

## **Video Transcript: Farmers Andy and Richard Rummings describe their flourishing floodplains and how they manage them.**

[Speaker: Andy Rummings.]

So, this is Waterhay Farm. It is about 75 hectares. It is between Cricklade and Cirencester in Wiltshire. We're all permanent pasture. And we have 90 suckler cows. Basically, we wean all the calves at about 10 months and they go to my brother and father's down the road. So, our main focus is on managing those mothers, grazing them for as long as we possibly can on our permanent pasture. And then they're currently housed indoors overwinter between December March. Half of them are fed hay, all the dry ones, and they calve in about March. And we've got the other herd which calve outdoors in July, and we make silage for those, so a mixture of hay and silage. And then we also buy in a significant amount of standing hay from other floodplain meadows in the locality. We produce our own replacement cattle. But we also have an on-farm butchery. So, 50% of our animals are now going direct to customer through a meat box scheme, or direct to butchers as carcasses.

[Speaker: Richard Rummings.]

My parents bought Waterhay Farm in 1950, we always had a small herd of cows, so they were turned out every day, right throughout the winter, so they were often out here if it wasn't in flood. In those days, it was very unusual if they had to keep off the floodplain for two weeks. Keeping them off three weeks through flooding was almost unheard of. These days, you wouldn't dare keep cattle out here in the winter, it's just the surrounding has changed, a lot more flood water coming off of the surrounding housing. So flooding is much more prevalent. It's no great problem to us in the winter. But it is a real pain, if it floods in the summer. There's a lot more reeds in the river, which slows the flow. And it takes a long time to go. We're not organic, but we are Pasture for Life. And I think our beef customers are more interested in the fact that we're Pasture for Life. We don't feed any grain whatsoever for the full life of the animal. Nobody really asks, "Are we organic?" And if they do, we can soon have the conversation and say, "well, why should we be organic? We don't buy any chemical fertiliser. The only spraying we do is spot spraying."

[Caption on screen: What are the soils like?]

[Speaker: Andy Rummings.]

We've got gravel, and then we've got between very little and up to 65 centimeters of more of a clay soil on the top. We've had some soil sampling done by Rothamsted and they did some multi-level or multi-depth soil sampling. And this showed that in the top 10 centimetres, there was 23% soil organic matter. And at the next level down, so the 10 to 25 centimetres, 17% soil organic matter. And so that is roughly double the non-flooding land, and a little bit more on our farm. And that was in our hay meadow, that was in the species rich hay meadow. It just shows quite what a phenomenal amount of carbon can be stored. That's partly why the sward is resilient and the land is resilient, and can take being underwater for several months and then come back. But I would like to have some soil sampling done across the whole farm to have a proper baseline so that I can use things like Farm Carbon Toolkit, and really get into that in some detail.

[Caption on screen: How do you manage your floodplains?]

[Speaker: Andy Rummings.]

Roughly about third of our land, you would class as floodplains so it floods regularly. We've had a run of really good years where we've made some excellent hay here and at North Meadow down the road, and that has now become a real mainstay of our overwinter forage supply. They are also quite useful for grazing. So, the one we're stood in here, we would graze between two and four times a year depending on the season. And it can be a really useful area but it can burn up in the summer and produce very little and also go underwater and be inaccessible. But we are fairly highly stocked. So, it is a very useful part of the grazing system.

[Speaker: Richard Rummings.]

We did used to make this into hay, I've bailed lots of hay out here over the years, but we haven't cut it for hay for the last 25 years, probably just because it's so risky. You get a nice crop of grass and then suddenly you get a flood in June or July, and you've lost the crop. So, we've gone on to grazing it. What has made that so much easier over the last four or five years is that we now mob graze, we can use electric fences to first grazing round in perhaps May, we can just graze the driest parts, we might only graze a third of it. And the second time around, we can perhaps graze two thirds of it. And perhaps the third time around, you might be able to graze it all. But we may be able to graze it all in May. But it's very unpredictable. So, you've got to be flexible. I think flexibility is the key with managing any floodplain. I don't think we get as much nutrients down from upstream as we used to. And I hope that that is because farmers upstream are not letting so much silt into the river, the hay meadow that we have works very, very well. Only some of that floods, a third of that probably floods, maybe half. On this field, I think we would miss the grazing, we would have to have a good payment to persuade us, I think, to turn this into another hay meadow, because we wouldn't have then have that spring grazing.

[Caption on screen: Tell us about the hay meadows.]

[Speaker: Andy Rummings.]

