

Winter Grazing and Out Wintering Pads for beef cattle

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Why ?

► Beef production systems economically sensitive

- production costs

► Extending grazing during winter time

- allows to reduce housing and associated costs : feed providing, straw for litter, worktime

► Condition required : managing animal location

- ability and easiness either to let the animals grazing loose on the swards or to keep them closed in the pads for several days if needed, according to weather conditions



What innovation ?

► Linkage of two techniques :

Winter Grazing + Out Wintering Pads

- WGz exists in some plain areas on gravel soil, but is mostly uncommon on clay soils, or in tough winter conditions
- Confining animals when poaching
- Providing fodder if required
 - not mainly an alternative to barns,
 - better a tool to preserve the sward



Several questions

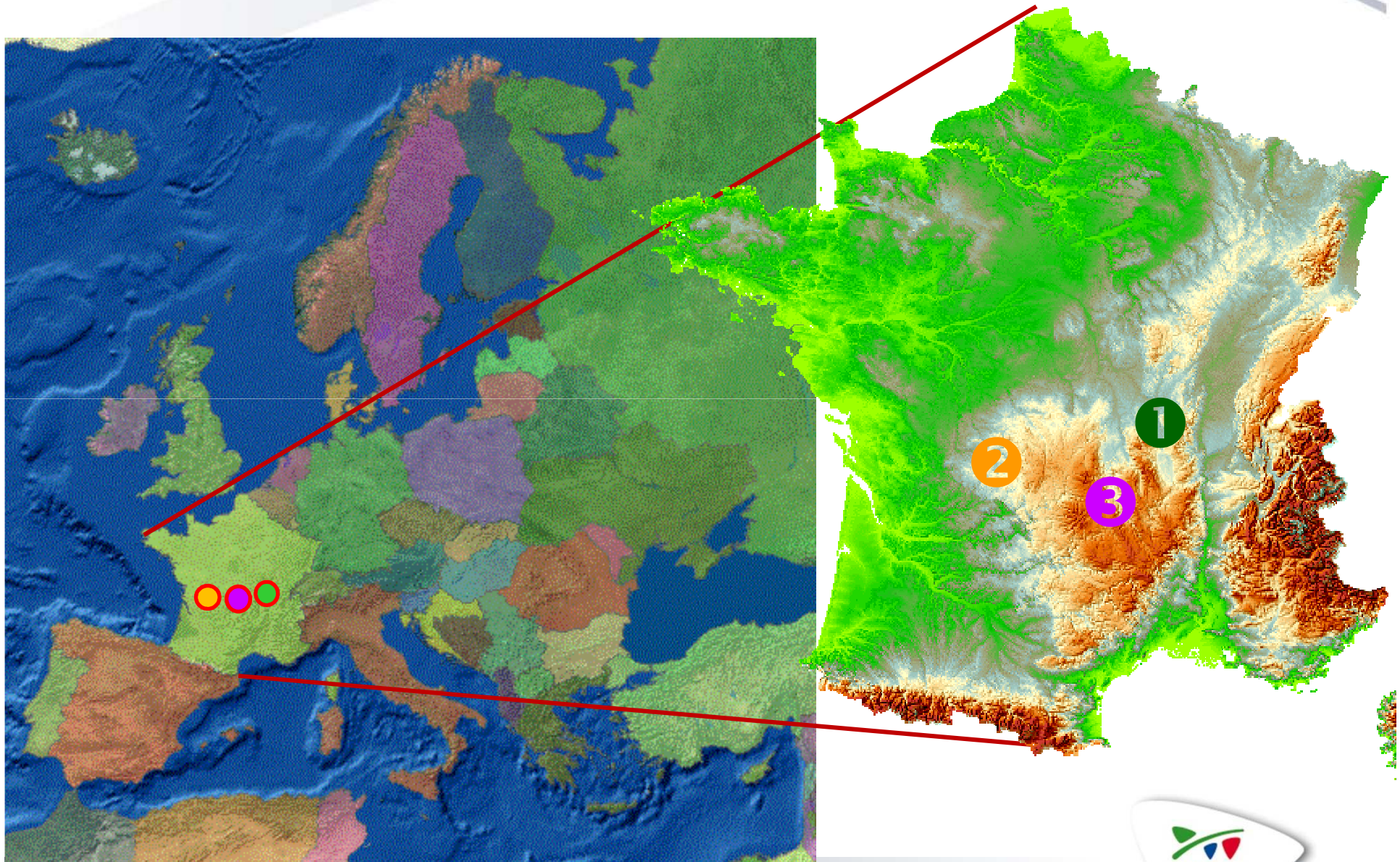
► **H:** Reduce by half the amount of fodder and straw for litter during wintertime ?

