

Bridgnorth Monitor Farm meeting report

Meeting 11: The importance of drainage

Date: 6 March 2018

Location: Norton Village Hall, Norton, Shropshire
TF11 9EQ



For more information, visit: cereals.ahdb.org.uk/bridgnorth

Meeting summary – key messages

- Good soil drainage is fundamental for healthy crops, healthy livestock, clean river water and longer periods for efficient field activities
- Do not neglect such an expensive and valuable asset!
- Preventing pollutant mobilisation is better than treating it

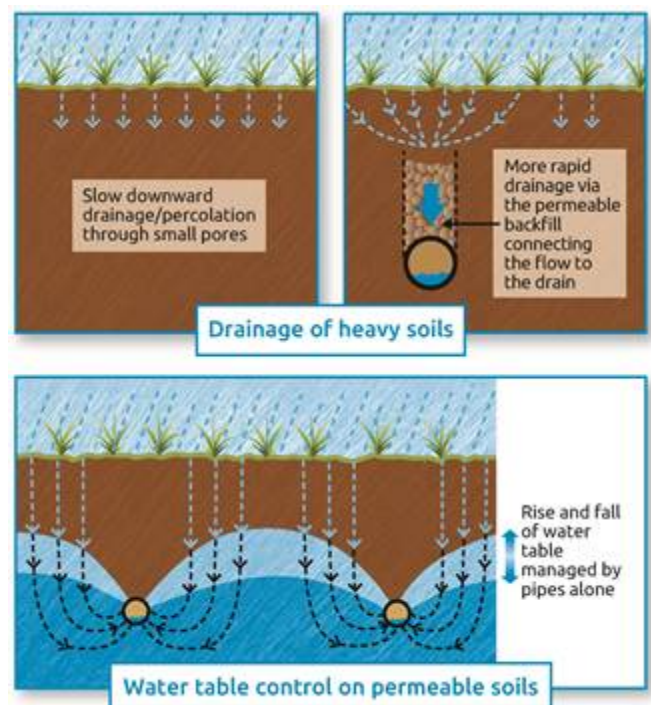
Controlling soil water

Why control soil water?

- To provide a better growing environment
- Allows improves plant access to water and oxygen; reducing waterlogging and drought
- Reduces competitive weeds and parasites
- Reduce soil and nutrient losses – agricultural and environmental benefit
- To provide a greater period when the land can be stocked, worked and trafficked

How do land drains work?

- Aid the removal of excess soil water through slowly permeable soils
- Control rising groundwater



Good drainage

Evidence of poor land drainage

- Surface ponding / saturated top-soils
- Poor crop health or yields
- High surface runoff and soil erosion
- Limited field access – rutting or poaching
- Presence of wet-loving plant species
- Susceptible to drought due to poor root development or available soil water

Maintaining good drainage

- Clean ditches (for the sake of your land and that of your neighbours)
- Bank batter suitable for soil type, reseeded and stabilised if required
- Fence ditches from livestock
- Locate and keep outfalls clear
- Jet, rod or replace blocked sections
- Renew drainage where necessary
- Mole drainage or subsoiling
- Good soil and field management

Scheme	Gravel fill	£ per ha	£ per acre
20 m spacing*	No	£1.5– 2.25k	£0.6–0.9k
20 m spacing*	Yes	£2.4–3k	£1–1.2k
40 m spacing*	Yes	£1.2–1.5k	£0.5–0.6k
Mole ploughing**	-	£100	£40
Subsoiling**	-	£200–300	£80–120
Ditch cleaning**	-	£1–3 per metre	

* John Nix 2015

**When done by contractor

Find out more – Links to AHDB information sheets or research

[Field drainage guide](#)

[Soil biology and soil health partnership](#)

[Cover crops, drainage and targeted cultivation for improved soil structure](#)

[Soil assessment methods](#)

[GREATsoils](#)

[An introduction to earthworms](#)



Next meeting

Date: 5 June 2018

Topic: Summer meeting

Time: 10.00

Location: Norton Village Hall, Norton, Shropshire, TF11 9EQ

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