

Report on GAP's Lincolnshire Field Visit

'From Field to Fork' 21st January 2004



Eric Phipps explaining hanging a side of Lincoln Red beef to develop the best flavour & texture

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Discussion of rearing and slaughtering approaches and their impact on carcase quality - a lamb carcase

GAP wishes to thank Roger Wardle and Eric Phipps who gave of their time and expertise so generously on the two Field Visit days in 2004 and also Sean Cooch who took many of the photographs used in this report

Part 1: The Producer's Perspective

Roger Wardle, Senior Advisor, Lincolnshrie FWAG



Roger Wardle with some of his cattle - the largest remaining pedigree herd of Lincoln Red cattle

Roger sees his pedigree Lincoln Red cattle as part of the whole farm system:

- they are used to manage the semi-natural habitats on the farm (wet woodland, marshy grassland, acid grassland and hay meadow) most of which is either Site of Special Scientific Interest or under Countryside Stewardship Scheme;
- they contribute to the economic viability of the farm;
- they are an important genetic resource (being the largest herd of pure-bred Lincoln Reds in the country).

1. Cattle as a management tool:

- Cattle grazing gives a variety of vegetation structure and produces a mosaic of habitat types e.g. short-grazed open areas for breeding lapwing.
- By changing from sheep to cattle grazing and from continuous grazing to a regime with bursts of fairly
 heavy grazing at carefully timed periods of the year the species diversity (plants and birds) has increased
 markedly.
- 'Returns' from the farm are seen in terms of environmental returns as well as financial ones e.g. number of orchids has increased from 6 (1979) to over 10,000; there is an income from CSS payments.
- Roger makes 'hay' from the rushes he cuts as a control measure; this is baled and used as bedding during the winter when the herd is housed.

2. Lincoln Reds as an economic beef breed:

- Lincoln Red meat is characterised by a marbling of fat through the muscle which is a very desirable trait and is attractive to niche meat markets where good eating quality is important.
- Lincoln Reds can maintain condition on 'poor' forage e.g. rush pasture. It is not feasible to finish animals on these pastures within the present Over Thirty Month restrictions but it is possible i.e. steers might be finished if kept long enough (3-4 years old) and heifers might finish. They can, therefore, be raised on grass and finished on relatively little concentrated food, making production less expensive than for a continental breed.
- Cows calf easily and can be calved outside reducing veterinary and housing overheads.
- Roger typically spends half an hour a day on routine stock management so staff costs are low.
 - However, Lincoln Reds, in common with other traditional British breeds, produce a carcass with a
 relatively high proportion of brisket and lower value cuts. This is because they have proportionately
 larger forequarters in relation to hindquarters (which provide roasting joints, steak etc.) compared
 with continental breeds.



3. Breed conservation and its effect on the management system:

• Young bullocks are not castrated but reared and finished entire. Good animals can thus be bred from (at sale an 18-month old pedigree Lincoln Red bull may make £650-£700).

Leaving bulls entire has several consequences:

- Uncastrated males mature more quickly and put on weight faster = cost less to rear in terms of husbandry time and capital can be realised faster.
- Growth is especially prominent on the fore-quarters giving the finished carcass a higher proportion of lower quality meat e.g. brisket;
- Bulls are more 'frisky' than castrated males and additional attention needs to be paid to safety when feeding housed stock etc.

- All 'good breeding animals' are retained. Unlike pure beef concerns the need to continue breeding from good stock means that cows are kept into old age.
 - Older animals are familiar with the challenges posed by the site and 'teach' younger animals how to deal with these e.g. finding areas away from flies. (Young animals are often seen in the company of their dams forming loose family groups).



- Some of the old stock can appear thin, leading to possible conflicts on public access sites and with veterinarians (the risk assessment approach in GAP's *Welfare Guide* can be used to address this).

4. Husbandry issues:

- <u>Calving</u>: in March and April; calves weaned on to grass at 6-9 months old; feed given at 12-15 months old. Calving problems minimised by carefully managed plane of nutrition in cows/in-calf heifers avoiding over feeding.
- Compensatory growth spurt: this can be achieved with careful management: feed during the winter to maintain bone development but restrict muscle and fat being laid down; in spring introduction of nutritious food eg fresh grass results in a spurt of growth = speeds finishing time, avoids a very fatty finished carcass and optimises feed costs. Feed management is critical: problems can occur in getting the growth spurt if animals have been 'held back' to strongly as their metabolism seems to go into 'hibernation mode' and this can be hard to overcome. Where this results in heavy feeding late in the animal's development it can lead to excessive development of brisket.
- <u>Economics stockman's time:</u> Easy birthing and relatively low stockman time input make staff overheads low (Roger can see to his cattle in about half an hour a day and do a full time job away from the farm due to the combination of grass-rearing method and labour-saving techniques.
- <u>Economics feed & bedding:</u> Feed costs are optimised by the ability to rear stock on grass and take advantage of the compensatory growth spurt in animals destined for slaughter. Bedding costs are minimised by making 'hay' from rushes, these have to be cut as part of the conservation objectives to control their spread but Roger dries and round bales the cut rush, rolling it out as winter bedding. A balance in cropping regimes is carefully managed to ensure sufficient arable retained to supply home grown straw and feed.

