What IWM strategies / tactics are UK arable farmers employing for weed control

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Rothamsted Research

Overview

The objective was to develop an understanding of the following by conducting interviews with UK arable farmers:
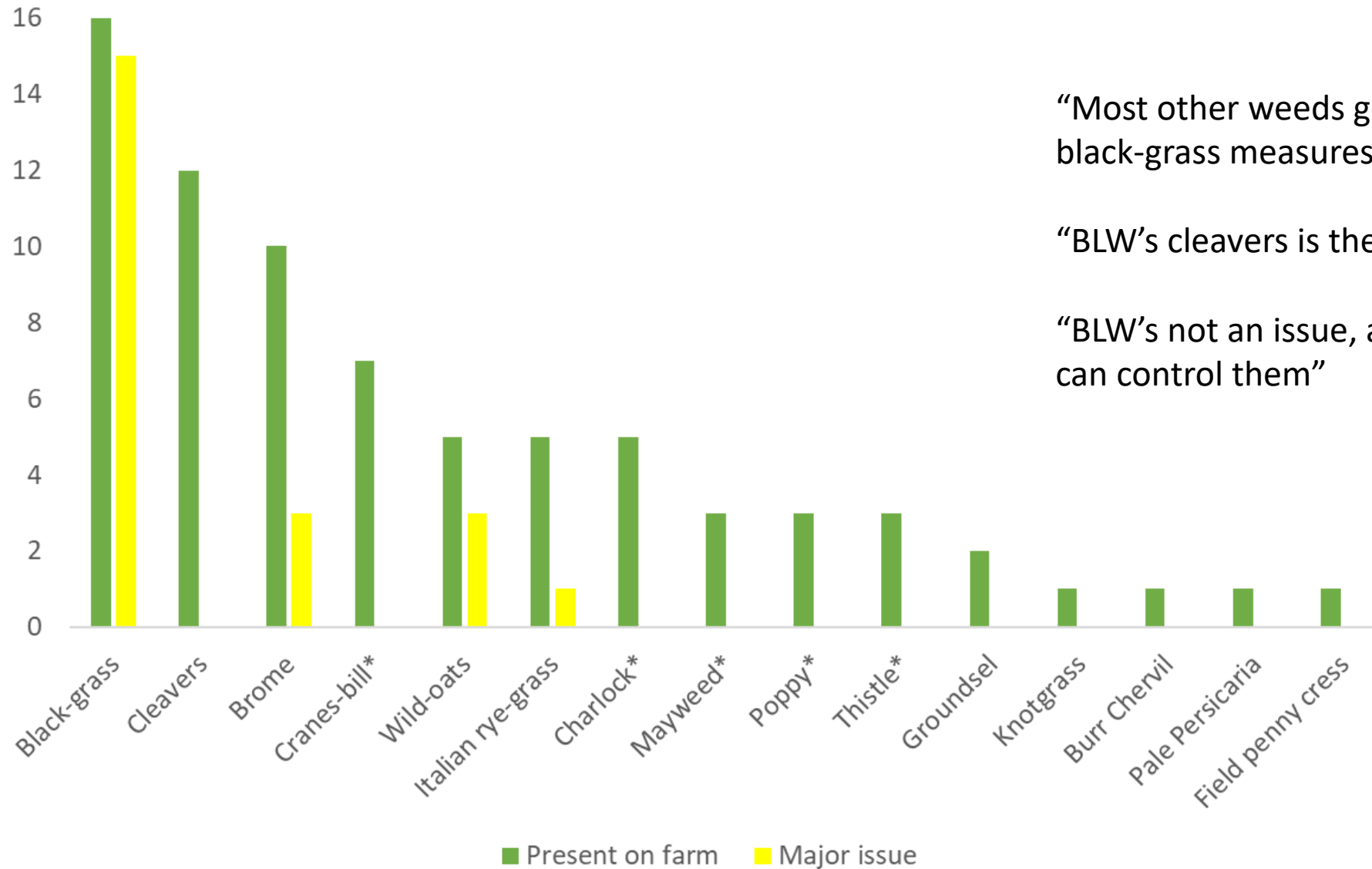
- what are the problem weeds

