



## Farm Herefordshire Survey 2023

### 1. Background

Agriculture is identified by source apportionment and substance flow analysis as the single largest source of nutrient loss in the Wye catchment. Agricultural data, especially at a county or catchment level scarce. As a partnership Farm Herefordshire (FH) seeks to increase the understanding of farming businesses of the Phosphate challenge faced by the county and to support them to take steps within their businesses to increase nutrient efficiency and reduce diffuse pollution from agricultural sources.

The last survey of awareness to water quality and farming approaches in Herefordshire was conducted in 2021 by the NFU and CLA. The survey received 45 responses and was limited in its reach as focussed on members of those respective organisations. It was acknowledged by all FH partners that as an industry and a community we lack the required data and evidence to effectively communicate what agriculture has done, is doing and will do to play our part in addressing the challenges the county faces with water quality.

It was agreed that a survey should be produced and shared widely as a joint effort by all of the partners in Farm Herefordshire.

### 2. Aims

- Capture changes to attitudes and practices relating to soil, water and nutrients in the county over the last 5 years.
- Assess the level of awareness of the Phosphate issues faced and what appetite there is within the farming community to address it.
- Generate statistics that help FH partners communicate with stakeholders and interested parties.
- Identify barriers to engagement with schemes, advice and information that need to be overcome in order to achieve further change.
- Provide an opportunity to evaluate the impact and effectiveness of FH as a collaborative partnership.

### 3. Survey Design & Distribution

Questions were drafted by Herefordshire Rural Hub who undertake the co-ordination for the partnership and refined as a collective at a Farm Herefordshire steering group meeting (March 2023). The survey was conducted online using the Qualtrics software platform. Twenty questions were developed to provide insights into farm size, location in the county, range of enterprises and business structure. Responders were asked how their farming practices had changed over the last 5 years, by indicating whether, if applicable, there was a reduction, increase, and no change for thirteen management practices. The survey also considered respondents' level of awareness, understanding and engagement with schemes, preferred sources and forms for advice and learning, and barriers to change. Questions were presented as multiple choice, matrix tables, and text entry to provide qualitative and quantitative data.

The survey ran for a period of just under ten weeks (April-July 2023) and received 251 responses.

All Farm Herefordshire partners were provided with unique distribution links to promote and distribute to their networks, responses by partner are shown in Figure 1 below.

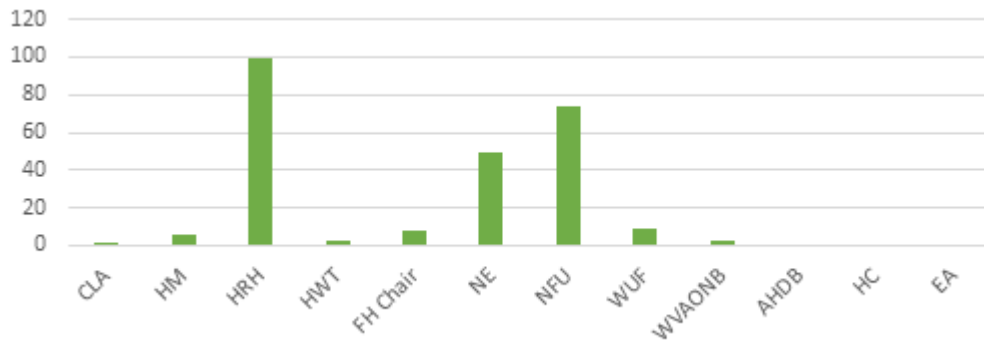


Figure 1 Responses per FH partner

## 4. Survey Results

### 4.1 Are the results representative?

It is acknowledged that generally the individuals that reply to surveys are likely to be the more engaged and therefore the results can be skewed. The survey was promoted through the networks of farming unions, conservation groups, community organisations via direct mail and social media to try to increase its reach to as broad a range of farm businesses as possible.

In the 2022 DEFRA CAP data there are 1,885 farm businesses with HR postcodes identified as receiving direct payments. With 251 respondents, this represents 13% of the county's farm businesses, which is not a significant proportion. However, the survey results captured farms from all postcodes, with the highest concentration of responses from the HR2 postcode area.