Loose family group of Lincoln Red

Part 2: The Butcher's Perspective

Eric Phipps, Q-Guild Butcher, F.C. Phipps Butcher, Mareham-le-Fen, Lincolnshire

F.C. Phipps is a family butcher business specialising in flavoursome meat from locally produced traditional breeds (including Lincoln Red and Long Horn beef, pork from Berkshire, Gloucester Old Spot and saddleback pigs, lamb from Hebridean and Norfolk Horn sheep).

Fred and Gert Phipps bought the business in 1950 and built it up based on a philosophy of refusing to compromise on quality. Beth & Eric Phipps took over the business from Eric's parents in 1976 and have won much acclaim in the national press (including winning *Country Life* magazine's *Best British Butcher* in 2000 and appearing as one of Rick Stein's *Food Heroes* on BBC TV). They also pioneered the reintroduction of traditional Lincolnshire Stuffed Chine.

- F.C. Phipps' premises consist of a small slaughterhouse, cold store and carcase hanging facilities, butcher shop and kitchen. Eric knows all his regular producers personally, which means he can guarantee his customers consistent quality he eats a steak himself before offering beef for sale in the shop.
- ❖ Q-Guild: The Guild of Q Butchers represents the UK's finest independent butchers. They are the only meat retailers to voluntarily submit their businesses to annual independent inspections to internationally recognised standards. These include standards of welfare for animals being slaughtered.

1. Important aspects to consider when slaughtering:

- Treatment of animals transport and handing in the abattoir
 Good handling right up to the point of slaughter is an important part in providing high quality meat.
 Changes occur in the texture of the meat when animals are stressed e.g. 'knots' in the best muscle, sloppy texture to pork in stressed pigs. Having a calm, quiet environment is very important in reducing stress levels. The producers supplying livestock to the shop are Lincolnshire based so distance travelled to slaughter is minimised. The stockman usually brings his own animal to slaughter so that they are handled by a familiar person. The abattoir routine is organised into separate 'pig days', 'sheep days' and one, sometimes two, beef animals are slaughtered for the shop each week. Only small numbers of animals are slaughtered on any day, some for the shop and some for private producers for their own sale or consumption.
- The role of hanging and chilling in devlopment of flavour
 Once slaughtered, carcases are hung to develop flavour and texture. Eric recommends a minimum 21 days for beef but usually hangs his meat for the shop for 28 days to mature fully. Lamb is hung for 5 days and animals over a year ('hoggit') or mutton for 10 days.

2. What makes a good carcase:

• How feeding and rearing methods effect eating quality
Mr Phipps looks for grass-reared meat to give the highest quality texture and taste, he says he can tell
which animals "have had the sun on them" by the yellow colour of the fat on their backs. Having an
eye for the balance of fat to lean meat is important and 'marbling' of fat in the prime beef cuts is
especially important. Cattle over 14 months old have better flavour and texture than younger beasts,
Eric would work by the '2 teeth' rule of thumb his father used if OTMS was lifted.

• Advantages of 'marbling' of fat in the meat

Most of the flavour of meat is held in the fat because fat-soluable elements give the taste and these cannot be dissolved in the water content of muscle. Meat from some breeds has veins of fat through the muscle – called 'marbling' – which give the meat a better flavour and keep it 'basted' during cooking. This gives superior 'eating quality' e.g. Lincoln Red and Aberdeen Angus.

Conformation

Traditional British breeds of beef cattle tend to have proportionately larger forequarters compared with continental breeds e.g. Belgian Blue. The hind quarters carry less of the animal's weight (about 40%) which means there is less connective tissue resulting in 'better' cuts e.g. rump steak, prime roasting joints. However, traditional, grass reared meat has a superior texture and flavour.

• Castration controversy

Eric Phipps does not take any meat from uncastrated males for his shop and prefers heifers and bullocks for beef. He finds entire males put more weight on the shoulders, there is less fat on the carcase, carcases provide joints too large for his 'small family' custom and meat can be tainted by the male hormones. However, Roger Wardle's butcher regularly buys Lincoln Red bulls.



Assessing fat quality on a side of beef during the January Field Visit

• <u>Disadvantages of small carcases</u>

There is an ideal carcase size for optimum proportion of meat to bone/guts. Many rare and primitive breeds e.g. Hebridean sheep produce much smaller carcases and are often considered uneconomic. However F.C. Phipps does offer Hebridean sheep because the distinctive flavour of the meat makes it popular amongst connoisseurs who are prepared to pay higher prices for specialist meats.