- strategies / tactics being employed

- drivers for decision making

- barriers to uptake of IWM

- where knowledge is gained / trusted

Interview protocol

- The same protocol / questions was used across all participating countries and cropping systems

- 4 sections:
    1. Farmer / farm details (size, ownership, problem weeds)
    2. What they do on there farm to control the weeds they have
    3. Factors that affect the decision making process
    4. Where they access information to make weed control choices

- Tried to avoid leading questions as much as possible

- Interviews recorded and then transcribed
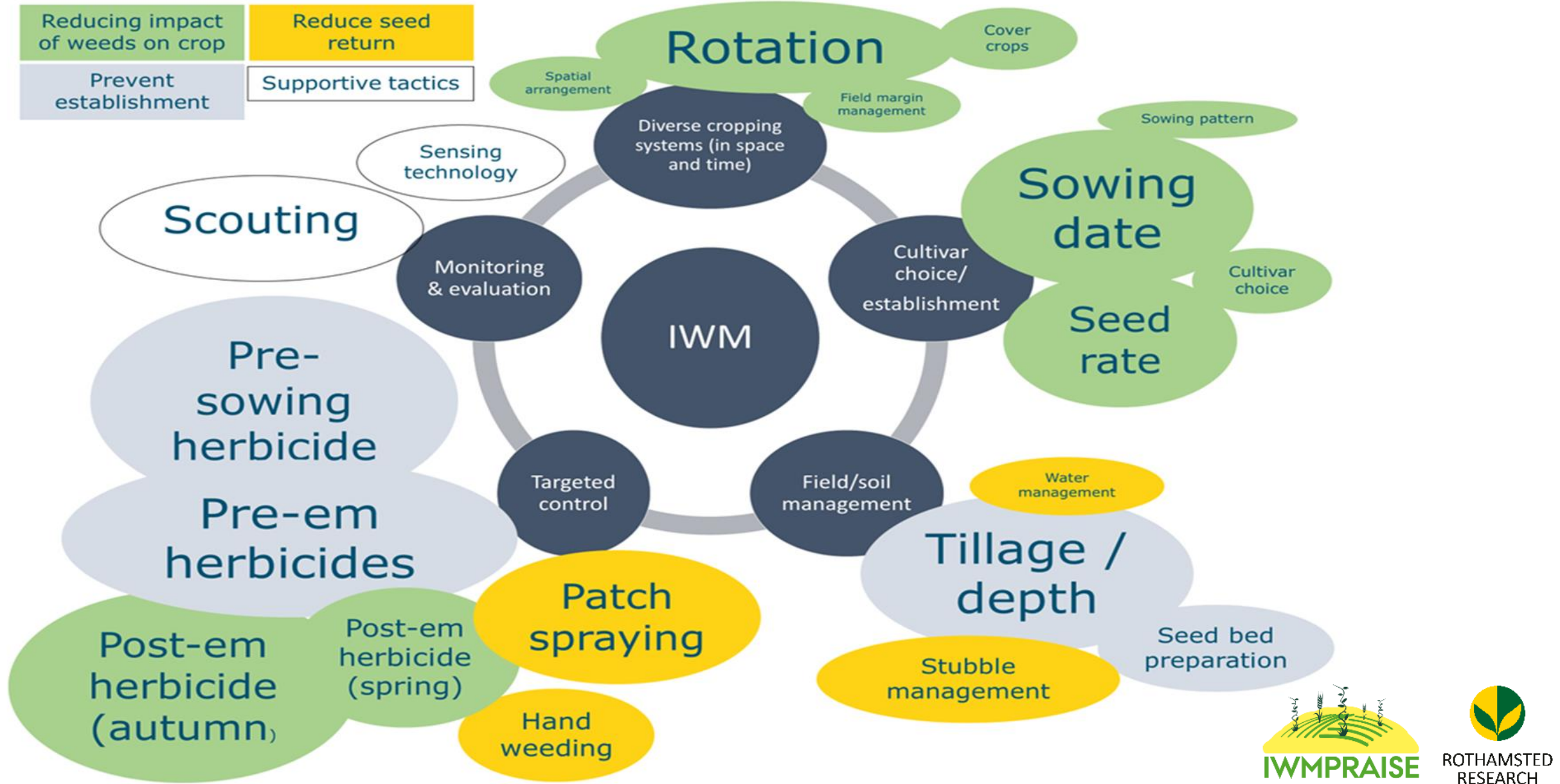
What are the main weed issues?