The DEFRA 2021 census identifies 179,817 hectares of farmed land in Herefordshire. The area covered by survey responders was 43,082 hectares which is 24% of farmed land.

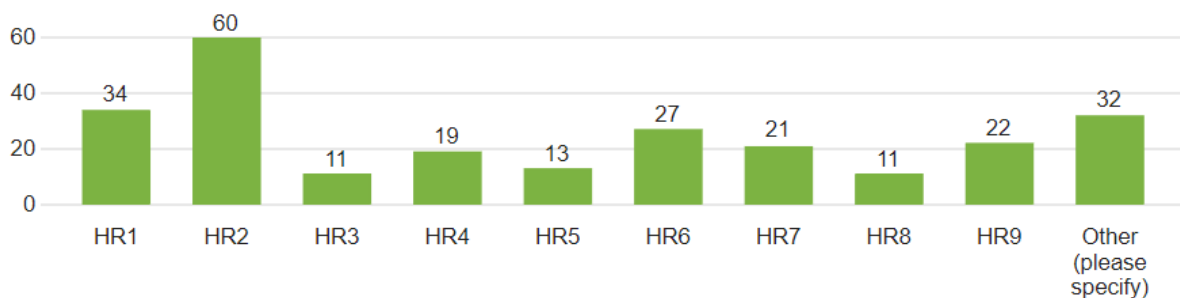


Figure 2 Responses by postcode

Enterprises on farm were captured, see Figure 3, as expected grassland and grazing livestock are still the predominant land uses followed by arable production. To determine how representative of the farming demographic the responses were they were compared to 2021 DEFRA census data, see Figure 4.

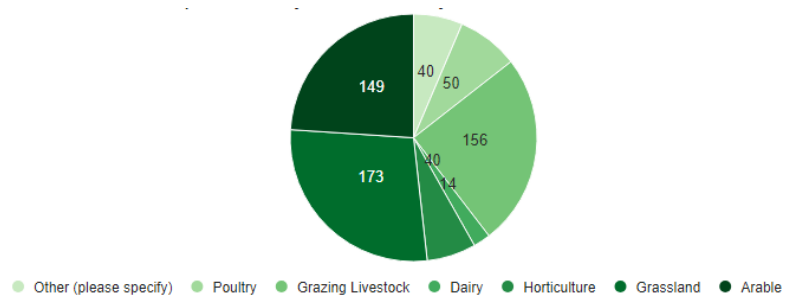


Figure 3 Enterprise Types

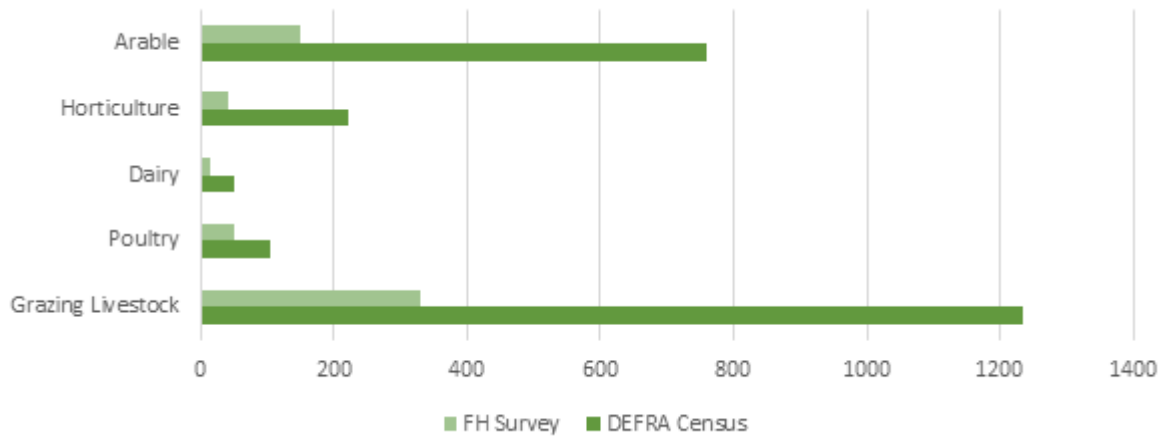


Figure 4. Comparison of enterprises represented in survey with DEFRA 2021 Census data

The comparison between the two data sets suggests that 48% of the poultry enterprises in Herefordshire are represented, 29% of the dairy enterprises, 27% of the grazing livestock enterprises, 20% of the arable and 18% of the enterprises that have horticulture enterprises (soft fruit, top fruit etc).

