

Regenerative Production



Angus Gowthorpe



Approach Farm - corn and horn

- 400 acre mixed farm in the Vale of York
- 7 year rotation including wheat and barley, WOSR, spring oats, beans and linseed
- Permanent and temporary grass
- 50 cow pedigree Saler suckler herd
- Sand, medium loams and clay soils
- OM - sands 4% to clays 8%
- Breaking away from 'can and bag' farming



Regenerative Agriculture

- Minimal soil disturbance - No till
- Long and diverse rotation
- Diverse cover crops
- Spare straw chopped / FYM additions
- Soil armour – living plants or residue
- Grazing livestock on the arable



Machinery

- Spade & penetrometer
- JD 750A 4m with stocks & liquid fert
- Horsch C04 on Metcalfe tines
- Shakerator on LD legs
- 2 150 hp tractors
- Trailed sprayer
- Combine



The cultivation team



Cash crops

- WW – Shabras, Crispin, Kerrin & Gravity
- WB – Surge and Orwell
- Reduced all pesticides
- Ceasing to use PGR's & seed treatments
- 5 lt/ha molasses with each liquid fertilizer
- No cultivations in last 6 years
- Permanent tramlines
- Fibrophos for P & K



No-till



Drilling 'on the green'



Cover crops

- M
- B
- p
- 2
- L



/ha

/ha



Slake test



Companion Cropping

- WOSR – Buckwheat, beans and berseem clover



Intercropping

- Peas and barley
- Sp Beans and oats
- Temporary herbal Leys
- Permanent clover understorey



Grassland

- Herbal leys – grazing & silage
- High yielding & high quality with anthelmintic properties and drought resistance
- Zero N fertiliser requirement
- IRG, Red clover, Timothy, Chicory & Plantain drilled this summer for silage

