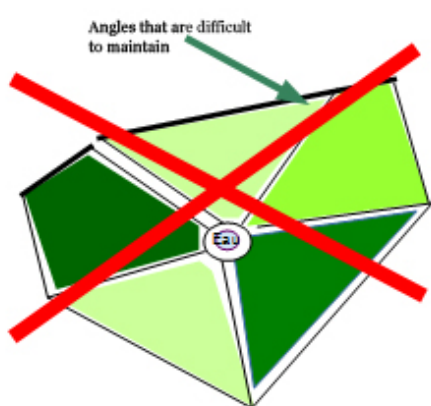
- Spring: 0.80 ha divided into five sub-parcels each measuring 0.16 ha (53 x 150 m). Rotation every four to five days depending on the growth of the grass. Average stocking rate of 0.24 ha per animal.
- Summer: surface area enlarged by 0.80 ha, so the herd rotates on a total of 1.6 ha of land.

Example of the Gauchoux GAEC (87): equestrian centre

1 herd consisting of 11 training horses

- Spring: 2.5 ha divided into six sub-parcels each measuring 0.30 ha, i.e. sub-parcels measuring 40 x 95 m, with a 5m corridor for water running along the six parcels. Rotation every four days. Average stocking rate of 0.32 ha per animal.
- Summer: total available surface area is doubled

Things to avoid



The sub-parcels that form obtuse angles. Horses can get cornered by others. It is not possible to drive a tractor and trailer (harrow, mower) into these corners. If these triangular areas are neglected, this encourages weed growth.

Different sized sub-parcels, because the rotation rhythm (regrowth time) will not be the same.

The type of layout to be avoided for rotational grazing

Water, food and shelter should always be sufficiently far apart to prevent the horses from constantly trampling the same place and to encourage the horses to use all the space available in the sub-parcel.

About our writers

Pauline DOLIGEZ Engineer IFCE

Bibliography

- **Doligez E.**, Pâturage du cheval, Prairiales Juin 2002
- Guide du pâturage, Herbe et fourrages Centre, Déc 2014
- **Gillet M.**, Physiologie et pâturage, INRA-SAPT, Lusignan