"Most other weeds get controlled by black-grass measures"

"BLW's cleavers is the main target"

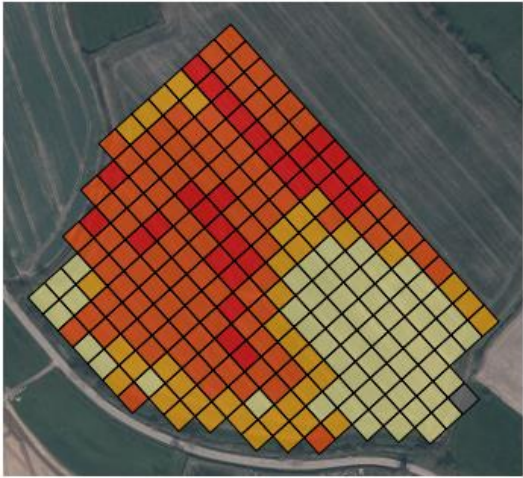"BLW's not an issue, always there but can control them"

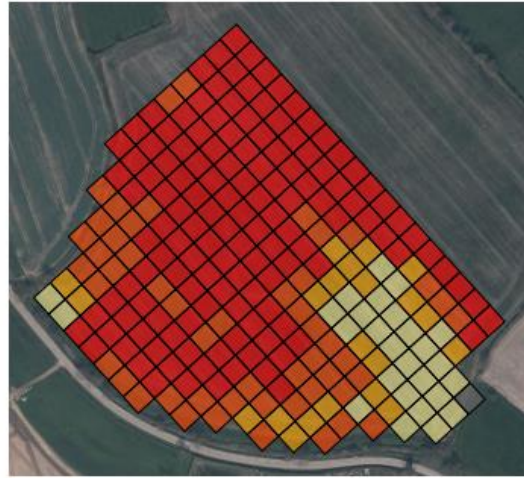# What farmers are doing for weed control?
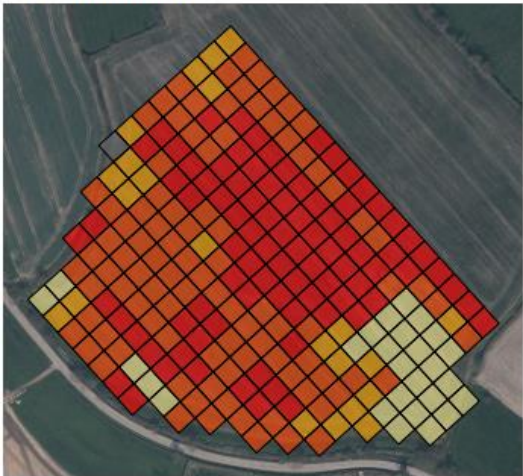
Monitoring black-grass abundance
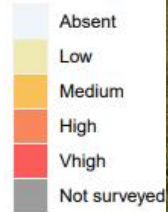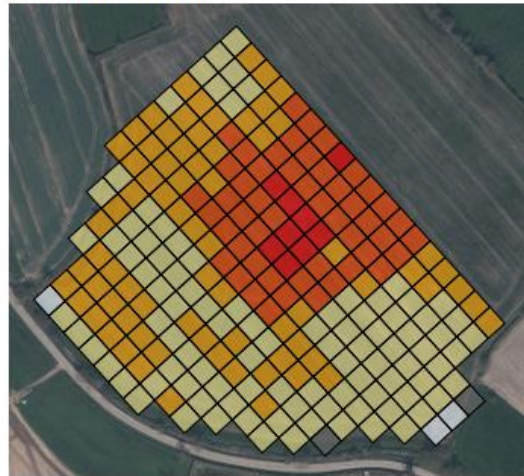