► **Q:** Which impacts on :

- Animal performance and welfare indicators ?
- Grassland reaction : soil appearance, fodder production ?
- Environment : production of leaching pollutants ?
- Human welfare ?

... according to different ways of managing grazing

An experiment on 3 spots



Innovations in grazing, Lublin, 3rd June 2012

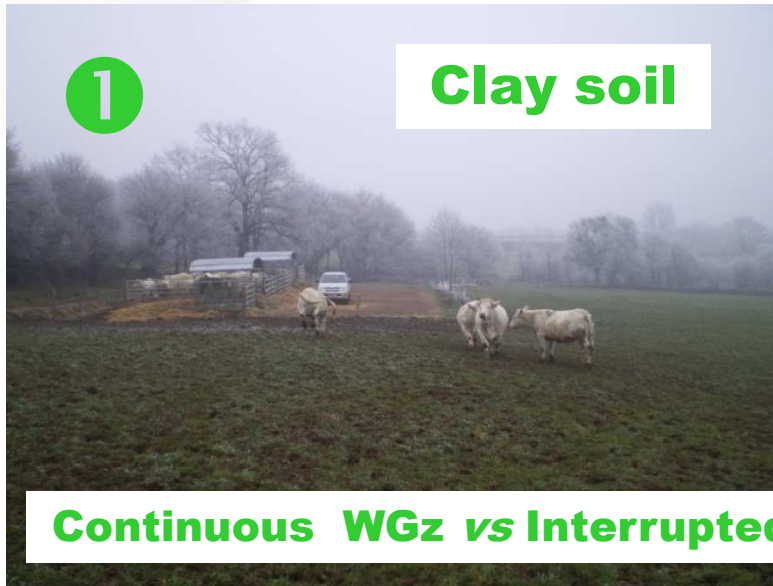
3 situations ●●● / 6 « treatments »

Fodder available in racks

Previous accumulation « on foot »

1

Clay soil



Continuous WGz vs Interrupted WGz

2

Gravel soil



OWP vs Full WGz ~~OWP~~

Cold / snow

3



Shelter + OWP



High vs Low accumulation



Tries management

| | ① Plain / clay | ② Plain / Gravel | ③ Mid mountain |
|--------------------------|----------------------------------|---------------------------------|--------------------------------|
| Animals | 2 x 12 heifers 500 kg | 2 x 10 pregnant cows | 2 x 8 pregnant cows |
| WGz period Nb of days | Déc – March 117 d | Déc – Féb 91 d | 15 Nov – Jan 81 d |
| Feeding | Yes | Yes | If required only |
| Stock rate LU/ha | 3,0 | 3,0 | 2,5 |