The majority of holdings responding were either less than 50 hectares in size or between 100-200 hectares in size, see Figure 5.

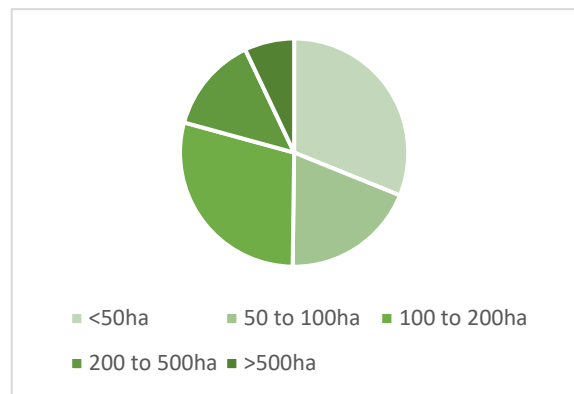


Figure 5 Farm Size Respondees

Whilst the 2021 survey 93% of responses were from owner-occupiers, the 2023 survey had a wider range of business types including those operating under contract farming agreements, see Figure 6 below:

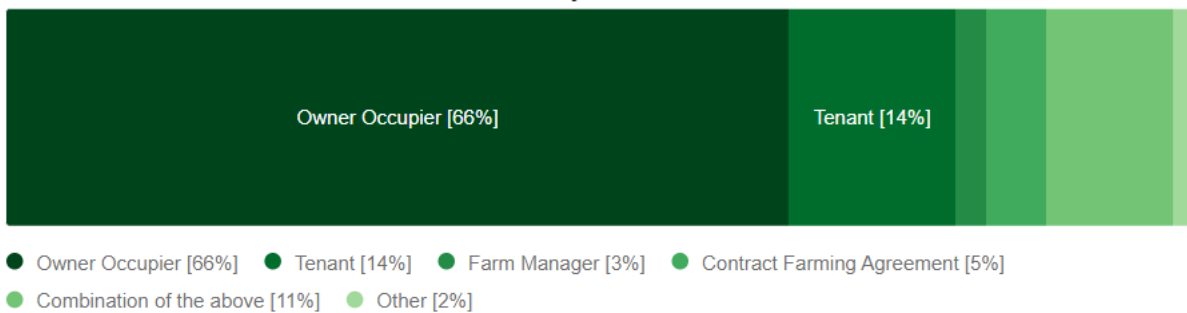


Figure 6 Types of Farm Business Operation

Based on the above we are satisfied that the responses received are well balanced geographically, across sectors, business type and farm size.

## 4.2 Increased awareness and engagement with phosphorus issues

One of the aims for undertaking this survey was to assess the level of awareness of the Phosphate issues faced and what appetite there is within the farming community to address it. To determine this we asked responders to rate their awareness 5 years ago, see Figure 7, and to rate their awareness now, see Figure 8.

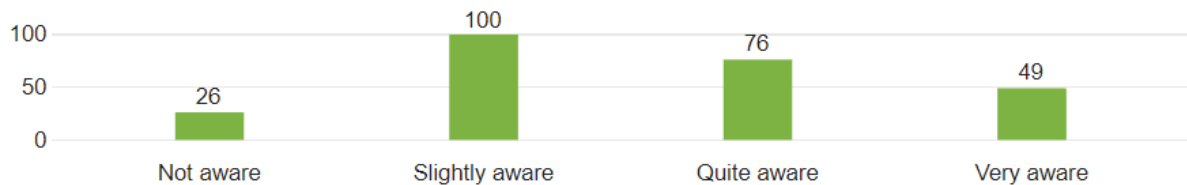


Figure 7 Five years ago, how aware were you of the challenges the county faces with excess Phosphate?