buckleys: 2014
Crop: Winter wheat

buckleys: 2016
Crop: Winter wheat

buckleys: 2018
Crop: Winter wheat

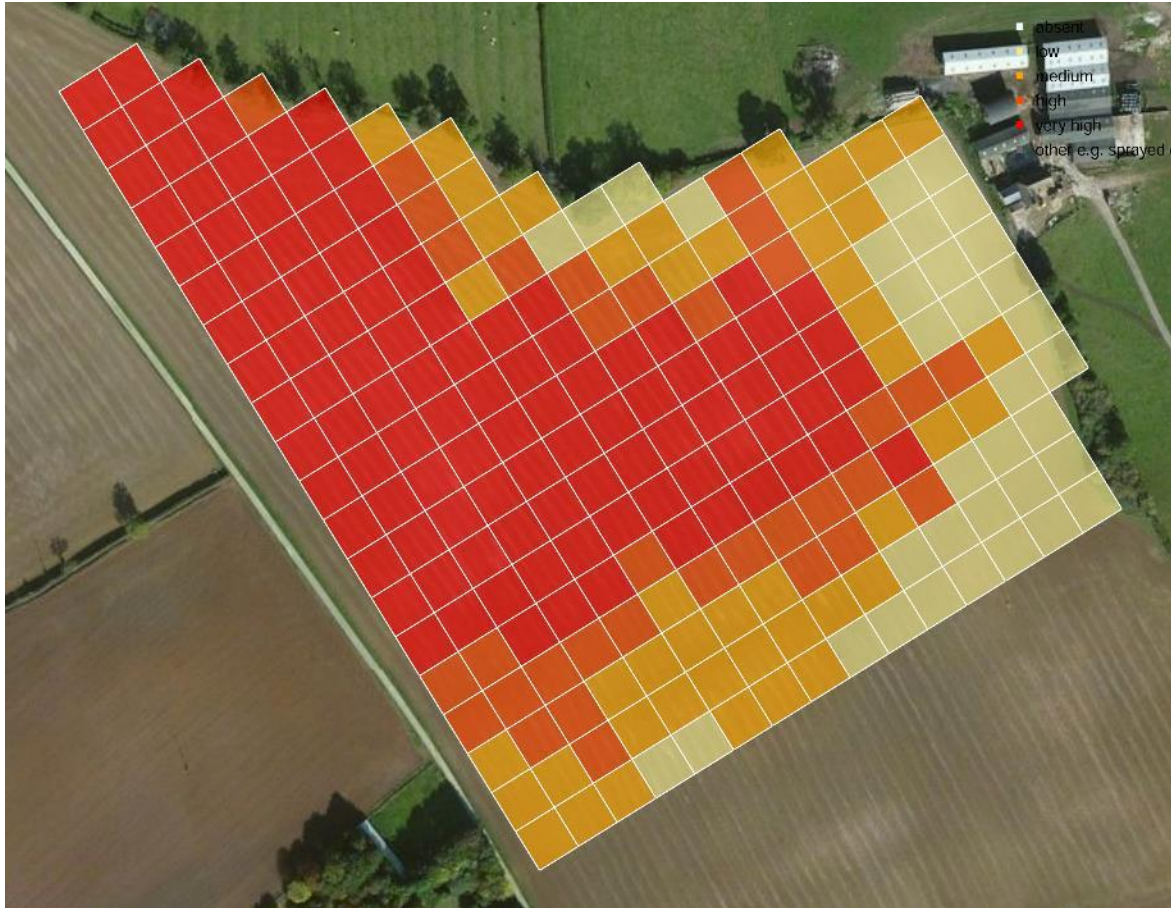