First results

Feeding

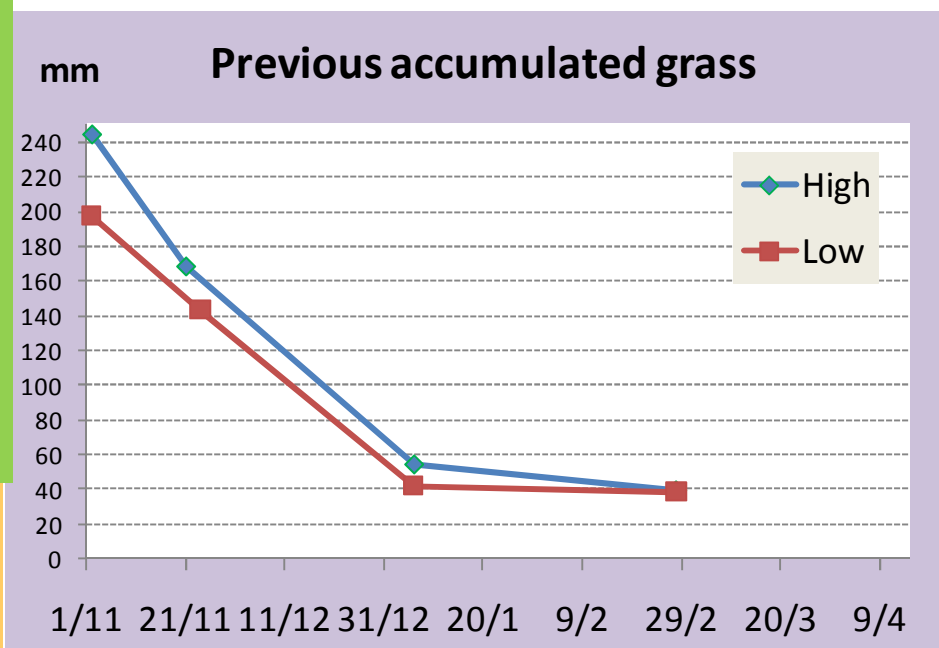
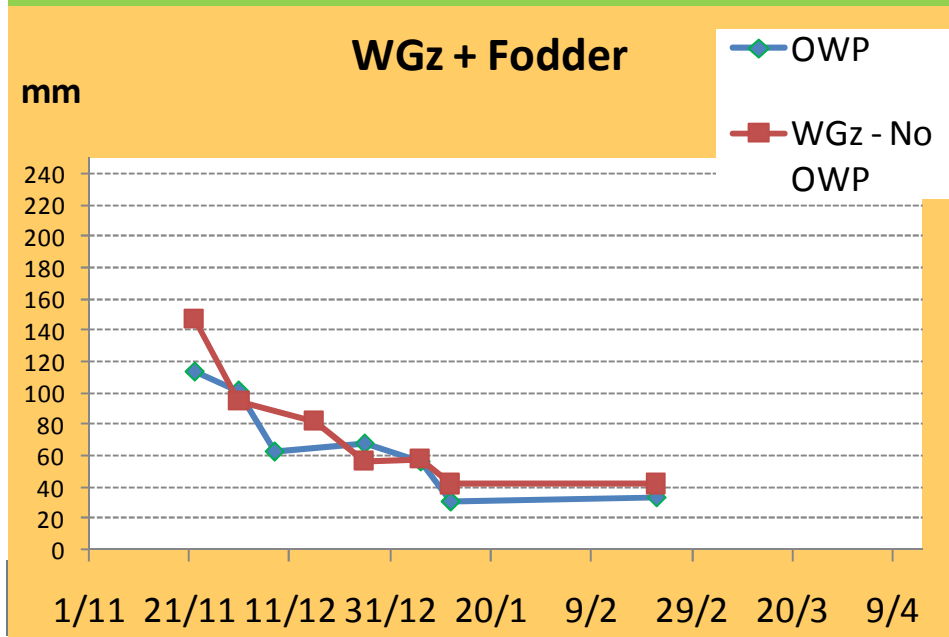
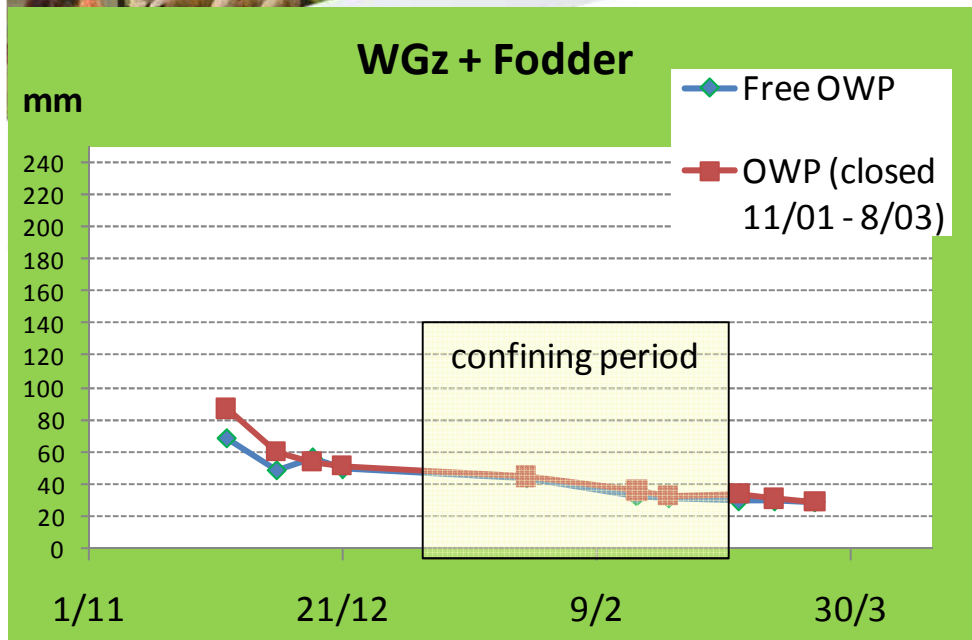
| | ① Plain / clay | ② Plain / Gravel | ③ Mid mountain |
|---|---|------------------|----------------------------|
| Confinement on OWPs | 0 – 7 d (« free ») 56 d (« closed ») | 0 – 7 d | 27 d (Year1) – 7 d (Y2) |
| Feeding (DM) / Requirements | 77 – 88 % | 67 – 81 % | 8 – 35 % |
| Grass height at the beginning (cm grassmeter) | 7 - 10 | 11 - 15 | 20 – 24 |

In regard to H « 50 % » ...