Figure 8 How aware are you of the challenges the county faces with excess Phosphate levels now?

10% of respondees were unaware 5 years ago, 70% considered themselves to be either slightly or quite aware and only 20% of respondees considered themselves to be very aware 5 years ago. In comparison, only 1 responder considered themselves to still be not aware of the P issues in the county. 75% of responses considered themselves to now be very aware of the P issue in the county. 95% of responses considered themselves to be quite and or very aware.

Beyond awareness we sought to clarify how important the issue had become to farmers in the county, see Figure 9. Only 5 responses didn't think it was important for the industry to reduce agricultures contribution to the P issues impacting on the rivers. 71% considered it to be very important, with this figure increasing to 91% when combined with the quite important responses.

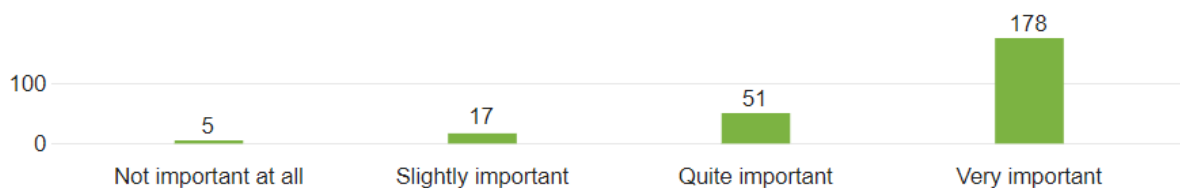


Figure 9 How important is it to you that as an industry we reduce our contribution to the phosphate issues currently impacting on the rivers?

When assessing willingness to make changes, 2% were unwilling to make changes to their business to reduce P levels in the county. 53% were very willing to make changes to their business, with that figure rising to 87% when combined with the quite willing responses.



Figure 10 How willing are you to make changes to your business to help reduce the phosphate levels in the county?

### 4.3 Interest in adopting different management practices

Little data exists that captures changes to management practices on farm. Responders were asked to indicate whether there had been an increase, decrease or no change to thirteen different practices, see Figure 11.

