



WATERHAY FARM, WILTSHIRE

ANDY & RICHARD RUMMING



Waterhay Farm, situated between Cricklade and Cirencester, is a 75ha diversified family-run beef farm which prioritises pasture-based grazing, biodiversity, and selling direct to customers through their meat box scheme.

KEY FACTS

- 75ha family beef farm with 90 hybrids and cross-bred cattle, including combinations of Herefords and Belgian Blue cross Friesians
- Pasture for Life members
- Diversified enterprise: holds farm walks, has a glamping enterprise and in-house butchery allowing them to brand their meat, thus maximising engagement with consumers and the wider public
- Weed burden(s): Docks, although they are seen as useful for playing a role in breaking up compaction
- Waterhay is not certified organic, however, they don't apply any chemical fertilisers. The only chemicals used are for targeted spot spraying where necessary

ECONOMICS

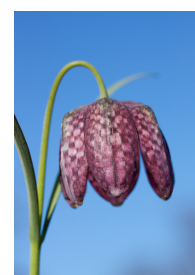
- The floodplain at Waterhay is fully integrated within the wider farm. For example, the hay meadows are important to the meat enterprise both for providing feed and because the biodiversity value offered by meadows provide a marketing opportunity with environmentally aware customers
- Suckler cows are the hardest to make economically viable, particularly during winter. They have recently considered experimenting with mob grazing on cover crops and using hay bale pots
- Waterhay has an in-house butchery which sells direct to customers. This is essential to the farming system as there is a clear economic benefit here. Andy is also able to receive up-front payments and service other local butchers, selling carcasses to their specifications.

FARMING ON A FLOODPLAIN

- Around a third of Waterhay Farm is classed as floodplain land, with some areas more prone to regular flooding than others. The unpredictable nature of the flooding here makes it difficult to estimate forage outputs precisely
- 100% grass-fed livestock production is key to the management here, alongside efforts to boost biodiversity
- The Rummings recognise that all floodplain areas behave differently: the river morphology itself can affect likelihood and duration of flooding.

JOURNEY TOWARDS NATURE-FRIENDLY FARMING

- Waterhay has historically been in Countryside Stewardship, with some hay meadow land in HLS for the last 10 years. This agreement was recently extended for a further 5 years, allowing Richard and Andy to focus on biodiversity
- The HLS measures used on the hay meadow are not financially beneficial (~£700/year) but the biodiversity benefits were sufficient to encourage uptake



Snakeshead fritillary

LIVESTOCK MANAGEMENT

- Waterhay is registered with Pasture for Life, whereby they don't feed their cattle with any grain
- The farm has a spring herd which calves in March/April alongside a summer herd which calves in June/August. Both of these herds consist of around 45 cows.
- Mob grazing is used across permanent pastures, with electric fencing used to manage the livestock
- Calves are kept with their mothers for 9-10 months before being weaned and moved onto another nearby family farm. They are then ready for beef between 20-26 months of age
- Cattle kept at Waterhay are housed indoors over winter between December-March and fed on hay and silage produced both by themselves and other local floodplain meadow farmers
- The on-farm butchery allows 50% of their meat to be sold directly to customers or to butchers as carcasses



Photo credit (far left): Andy Rummings

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SOIL TYPES

- Soil organic matter and other nutrient levels, including N and carbon, are dramatically higher on the floodplain land at Waterhay than on other (non-floodplain) fields. This is because floods deposit nutrient-rich sediment
- The high levels of carbon on the floodplain land demonstrate its ability to store carbon
- The soils across this unimproved pasture have relatively high nutrient levels based on the management type. These nutrients also contribute to the high levels of sward resilience seen post-flooding
- Andy plans to carry out soil testing across the entire farm to enable him to gather full baseline data surrounding their carbon footprints and sequestration potential.

Baseline soil data – Longfield floodplain meadow		
Measurement	0-10cm	10-20cm
Clay (%)	40	37
Silt (%)	8	21
Sand (%)	53	53
Nitrogen (%)	1.169	0.847
Total carbon (%)	11.76	8.94
Soil organic matter (%)	23.5	17.85
C/N	10.06	10.51
pH	5.73	5.74
Dry bulk density	0.599	
Available water capacity (mm)	291	

Data collected by Rothamsted Research (2020)

BIODIVERSITY

- Over 108 species of bird have been recorded at Waterhay, including curlew (flocks of up to 200), egret, marsh harrier, lesser redpoll, and European crane
- Rare plant species include snakeshead fritillary and great burnet
- This biodiversity helps them to advertise their meat business with environmentally minded customers

HAY MEADOWS

- Andy and Richard are passionate about boosting biodiversity and the hay meadows are a great source of rare insects and butterflies
- Hay cuts are made once a year, usually in June, with resulting high-quality hay fed exclusively to their own dry cattle (i.e., period of time where cows have a ~60 day break from lactations to maintain their health and fertility whilst avoiding infection)
- Whilst cutting hay in June works well for producing highly palatable hay with good nutrient levels, Andy recognises that cutting in September would be better for promoting insects. They maintain long grass in other areas of the farm to overcome this trade-off
- In terms of botany, the meadows are dominated by perennials including meadow foxtail
- The hay meadows have been in high-level stewardship for 10 years and whilst it hasn't been greatly beneficial financially, they have found this useful for setting up a management system and focusing on biodiversity
- Having infrastructure to store hay both from the on-farm hay meadows and North Meadow (see p3) has been critical for keeping it dry
- Andy uses a data-driven approach to maximise the benefits of his hay, through undertaking forage analysis and measuring growth rates to decide which groups of cows are fed with hay
- The unpredictable nature of flooding makes it difficult to precisely estimate forage outputs. This is mitigated through producing additional hay off-farm (at North Meadow) and grazing cattle on fields owned by local horse owners when they have excess grass, thus allowing Andy to stockpile his hay.



Top: Pink footed goose;
 Middle: Green winged orchid;
 Bottom: Lesser redpoll
 Photo credit: Andy Rumming

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NORTH MEADOW: A TRADITIONAL 'LAMMAS' MEADOW, CRICKLADE

Alongside their farming enterprise, Andy and Richard are also one of four farms to produce hay from a large traditional hay meadow near Cricklade, Wiltshire. The site is a national nature reserve of special scientific interest (SSSI) so all activities are carried out sensitively and to enhance biodiversity. Andy and Richard work closely with Natural England to carry out hay cuts, with the resulting hay fed to their in-house pasture-fed livestock.

The meadow boasts 80% of all snakehead fritillaries in the country!



Photo credit: Floodplain Meadows Partnership

FUTURE PLANS

- Continuing under HLS having renewed for a further 5 years in 2023. Andy and Richard will then make further decisions depending on what the support landscape looks like in 2028 when their current agreement ends
- Exploring whether they can make overwintering work on the farm by utilising cover crops and bale pods containing hay produced by the farm. These pods are laid out in a particular way so that they can be used to feed livestock outdoors over Winter. This move is, in part, motivated by a concerns surrounding the financial viability of their current approach once the basic payment scheme ends
- Further wildlife monitoring for building a stronger understanding of wildlife abundance alongside species diversity
- Exploring ways of utilising entire carcasses, including hides and tallow. Andy is already exploring this through networking with various people working across local supply chains



Meadow foxtail
Photo credit: Andy Rumming



KEEN TO LEARN MORE?

Visit the farm's website, including Andy's blog:
<https://www.andyrummingsbeef.co.uk>

Or watch the full case study video on YouTube:
<https://www.youtube.com/watch?v=a6PvxolsGgY>

