

Lackham Farm Guide

30 April 2021

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1. Home Farm

Dairy

The facilities at the Home Farm include an Alpha Laval 16:16 Herringbone direct to line parlour with fabdec cluster flush and loose housing, for a maximum of 80 cows. The parlour was upgraded in 2021 with the latest clusters and auto identification.

In 2020 the new 120 cow robotic unit started up with two Delaval V300 robots, housing for 120 cows in cubicles, feed passages with headlocks for ease of management. Two silage pushers and a robotic scraper for the passageways.

The herds are managed by the Livestock manager with assistance relief milking and feeding. Feeding during the winter period is with a complete diet feeder, using grass and maize silage combined with straights (soya, rapeseed meal, crimped maize, minerals and fats). During the summer the emphasis is on producing milk from grass.

The breeding policy is aimed at longevity, so type is important. The cows are bred with Holstein/Friesian bulls during blocked periods of the year to enable the robotic herd to go to all year-round calving whilst the parlour milked cows will stay mostly autumn calving. When we have enough replacements then the cows are served with triple impact semen or other beef including Beef Shorthorns and Limousin, beef calves to rear in our beef unit, some calves are sold at 3 weeks of age to reduce workloads during Lambing periods. Cogents "Pinpoint" service provides the semen and Cogent technicians serve the cows.

The health of the herd is very important, so the vets visit on a weekly basis to monitor health issues like mastitis, fertility and lameness.

We currently have 200 Friesian Holstein cows producing 10,500 litres per cow per year, with milk quality at 4% BF and 3.2% protein, Cell Counts averaging 150 and Bactoscans averaging 10. The herd uses home bred replacements to maintain cow numbers. The milk is sold to Cadbury's through our membership of the Selkley Vale group of 80 farmers.

Dairy Replacements

75 herd replacements are homebred using sexed semen from Cogent bred bulls. The breeding aim is to improve longevity by breeding for type, legs and udder. The herd introduces replacement heifers at the rate of between 15% and 25% each year.

Calves are fed for four days with dam's colostrum, then reared on milk replacer for a further four weeks before being fed once per day on milk replacer. They are weaned when at 75kgs bodyweight or seven to eight weeks and eating at least 1kg of concentrates. The farm sets annual targets for growth rates with the aim of calving them at 2 years of age.

2. Beef Production

A range of both intensive and semi-intensive systems are used to provide a wide range of farming practice for beef production, for example:

16-18-month intensive system using Limousin X 1/2 breds from dairy

18-20-month semi-intensive grass using 1/2 bred Beef shorthorn crosses

Forage/concentrate system

The farm produces beef from two principal breeds, the Limousin, (a continental breed) Beef Shorthorns (traditional breed). These breeds have different characteristics in many aspects from docility to growth rates and carcase confirmation. The pedigree herds provide a facility for the students to look beyond just producing beef.

Students experience:

- Following a system of production
- Selecting breeding animals
- Carcase selection and grading
- Growth rates and K.O %
- Meat processing
- Selling of the product
- Marketing live animals
- Marketing meat

The beef finishing unit takes around 50 calves from the dairy unit, the remainder are sold through Meadow Quality calves; this enables us to supply local outlets at regular times throughout the year. During the rearing and finishing stages the animals are fed a range of diets; protein content starts at 18% and reduces to 14%, allowing the bones and structure to develop at an early stage. As the animal matures the energy in the diet increases and lays down the muscle and fat ready for sale. The target is to finish the animals according to their ability to mature depending on breed, but always as quickly and efficiently as possible. The liveweight range will be 520kgs to 650kgs; killing out % varies on the breed, so the deadweight target is 280kgs to 420kgs.

Pedigree Limousins

This project was started in 1999 in conjunction with the British Limousin Cattle Society. The aim of the project is to breed heifers and monitor traits of the breed. This enterprise also produces pedigree offspring for replacements and sale.

The use of AI has had a significant role to play in developing the herd over the last few years. A selection of bulls with good qualities improves herd profitability, and serve cows not taken to AI. Recent bulls used have been Wilodge Fastrac, Regal, Wilodge Cerberus, Oxygene, Gerrygullinane Glen, Mereside Lorenzo, Tomschoice Jet, Powerful Louis and Foxhillfarm Jumpingjackflash who was purchased for £5,000gns, he has now left the herd and been replaced by a Home bred bull to sweep the cows Lackham Percy by Fenomen out of Lackham Mayflower.

Each breed has a different temperament and requires different handling. Students are encouraged to gain experience working with the herd to develop their skills within the various breeds. Showing at local shows is a target that students are encouraged to aim for: we have recently shown at the

Bath and West Show and gained several rosettes for the herd. The herd won the best medium sized herd in the South West competition.

The herd is managed along commercial lines as groups, but some individuals will be selected for additional handling and showing at shows such as the Bath and West and Berkshire Agricultural Shows.

Pedigree Beef Shorthorns

The herd has been purchased by Whitehall Garden Centre for supplying their outlets with shorthorn or shorthorn crosses. They are showing quality and will be shown by the students with the Limousins.