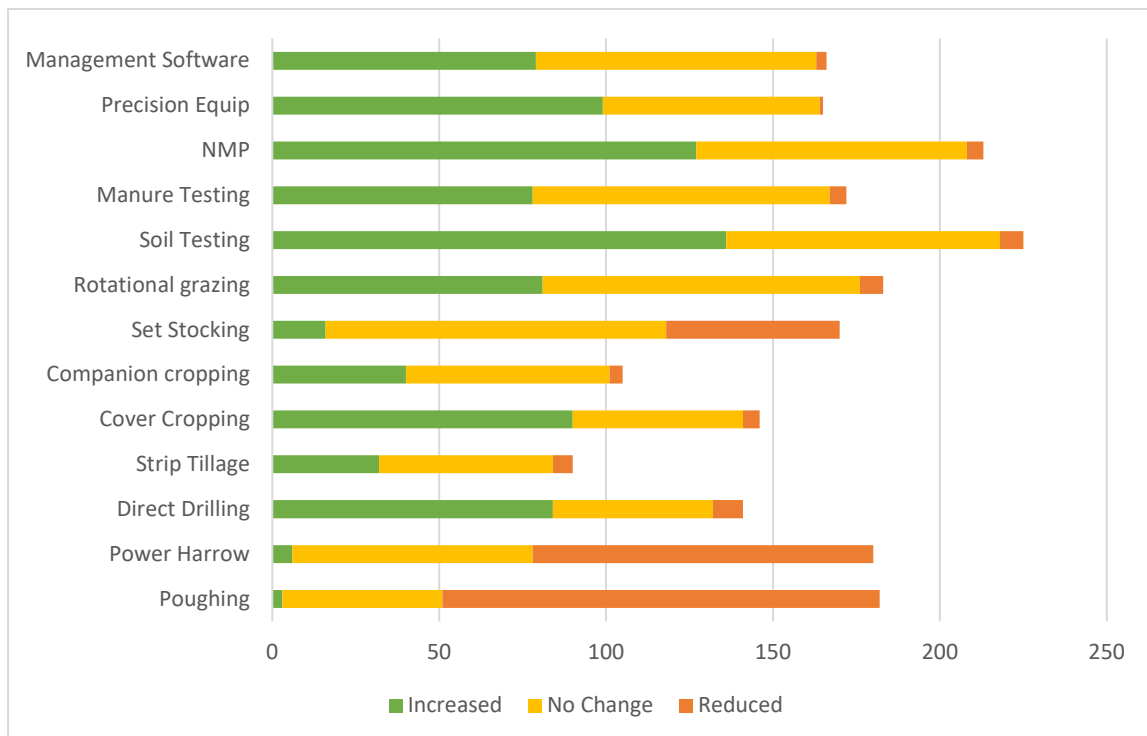


Figure 11 Over the last 5 years, how have your farming practices changed?

The practices that have the most significant increase are nutrient management planning and soil testing. 6% of responders thought soil testing wasn't applicable on their holding, these were all grassland farms. Similarly, 10% of responses thought nutrient management planning was not applicable on their holding, these all had grassland and or grazing livestock as their farm types. When looking more closely at the grassland specific management options, there is also less significant change in grazing practices, there has been some reduction to the number of holdings grazing livestock through set-stocking and adopting a rotational grazing approach, but the majority of holdings had made no change to the manner in which they graze their livestock. The practices that have the most significant reduction are use of plough and power harrow.

We also tried to gauge the level of existing uptake of measures and interest in adopting actions in the future across a further 20 management practices, see Figure 12.

The majority of respondents already:

- Buffering watercourses,

- Taking action to build organic matter levels,
- Avoiding bare soil over winter,
- Reducing applications of P to high index soils,
- Utilising grass leys in their rotation, and
- Fencing watercourses