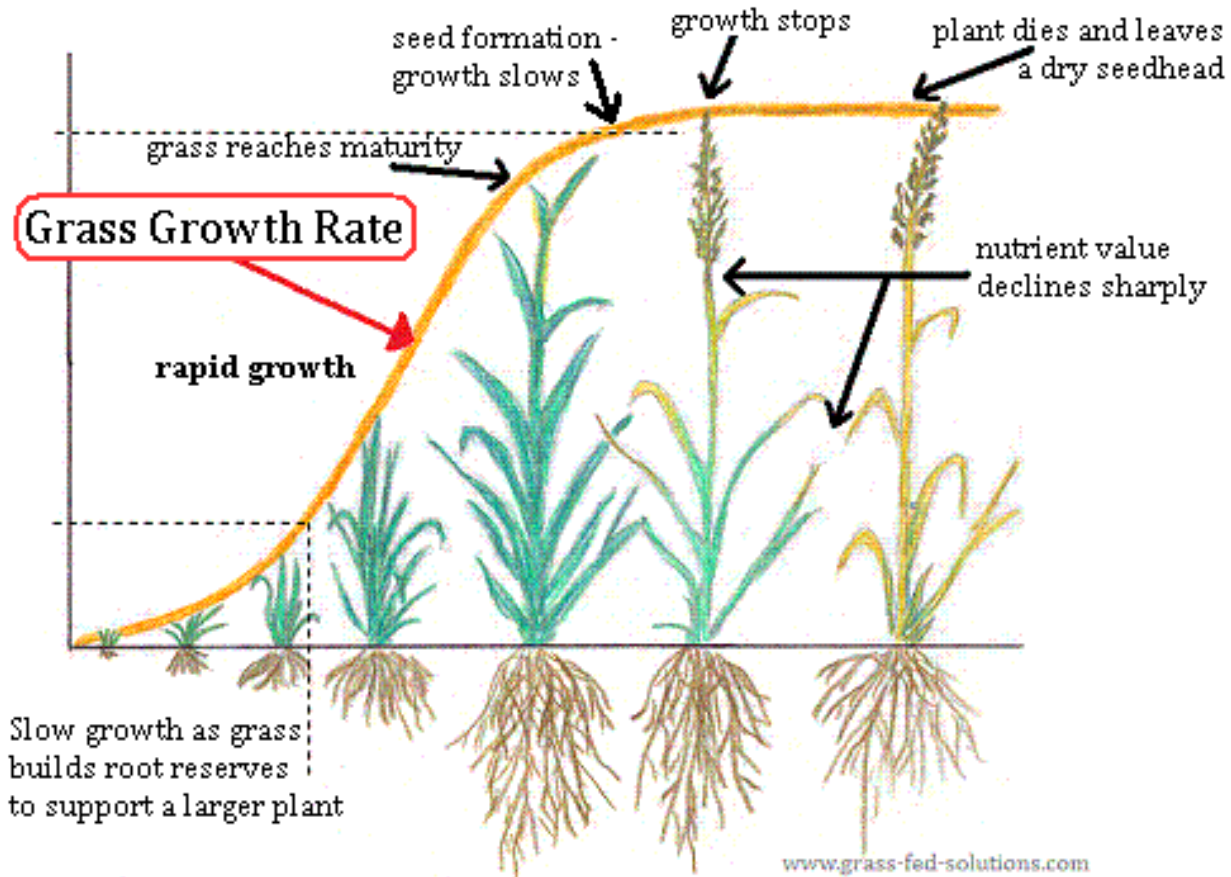


Mob Grazing

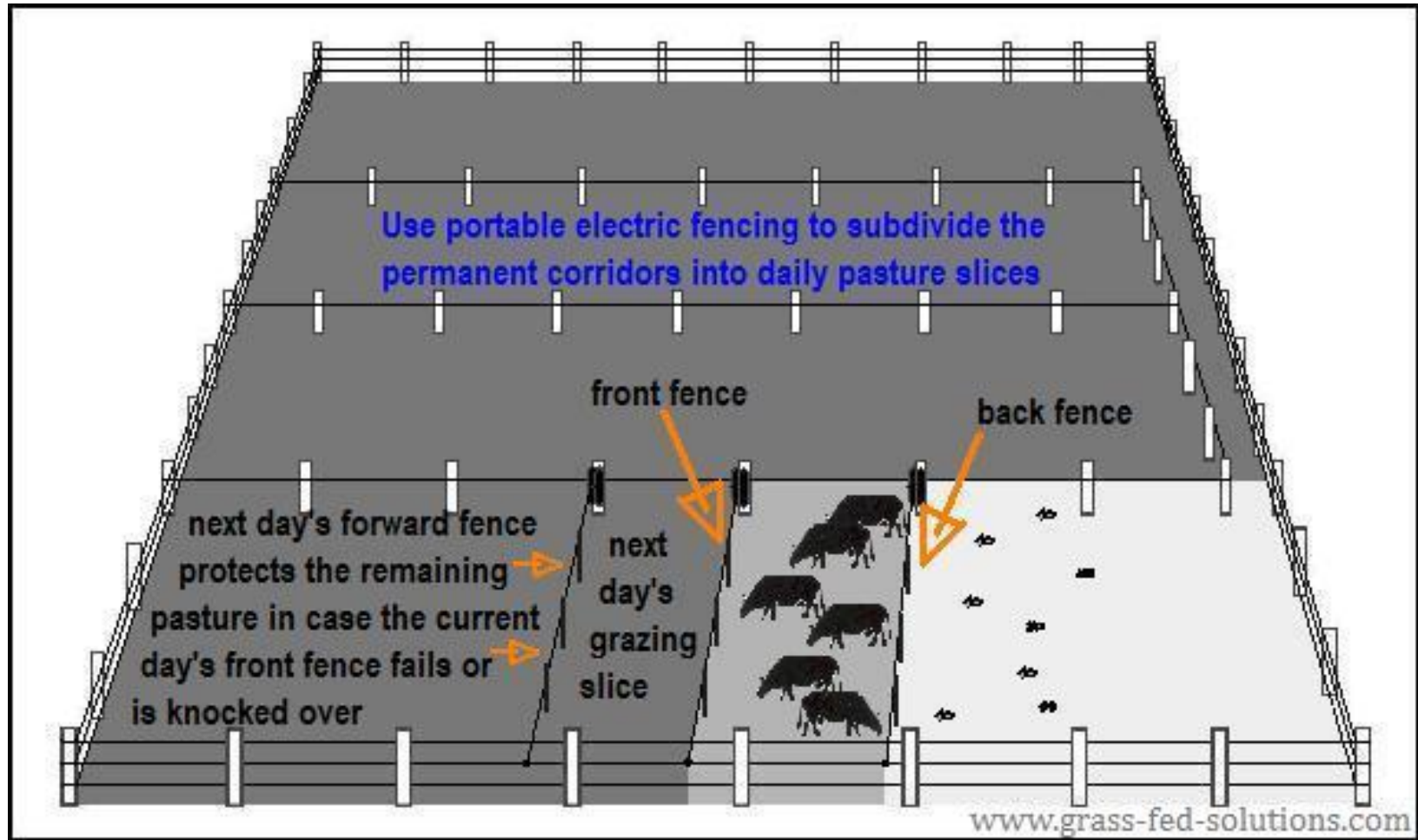
- Goes against many considered norms!
- Paddock grazing with daily moves
 - high density short term grazing
- 30-50 day cycle
- Graze to no less than 10cm sward height
- Eat 1/3rd trample 1/3rd leave 1/3rd
- Even distribution of manures



Grass growth



Grazing example



Benefits of Mob Grazing

- Extended grazing season
- Carry more stock on same area
- Lower costs – no fertiliser & healthier livestock
- Higher levels of rainfall infiltration
- Greater resilience to weather extremes
- Less need for buffer or creep feeding



The next level



Joel Salatin



Benefits of RA

- Reduced water run off/erosion gives less soil and nutrient loss
- Reduced pesticides
- Improved nutrient uptake – Mn
- Reduced fuel
- Increased water infiltration, water holding capacity, OM % and CEC
- Increased carbon sequestration
- Greater resilience to weather extremes
- Increased wildlife



Thank you