buckleys: 2019
Crop: Winter wheat

Absent
Low
Medium
High
Vhigh
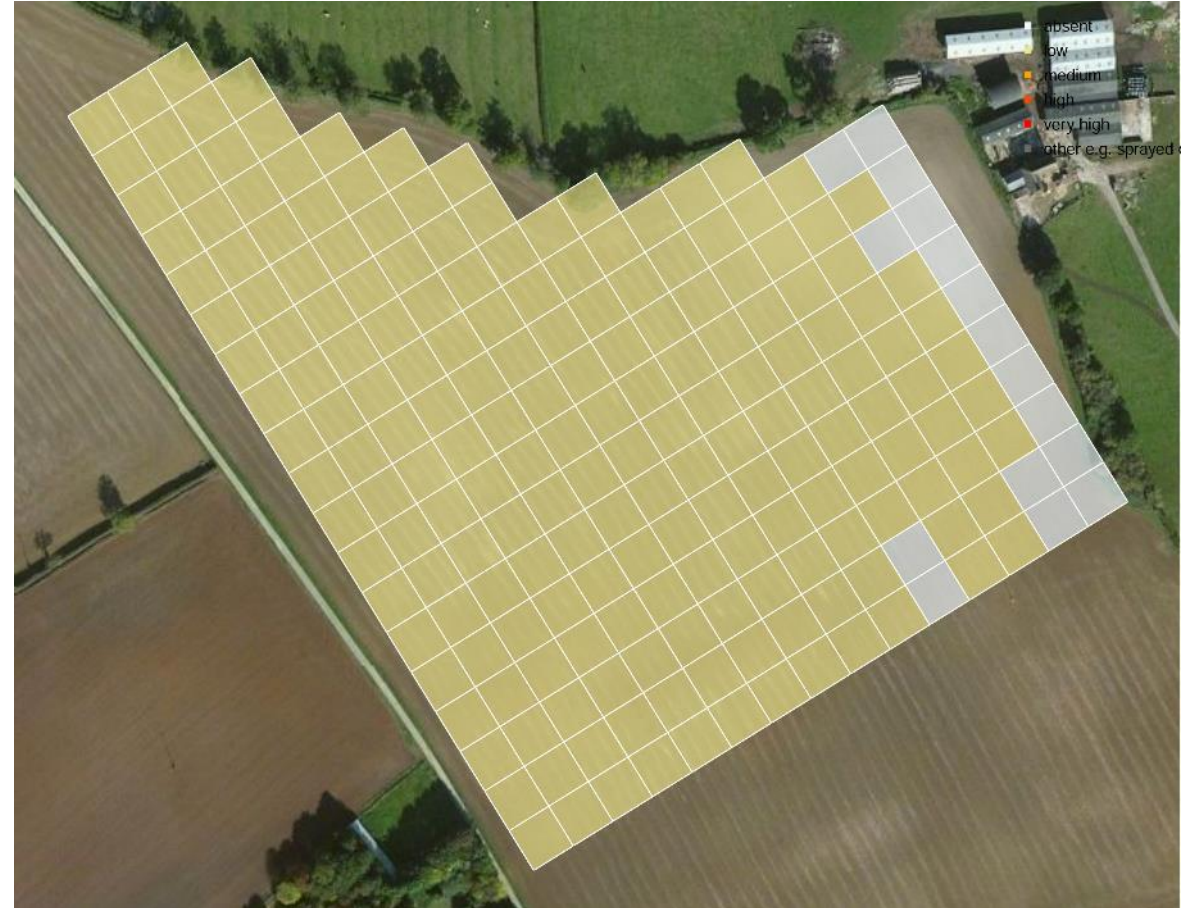Not surveyed