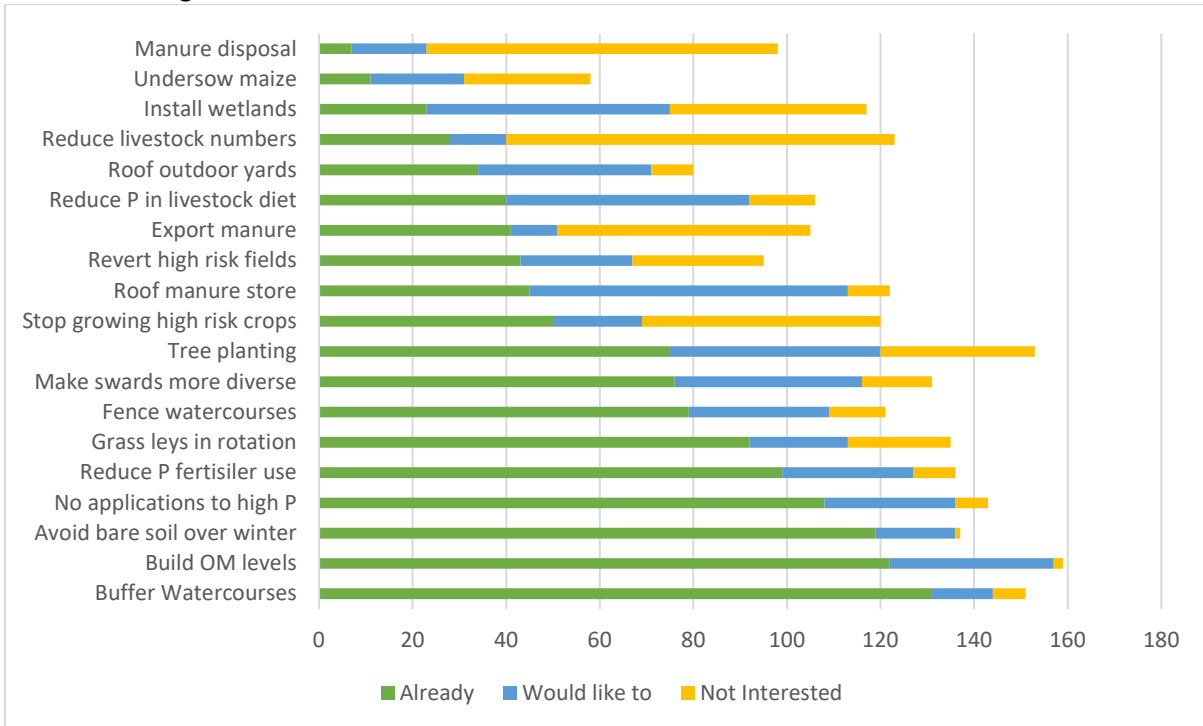


Figure 12 Which of the following actions you already do or are interested in doing on your farm

The actions with the most interest in adopting were: Roofing manure stores (68), reducing P in livestock diets (52), installing wetlands (52) and planting trees (45).

The actions of least interest were reducing livestock numbers (83), manure disposal schemes (75), exporting manure (54) and stopping growing high risk crops (51).

The survey also sought to clarify how many farmers were routinely testing their soils, especially as it is now a legal requirement under Farming Rules for Water, see Figure 13.

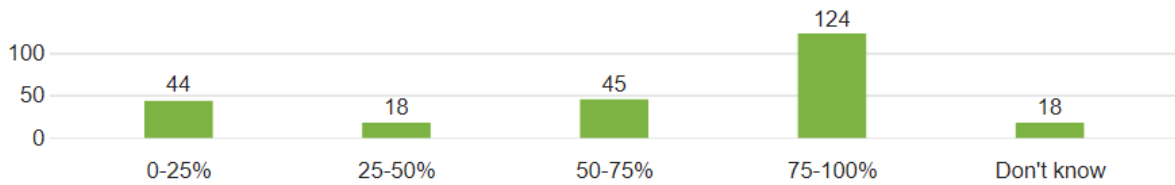


Figure 13 What percentage of your fields have been tested for P in the last 5 years?

Anecdotal evidence from FH engagement with agronomists suggest that P indices have generally risen in the county over the last ten years. In hindsight the question to clarify this was poorly composed and does not provide as useful data as perhaps could have been achieved.

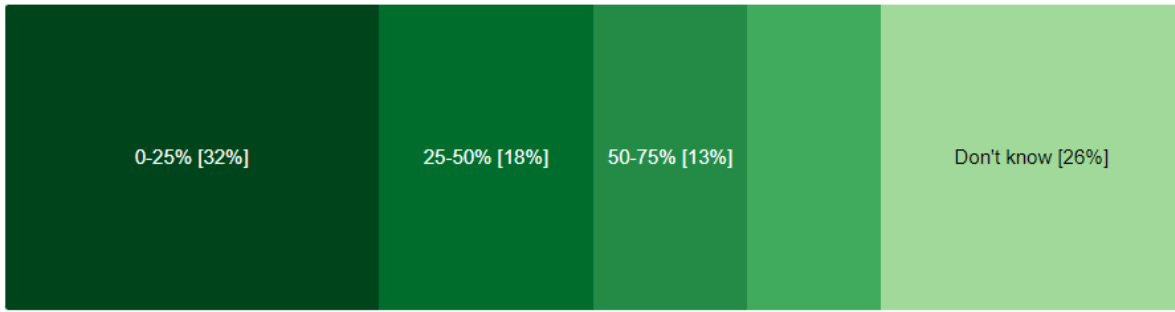


Figure 14 What percentage of your fields have a P index above 2?

Based on the area farmed provided by each respondent, and the mid point for each percentage bracket was assumed (12.5%, 37.5%, 62.5%, 87.5%), of the 43,082 hectares covered by the survey it is indicated that 42% (18100ha) is running above an Index 2.

### 4.3 Farmers access support in different ways

FH includes a number of partners that deliver environmental advice, the survey asked respondents to identify where they most commonly access advice, see Figure 15.