NB It is important to discuss with your prospective butcher what he wants at an early stage and find an outlet that will take the type of animal your system can produce. There is obviously variation in customer demand and butchers' preferences — you have the opportunity to castrate if you find out what your local butcher wants early enough. Tainting of meat is a common concern in uncastrated male animals but does not necessarily apply to all situations.

3. Making the most of all the cuts

Customer demand has changed over the generations. Our parents probably spent more time in the kitchen cooking stews and pies than the typical professional person or family does now and they usually had less money to spend on expensive roasting joints and grilling steak. Past generations employed in manual labour demanded much more fat on their meat than would be acceptable today and the ideal ratio of fat on a carcase still varies between butchers, depending on the age of their customers.

Demand for different cuts also varies through the year with greatest sales of steak in the summer (for barbecues) and highest demand for roasting joints during the winter months. Butchers need to sell all parts of a carcase and a degree of 'processing' makes less popular cuts more palatable. F.C. Phipps offer a website ordering service (www.fcphipps.com) where customers can source a whole range of meat and dishes, all of which are delivered on ice within specified time scales.

Adding value to cheaper cuts by processing - 'ready to cook' and 'ready meals'
Ready to cook dishes are raw meat with sauces, marinades or other ingredients that can be cooked with
minimum effort on the part of the consumer e.g. stirfry beef and peppers in chilli sauce. Ready meals
are complete dishes that simply need to be reheated and served, usually in microwave packs. Both of
these options make 'hard work' cuts more appealing and Eric Phipps and his wife produce a complete
range of both for sale at the shop.



In Phipps Butcher shop discussing adding value to cheaper cuts of meat

Box schemes - selling several joints: a range of prime and cheaper cuts

Some butchers and local producers selling direct to the customer offer a mixed box of meat. These are usually a set weight of one kind of meat e.g. beef and will consist of a range of high value joints and steak together with lower cost cuts. Some boxes are one half or one quarter of an animal but others are a specified weight of meat. Effectively the customer is offered a discount for buying in bulk and the price is set on a £ per kg basis for the box as a whole. Joints need to be clearly labelled with the cut and weight and vacuum packing is preferable so that meat stores better (reducing the risk of 'frost burns' that can develop over longer periods in the freezer).

Restaurant sales

Another possible outlet for the cheaper cuts of meat is the local pub or restaurant, many of which have pies and casseroles as a standard menu item and may be interested in regular purchases of stewing steak etc. If you are trying to sell meat with particular cooking requirements e.g. primitive breed lamb, talk directly to the chef as poor cooking and bad eating experiences will mean poor follow-on orders.

4. Mr Phipps webpage

Phipps Family Butcher has a web site with details of the butchers and staff, the competitions and prizes they have won and meat available for sale. The site can be visited on: www.fcphipps.com

Annex 1

Rare Breeds Survival Trust

One of the most important aspects of conserving rare breeds of farm livestock is to find or create a practical market for them. It is because such breeds do not meet the needs of the mainstream market for different reasons that they become rare in the first place. Because supermarkets, which so dominate the retail trade in meat today, want a standard product that is served by the commercially raised stock, there is a danger that rare breeds are threatened by not having a market available for non-breeding stock.

In 1994, to address this problem, the RBST set about starting a scheme that would by-pass the supermarkets by accrediting individual butchers to stock and market meat from pure-bred rare breeds. Because they are raised extensively and mature more slowly, most rare breeds have much better eating qualities than most meat from the mainstream market. Also, the meat from different breeds has different eating qualities and the scheme promotes those values so that the consumer can enjoy a variety of different tastes and experiences at different times of the year.

As well as enjoying meat with real old-fashioned qualities of taste and succulence, this scheme provides reassurances for the public about the food that they eat:

- Traceability all animals are pure bred from registered parents and we can trace stock back to its point of birth and at every stage in between.
- High animal welfare all meat comes from members' farms where stock is kept in non-intensive conditions.
 Stock is only sourced direct never at markets or through dealers and the farmer transports the animals direct to a local smaller abattoir for minimum stress.
- Local food 'food miles' the distance that live animals and subsequently pieces of meat travel before reaching the shelves of national retailers is causing growing concern because of the impact on the environment. This scheme keeps everything local and the Accredited Butcher almost always knows the farm where the stock was raised. Researchers have shown that local food keeps much more wealth in the local area than nationally distributed food and therefore this scheme is good for local rural economies.
- Helping Conservation by eating the produce of rare breeds we know that it encourages more people to keep more of them and therefore you will be helping us to save these breeds.

Many food writers and top chefs are now recognising the qualities of meat from rare breeds as a growing proportion of the discerning public.

All the Accredited Butchers stock such meat and most make their own speciality products such as sausages, dry-cured bacon etc. so if you would like to try something really special while helping the conservation of rare breeds, visit some of the following.

For all enquiries please contact: Traditional Breeds Meat Marketing Co Ltd Freepost (GL442) Cirencester Gloucestershire GL7 5BR

Tel/Fax: 01285 869666 Email: <u>greatmeat@aol.com</u>

Annex 2