Calving this year was successful with some well-bred calves born, hence the same bull, Diamond Lord Belmont, has been used to serve them. A new bull, Coxhill Kirk purchased by Whitehall from Carlisle, has been running with the cows to cover those not served with AI.

3. Notton Farm (Sheep)

Notton Farm is the home of our flock of 900 MV accredited pure bred and pedigree Lleyn ewes. They are home-reared Lleyms, half of which are owned by Whitehall. The flock lambs in January (100 -200) and March (700-800) to Lleyn, Hampshire and Berrichon Rams.

High health status is paramount for the flock, Vaccinations undertaken to protect from Enzootic abortions, and Toxoplasmosis. The flock is Maedi Visna Accredited, vaccinations with Heptavac P for clostridial diseases and vaccinations for Orf.

The ewes are bred for prolificacy and meat quality to supply Whitehall, Downland and local butchers and high-quality supermarkets and to have fresh young lamb available all year round.

The January flock are housed indoors until March when the lambs will be kept indoors for finishing up to June when the single March lambs will be ready for marketing. The March lambing ewes and lambs are turned out after lambing onto grass for finishing from 12 weeks of age; any remaining lambs are weaned at 14 weeks and can stay on the farm for a further 16 weeks until finished. January and March ewes are housed in winter and fed on forage and concentrates. Lambs are sold at 36-40kg live weight aiming for an 18-20kg lamb on the hook. All lambs are graded at the abattoir; the majority of our lambs' grade at R and Us 2 and 3L.

The flocks provide excellent hands-on, practical experience for a wide range of courses as well as agriculture. Students experience lambing, foot trimming, injecting vaccines, fitting rubber rings and shearing.

Lackham hosts Lambing Weekends in March, drawing up to 10,000 visitors to see lambs being born. During their visit they can also see cows milked and other animals kept at the farm. The dates for these weekends can be found on our website.

4. Pigs

The unit rears piglets from another breeding unit purchased at 3 weeks of age, these pigs are reared and finished in the Home farm monopitch unit. The pigs are sold to Downland and Whitehall for sale in their shops.

5. Crops

The Land area has reduced dramatically, in order to demonstrate a variety of crops a demonstration area designed to teach students about disease, weed identification, inputs and chemical results will be introduced in summer 2021.

The remainder of the land is dedicated to Grass and Maize crops for forage production for the livestock.

Contractors are employed to help out with large tasks beyond the student's availability.

6. Machinery

It is essential to have a wide range of machinery available on the farm, both to guarantee the smooth operation of farm enterprises and to provide students with up to date, modern machinery to use which will enhance their experience and prepare them for when they work in the industry. The students are trained on site in order to ensure they have hands-on, practical skills and experience on all the machinery whilst here at the College.

The workshops now run a fleet of New to three-year-old tractors for students to use. In addition, there are New ATV's for training and gaining individuals certificates.

Campaigns are designed to get them working as a team with all the equipment, in tasks such as:

- Demonstration plots
- Maize harvest
- Manure spreading
- Grass silage 1st and 2nd cuts
- Spring cultivations and Maize ground preparation

7. Learning on the Farm

First year students on the Extended Diploma in Agriculture engage in practical routine duties, spending a week with staff in two main areas, namely Dairy and calf-rearing. Practical sessions revolve around work associated with the Dairy, Sheep, and Beef enterprises.

Level 2 Agriculture students spend a day per week with the stockman, providing each student with experience in each area to complement their theory work.

Dairy students are involved with milking and its related activities. These include tractor driving when scraping out feed passages and working with feeding and bedding once they have a Loadall certificate.

Students will also be involved with the weekly visits by the farm appointed vet. If they are on beef duties, students could be feeding calves or feeding housed animals at Home Farm in the morning and in the afternoon handling animals – weighing, injecting, fencing, disbudding or carrying out any other tasks associated on the units.

Practical sessions with lecturers and farm staff range from tasks on tractors, manure hauling and field operations to all livestock tasks. Students get hands-on as a group and are given detailed explanations on the task in hand: why it is crucial, the consequences if it is not and the need for accuracy when doing the task.

We aim to impress on students the importance of accurate record-keeping across the whole of the business, as well as instilling a tidy, safe and thorough way of working in our industry.

8. Student Projects

Students explore a wide range of subjects through live projects on the farm. Undertaken in their 2nd year on the Extended Diploma in Agriculture, the projects encourage students to develop skills in teamwork, budget responsibility, leadership and negotiation, customer care and many other aspects of management. They also work with industry feed companies, slaughterhouses, marketing and suppliers of stock.

In addition to these projects, students investigate various aspects of the farm such as fertility, mastitis and lameness within the dairy herd; showing animals, designing a breeding programme, looking into carcasses and studying the meat-to-bone ratios of various purebreds or crosses, and looking after a flock and recording results and problems associated with the flock.

Students have the opportunity to monitor all aspects of these enterprises, looking at records and concluding with a way forward or recommendation and giving presentations on these subjects. An example of a project is exploring the benefits of treating ewes with a mineral drench before lambing. Students then followed the lambs born from those ewes right through to sale, to see if there were any financial or health benefits for the sheep. We have also had a group of students investigating the same process in beef systems.