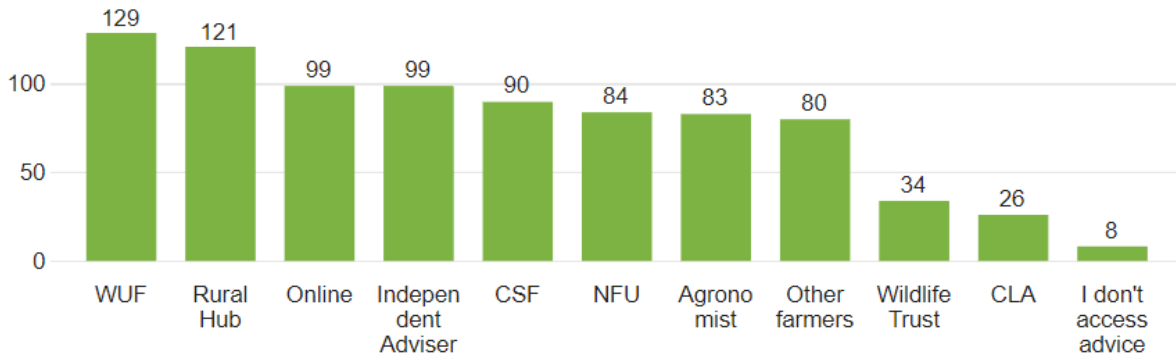


Figure 15 Where do you access environmental advice?

We also sought to clarify which forms of support/information was most likely to influence decisions made on farm. Grants were identified as the most likely, followed by 1:1 advice, see Figure 19.

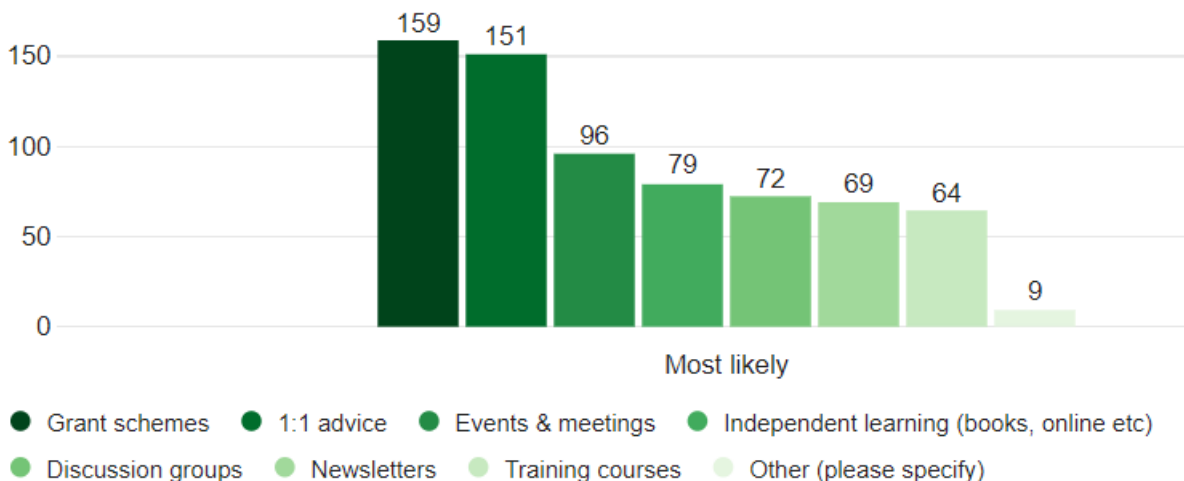


Figure 19 Which methods are you most likely to use to inform decision making on farm?

In relation to uptake of schemes we also asked about uptake of existing environmental schemes, see Figure 20, this indicated that 72% had schemes currently running on all or part of their land holding. Analysis of the available environmental stewardship data in DEFRA's Magic Maps indicates 52,800ha

of land in a form of stewardship scheme (Midtier, ELS, HLS) in Herefordshire. That represents 30% of the 179,817 hectares of farmed land.



Figure 20 Do you currently have agri-environment schemes on land that you farm?