Monitoring black-grass abundance

2014

2018

Monitoring black-grass abundance

2014

2018

Monitoring black-grass abundance

Un-treated: Flufenacet treated:

Monitoring black-grass abundance

moulsoe.cross: 2015
Crop: Winter wheat

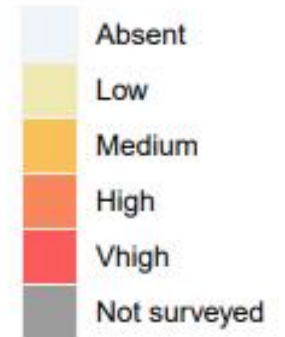moulsoe.cross: 2016
Crop: Winter wheat

moulsoe.cross: 2018
Crop: Winter wheat

moulsoe.cross: 2019
Crop: Winter wheat

Absent
Low
Medium
High
Vhigh
Not surveyed

big.boxhedge: 2014
Crop: Winter wheat

big.boxhedge: 2015
Crop: Spring barley

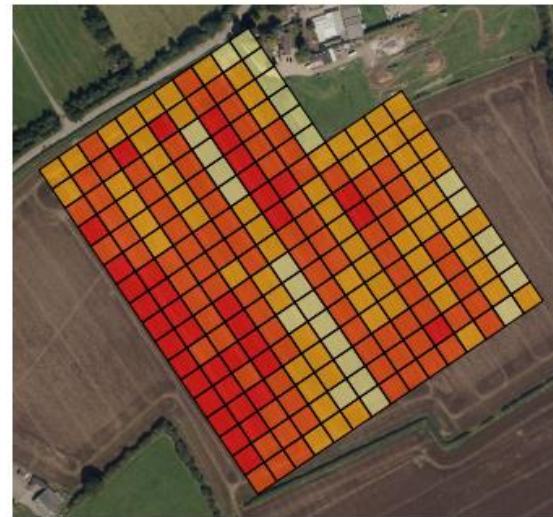big.boxhedge: 2017
Crop: Winter wheat
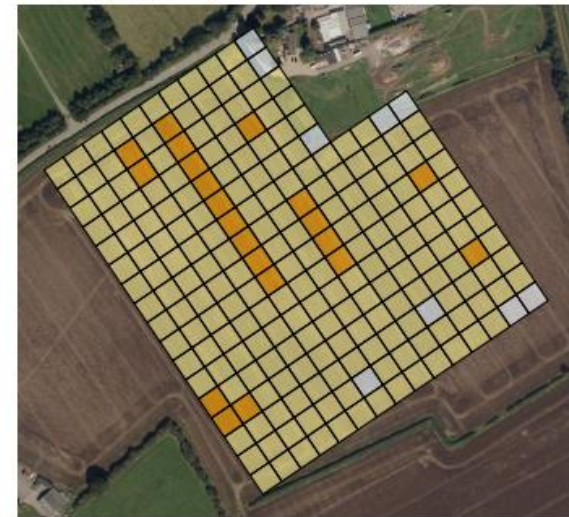
big.boxhedge: 2018
Crop: Winter barley

big.boxhedge: 2020
Crop: Winter wheat

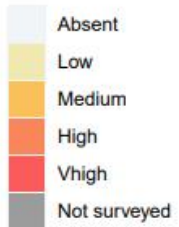mushroom.field: 2014
Crop: Winter wheat

mushroom.field: 2015
Crop: Spring barley

mushroom.field: 2017
Crop: Winter wheat

mushroom.field: 2020
Crop: Spring barley

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Diversity / flexibility is key to sustainable weed control

