



# BARROW FARM

ROB DAVIES



## FARMING ON A FLOODPLAIN

Barrow Farm is situated in Sandhurst, a small village just outside Gloucester. Rob has multiple blocks of floodplain land. On the main farm, around 25% of the land is floodplain land. This is managed in one of two ways depending on its suitability:

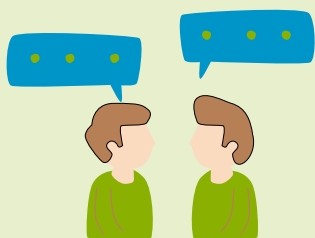
- 1. Extensive grazing and hay cuts:** Most of the floodplain land managed by Rob is diverse grassland, which receives no fertilisers, with hay cuts taken in July followed by aftermath grazing. Another, drier, area of this land is grazed all year around with relatively low stocking rates.
- 2. Intensive grassland:** Some of Rob's floodplain land is used for intensive grassland which is slot seeded with Italian ryegrass before being grazed and cut up to 5 times each year. Artificial fertiliser inputs are minimal, and Rob is careful to time slurry applications with the weather (i.e., spreading when it's suitably dry). Much of this land was already cultivated in this way when Rob took the land over, though one particular field with a high weed burden has now been cultivated for growing maize and spring barley.

## KEY FACTS

- Mixed farm comprising dairy, beef and arable enterprises across just over 400ha
- Main arable crops include grass, maize and winter wheat
- Rob's key message around floodplains is a need to be flexible. For example, particularly wet years may require earlier cuts and early harvesting of maize
- Farming on a floodplain has made Rob able to anticipate flooding using his own intuition, demonstrating the importance of land-based knowledge.

## SOURCES OF ADVICE

Rob engages with several sources of advice and information, relying mostly on friends who are farming in a similar way. He also uses a consultant for advice relating to agri-environment schemes, alongside some advice from his seed supplier (Green Farm Seeds). He also points out the importance of 'gut instinct', often trusting himself to make decisions as he knows his land better than anyone else.



The floodplain land across Barrow Farm represents an integral part of the farm business. Both grassland management approaches (above) work well with the more intensive part of the business as similar treatments are generally appropriate on both the ryegrass fields on and off of the floodplain land, i.e., they are both cut at the same rate at the same time. In addition, the floodplain meadows themselves can be highly productive due to the presence of deep rooting plants which promote healthy, uncompacted soils. For example, the meadows regenerated themselves with no reseeding following the heavy flooding of July 2007 which left all of Rob's floodplain land under water for around 8 weeks.

The arable areas on the floodplain land are managed alongside the wider arable land, with the exception that winter wheat isn't included in the floodplain rotation. Focusing on crops with short growing seasons, such as spring crops, allows Rob to be more flexible with planting and harvesting times.



Cattle grazing at Barrow Farm  
Photo credit: Rob Davies

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## AGRI-ENVIRONMENT SCHEMES

At the time of writing (2023), Rob has entered his final year in Countryside Stewardship.

Measures include:

- Pollarding willows to increase their longevity
- Planting pollen and nectar mixes
- Watercourse management
- Some arable reversion

He is not, however, sure what the future holds in terms of agri-environment schemes, largely due to ongoing uncertainty surrounding the incoming environmental land management scheme.

## KEY CHALLENGES

- **Timings** represent one of the biggest challenges on Barrow Farm, particularly during years with extreme weather. For example, late Spring flooding means that Rob is sometimes unable to plant the crops he had planned for his rotation
- **Flooding** itself represents a challenge, mostly due to the litter that is deposited and the resulting tide lines that remain once the land has dried out. Rob has found all sorts of debris on his fields after floods, including a sofa!
- **Public access** on the floodplain land can pose a problem where gates are left open. However, Rob is keen to encourage responsible walkers as he understands the importance of the popular Severn Way walking route and appreciates it when locals let him know where there are damaged fences or issues with his livestock
- There are also concerns around **wider land use**, with Rob particularly worried about large housing estate being built close to floodplains as these could have an impact on flooding as runoff occurs more rapidly on concrete and other hard surfaces. Rob sees these developments as changing how rivers respond to heavy rainfall.

## SLURRY APPLICATIONS

Slurry applications are timed carefully and generally adjusted depending on the weather. As a result, slurry is not generally applied until after a first cut has been made, largely because the ground is unsuitable for machine passes. In addition, there is often a high risk of flooding earlier in the year and too much vegetation on the ground.

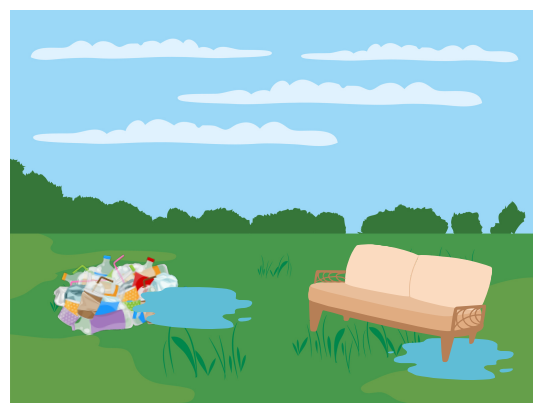


## ENCOURAGING WILDLIFE

Rob has installed barn owl boxes on his farm, many of which have been a success.



Barn owl box at Barrow Farm  
Photo credit: Rob Davies



Litter of all shapes and sizes has been found across the floodplain land at Barrow Farm after flood events



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## HAY MEADOWS

- Rob produces hay on his extensively managed floodplain land. His hay cutting timings have changed in recent years, but generally take place between 1st and 15th July
- Hay cuts need to be flexible due to concerns about missing cuts during good weather. Rob also argued that hay cuts shouldn't happen simultaneously with wheat cuts as this becomes logistically difficult - for example, some of his arable reversion grassland can't be cut until after 15th July according to his Countryside Stewardship agreement, resulting in a heavy workload around this time. His other hay fields are under no restrictions as they aren't in any AES, making it easier for Rob to decide when to take cuts
- There is very little grazing pressure on the meadows as Rob's dairy cattle are permanently housed, with only the beef cattle grazing the floodplain land (after hay cuts). This approach further increases how flexible Rob can be with managing the floodplain land
- Nutritional testing revealed that the hay he produces is good quality and energy-rich. He uses the hay in several ways: some is kept in-house and used to feed cattle, whilst some is sold to local liverys and other farming enterprises as far as Wales.
- He has, however, found that the high levels of wildflowers present in his hay have been questioned by buyers despite this diversity adding to the nutritional quality of the hay.

## FUTURE PLANS

- As explained above, Rob hasn't yet decided on future plans relating to agri-environment schemes, but is planning on looking at opportunities to move towards increasingly regenerative practices
- As he gets older, Rob may also downsize parts of the business, put more floodplain aside for wildlife enhancement, introduce wild camping, and generally move away from the intensive side of farming.



## INTERESTED IN LEARNING MORE?

Watch the full case study video on YouTube:  
<https://www.youtube.com/watch?v=k3WmH6mSbdU>