First results

Height grazing



« On foot stock » quickly decreasing ... whatever the situation ...



First results

Animal performances

| | ① Heifers | ② Pregnant cows | ③ Pregnant cows |
|----------------------|------------------------------|-----------------|-----------------------|
| ADG g/day | 500 (Y1) 220 (Y2) | | |
| Body C. variation | | ≈ 0,0 | - 0,3 to - 0,4 |

Compatible with breeding objectives



First results

Animal welfare

- ▶ no injuries, no foot problem, animals healthy
 - ▶ animal cleanliness ok ...
- ... whatever the aspect of litter





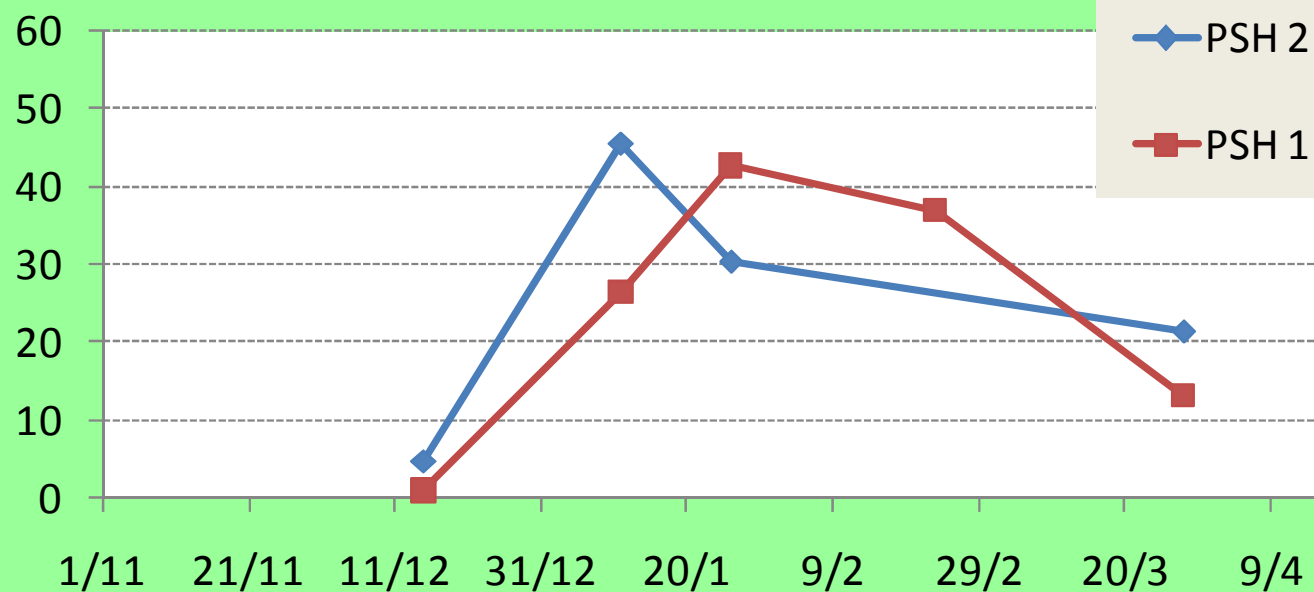
First results

Pasture and soil damaging

► Evolution of
% bare soil
seems
reversible



% bare soil





First results

Winter Grass and winter grazing....

| | ① | | |
|---------------------------------------|------------------|--|--|
| Estimated availability | | | |
| Tons DM / ha | 1,0 – 1,5 | | |
| Kg DM / head / day | 2,1 – 3,3 | | |
| Valued grass | | | |
| Kg DM / head / day | | | |
| 30/11 - 15/12 | 5,1 | | |
| 15/12 - 29/03 | 1,4 | | |
| Tons DM / ha on winter grazing period | 0,9 | | |



Other results coming



Leaching (under the OWP)

Animal behaviour





Questions to be solved

.



*Defining and managing
previous « on foot stock »*

*Managing rotation in
wintertime*