The transition from Basic Payment Scheme and Countryside Stewardship to the new Environment Land Management scheme is still in its early stages. In 2022 a soils standard was the first element of the new Sustainable Farming Incentive (SFI) to be released. At the time of the survey this was still current, although it has subsequently been superseded by a revised SFI 2023 offer. The survey sought to establish how engaged farmers were with the new schemes; we found that only a minority (13%) had already applied and the remainder of responses were either still considering applying, not interested in applying or didn't understand enough about the scheme and its eligibility.

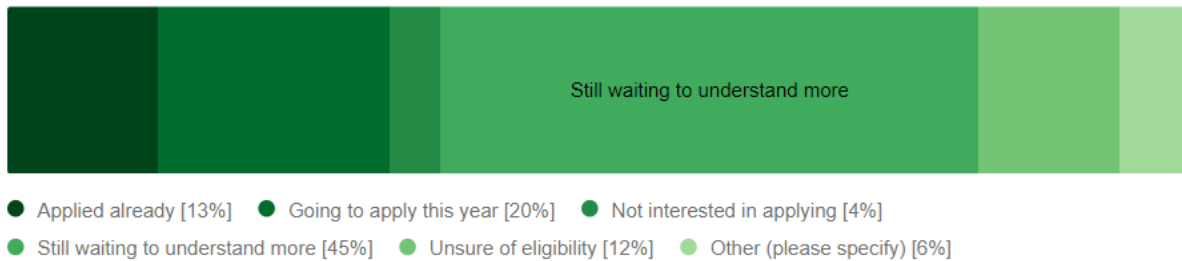


Figure 21 Are you engaged with the Sustainable Farming Incentive in ELMs?

#### 4.4 Finance, planning permission, and tenancy seen as barriers to change

Although we have collated a significant evidence bank of the efforts already been undertaken on farm and the willingness to make further changes to their businesses. It was important to also consider the barriers that may hinder further change. 57% of respondents identified single or multiple barriers to change on their farm. Of these, 68% considered finance, costs and profit as a barrier to change. This reiterates the finding in Figure 19 that grant funding is the key influence on making changes on farm.

23% identified gaining planning permission for investment on farm a barrier; this included numerous comments about it being a long and expensive process. Comments also highlighted that with grants often being linked to planning applications, when delays occur grant deadlines cannot be met, the work then cannot take place but the cost of application has still been incurred. 7% also identified short term tenancies, restrictions with Farm Business Tenancies and lack of support/engagement from landlords as a barrier.

### 5. What have we learnt about Farm Herefordshire as a partnership?

Through a collaborative approach a far higher number of responses were achieved than the 2021 survey. However not all partners were able to distribute the survey as do not maintain customer/stakeholder databases or are limited by company policies. The strength of such a diverse partnership is that the audience we reach is far wider than any single organization can reach on its own, if the restrictions of partners could be overcome for future surveys the response rate should be higher again.



In the survey we also took the opportunity to ask respondents whether they were aware of Farm Herefordshire. 38% said they were either quite or very aware of FH. 31% had slight awareness and 31% were not aware. This indicates that the partnership needs to communicate more clearly and more widely to our audience what we seek to achieve, who is involved and how people can engage.

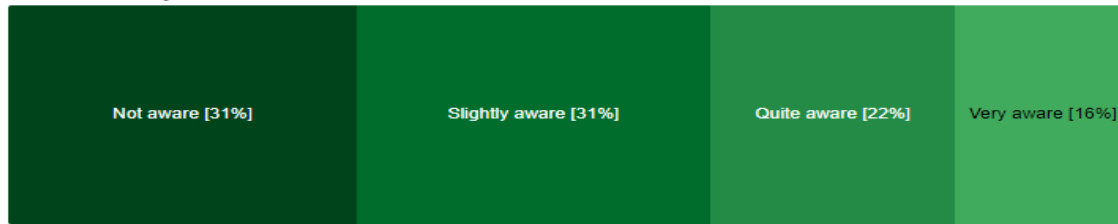


Figure 22 How aware are you of Farm Herefordshire?