Rotations / cropping
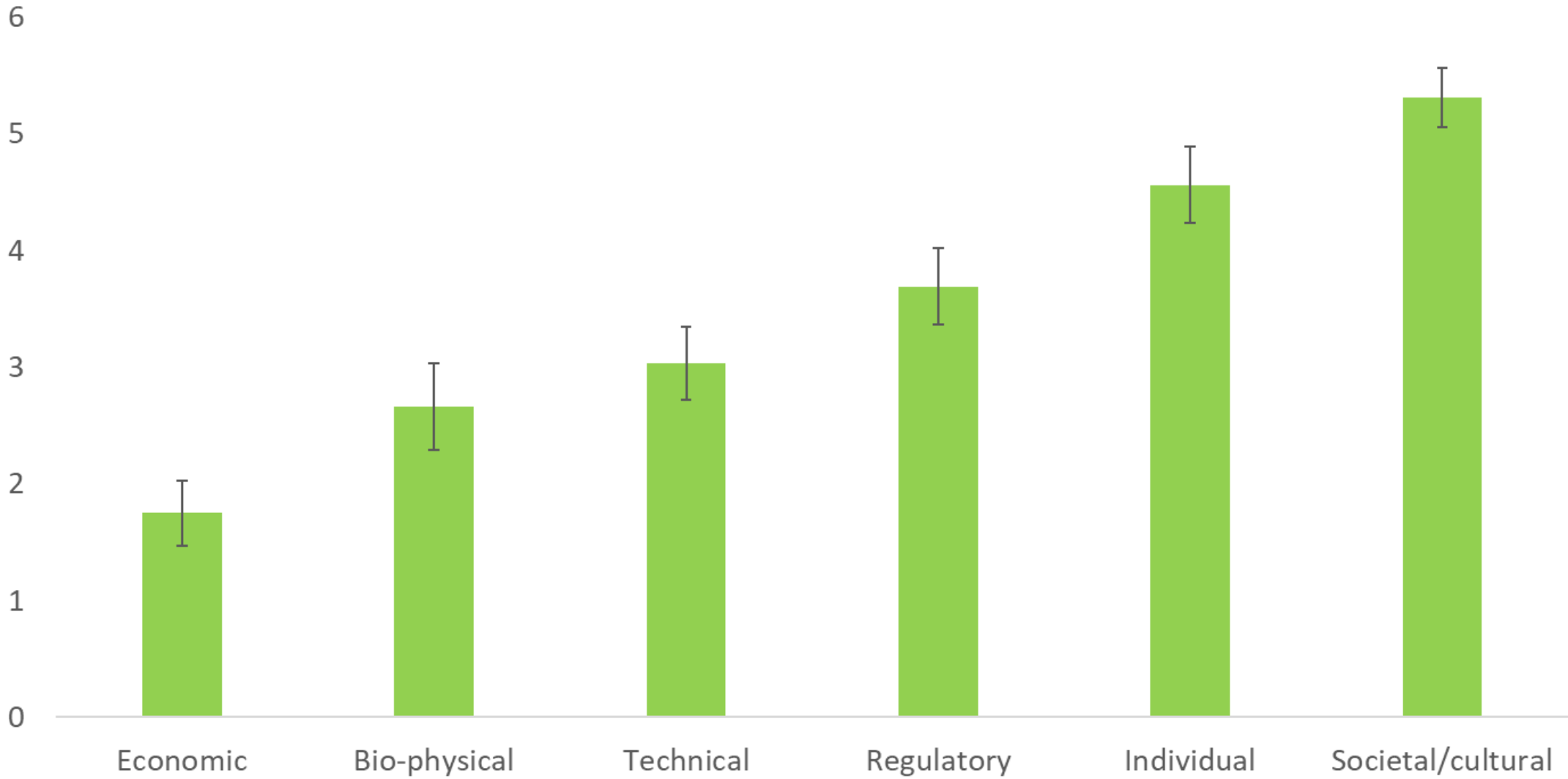
Drilling dates

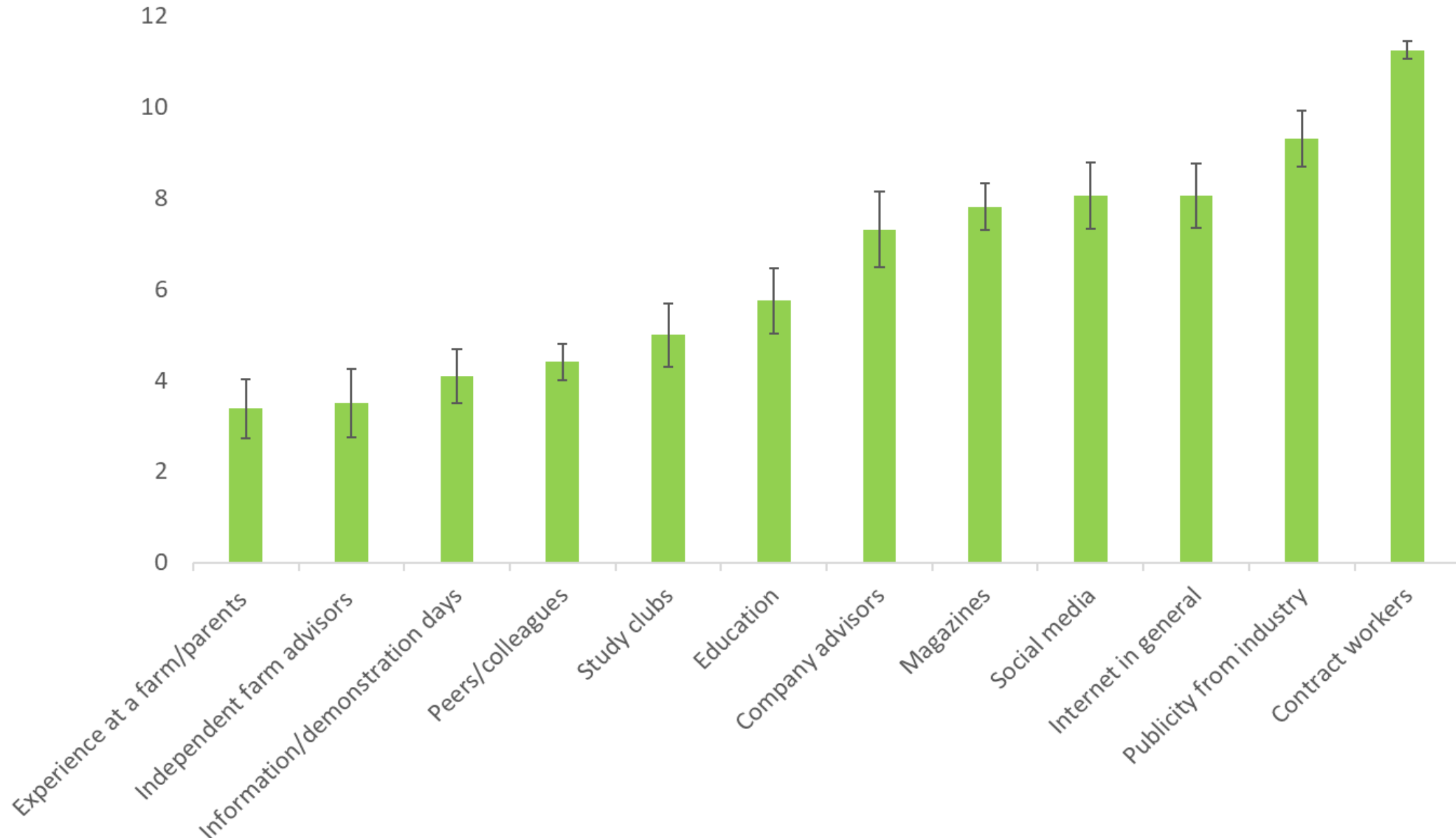### Cultivations

Herbicides

Monitoring

What factors affect farmers decision making

Information sources for farmers

Summary

- Diversity & flexibility key to IWM
- Monitor success of tactics employed
- Will IWM changes affect profitability
- Use sources / places of information that you trust