So, on the hay meadow side, I'm really interested in biodiversity, and you couldn't get a better kind of spot on the farm in order to find a really wide range of plants, insects and birds. So, if you want to go and find interesting species of dragonflies, butterflies, it's a great environment. And it still produces normally a really useful amount of hay and aftermath grazing. So, it is a really good blend of environment and productivity. We feed our hay to our dry cattle. And in terms of energy and protein requirements, it fits the bill, it's really good. We've done a little bit of metabolic testing as well to look at, I guess, the science. And it is it's great. It also is highly palatable. So, they really enjoy eating it. And the intake is really good. The field that's managed as a hay meadow and North Meadow is cut once a year. If we can cut it in June - that's great. That's for two things. One, the quality of the hay is great, that kind of relationship between volume and quality is probably at its optimum. And secondly, because of the amount of flooding and amount of nutrients deposited, we're actually getting a lot of nutrients off that field, which means that it doesn't turn into a grass dominated poor botanical species mix. And that's really key. And so that whole way that biodiversity is sustained is by removing large amounts of nutrients. So, it's getting cut once, kind of as early as possible. However, that is not great for insects. So, if you were focused on insects, you would leave it probably till September. So, there's always a bit of a tradeoff. However, there are other areas of long grass around the farm. We try and leave a little bit of a margin. But actually, at our hay meadow here and North meadow, the botany is the number one priority. And we get a little bit help from Natural England and Floodplains Meadow Partnership in those timings.

[Speaker: Richard Rummings.]

For cutting periods, I think Natural England are a bit more relaxed. They used to say no cutting before 15th of July, but they are much more relaxed now on areas that are mostly interested in the biodiversity to cut in end of June, if you'd like and there will be those years that naturally prevent us from cutting then and we won't be able to cut till the second half of July. So, you get a good balance.

[Speaker: Andy Rummings.]

One year, we had a dump of silt that set, it looked like Mars, like red silt. And it almost set like concrete. And we had one fritillary flower through it. But unbelievably, once you got to May, it all got going, we had a bumper hay yield really diverse plants. So, I would say it's an incredibly robust resilience mix of species and they hold the soil in place.

[Caption on screen: Do you have any Agri-Environment Schemes?]

[Speaker: Andy Rummings.]

In terms of Agri-environment Schemes, the three hectares of floodplain hay meadow is in HLS, and has been for 10 years. I think it was useful in kind of setting up our management system, and probably not being able to graze it and focus on biodiversity. And we get paid around 700 pounds a year for that. It's really great from biodiversity point of view. It also got us experienced in dealing with a species rich floodplain meadow, which then meant when we moved on to North Meadow making hay about four years ago, I think we knew what we were likely to get and what was going on. So, I think that's been the main benefit from HLS. The financial side is nice, but a very small drop in the ocean really. We had a 10-year agreement. So, the grazing land is an entry level sort of low input. It's a very small payment, but I guess adds up. We've just signed up to a five-year extension, which we were offered. So, we've got full flexibility to change into other schemes.

[Caption on screen: Are there benefits of having the floodplain?]

[Speaker: Andy Rummings.]

In terms of the wider benefits of the floodplain, we've got a small glamping enterprise. And it's a draw for some of the visitors, especially who are here in kind of May and June and April. I would also say that when we do farm walks and the branding of the meat business that includes Snakeshead Fritillaries and Great Burnet. And so, yeah, the floodplain area of the farm is tied really, intrinsically, to the meat business. And essentially, we are selling meat off the back of the floodplain biodiversity. At the moment, no matter what you might hear, there is a demand for it, we have a really good group of customers. We have to work hard to keep them. But people want to eat meat from an agro-ecological system.

[Caption on screen: Tell us about the challenges and your plans for adaptation.]

[Speaker: Andy Rummings.]

The floodplain meadow is fairly resilient. However, there are some quite major challenges. We've got building developments, not too far away. We've got an application in at the moment from our neighbours for gravel extraction, that will be right up to the edge of the river on the opposite bank. So, there are things like that coming along that could have a direct physical challenge on the water levels and the hydrology. Probably the biggest challenge, I think, is actually economics of keeping the suckler cows, and that is difficult. And there's a big trend nowadays, towards people looking at keeping cows

out in the winter, which saves a lot of money. And so how you integrate that into farms that have floodplain meadows, takes quite a bit of thinking about. So, I'm very interested in whether there's deals we can do with people perhaps on the edge of the Cotswolds where our cows spend some time, not here in the winter. Perhaps utilising cover crops and perhaps utilising floodplain meadow hay in things called bale pods. And that would be a really very major change for us to go into that. But it's something we have to look at seriously. Because if we take a hardnosed approach, our overwintering system is economically not viable, once BPS has gone.