
This is the author’s final accepted version.

There may be differences between this version and the published version. You are advised to consult the publisher’s version if you wish to cite from it.

http://eprints.gla.ac.uk/204523/

Deposited on: 03 December 2019
Pre-lambing preparation: getting you and your farming clients prepared

- Pre-lambing: what needs to be prioritized
- How to engage your clients: workshops and fact sheets
- The must-have before lambing starts
- What are the outcomes of a well planned lambing experience

Like everything in life, preparation is the key. Plan, plan and plan some more. And when it comes to the most stressful, yet the most significant time of the year, then this is even more important. The whole farming cycle is built upon having as many healthy lambs as possible, with properly looked after ewes. We are well aware of that, so the challenge is to prove to our farming clients the importance of a well-planned lambing time and share with them what are the crucial aspects to focus on for the maximum rewards. If you can take them on board at this stage, you have been truly successful. Furthermore, being ahead of the game by starting early and getting organised before the mayhem of lambing, will considerably reduce the stress associated and give them a chance to really engage on those crucial areas.

What needs to be prioritized

A good time to start the pre-lambing preparation would be around mating time. A bit further ahead, but still giving enough time to get ready and make some changes, is around scanning. Try, if possible, to link any type of discussion or intervention around some key events, either as they offer the opportunity to discuss on performances or because the farmer is able to take a moment from other jobs to concentrate on the issue you would like to discuss. Choosing the right moment to start the conversation is as important as the topics you would like to discuss.

Ewes’ fitness. Lambing is a major challenge for the newborn as much as for their mothers. Ewes need to be ready to face such challenge by being properly fed and looked after. Body condition score of ewes throughout the year should be encourage, but in particular before mating, at scanning and before lambing, with different target according to the production type and the time of the year(1). Since the last 6 weeks of pregnancy are the crucial one, take this opportunity to explore how ewes were managed in previous years and plan what areas might need some input. For example, a follow up visit could be suggested to assess the nutritional balance 3-4 weeks before lambing starts (Figure 1). Ewes should also be free from pain, injury or disease (2), so this would be the appropriate time to discuss topics such as flock-specific lameness control plan (3), scab control(4) and the provision of analgesia through the use of non-steroidal anti-inflammatory drugs (NSAIDs).

Ewes’ vaccination. To provide the necessary antibodies in colostrum against clostridial diseases, ewes needs to receive their annual booster 4-6 weeks before the start of lambing, with consideration in vaccinating ewes at different times according to their lambing date, if the lambing is particularly extended(5). The main issue is to combine yearly boosters with those animals entering the breeding flock, which might have never been vaccinated before and would therefore need two full doses of vaccine 2-4 weeks apart (depending on the brand used). When advocating vaccination, make sure the
farmer is aware of these constrains and can plan the sourcing of the vaccine as well as the timing accordingly.

**Worming.** Be prepared, as this topic could be quite controversial. Your client might be in the habit of routinely dosing all ewes at mating and this practice should be really discussed in face of the increasing anthelmintic resistance, the lack of significant effect on the ewes’ performances and the evidence behind the benefits of leaving animals untreated(6). Without being too coercive, this is the right time to discuss anthelmintic treatment with your client, as they might not be aware of the reasoning behind our advice or simply having carried out the same protocol without questioning for many years. A different concept is the routine treatment around lambing time to reduce the impact of the periparturient egg rise on pasture contamination, however this model should also be reviewed in light of the actual benefit of this practice on the lambs’ performances(7). This would need even more careful planning (and probably a whole article in itself), but again it represent the right moment to bring up the subject and start discussing the different options and solutions available. Liver fluke treatments should also be considered at this time of the year, again both in light of the increasing reports of triclabendazole resistance (8) as well as because of the complex epidemiology of this disease, where yearly revision based on disease forecast should be encouraged.

**Other routine treatments.** This will include other vaccinations, depending on the specific diseases on farm, like those against ORF and foot rot. One crucial point to make here is the importance of the methods used for vaccination, as demonstrated recently by ORF vaccination being often carried out incorrectly across UK sheep farms, with likely effects on the vaccine efficacy (9). The value and necessity of mineral and trace elements supplementation should also be considered at this time, depending on what has been done in the past and whether this was backed up by diagnosed deficiencies. Finally, other routine procedure, like shearing or crutching could be discussed.

**Lambing logistics.** Things are most likely going to roll on from previous years, so the crucial discussion here is if there have been any major changes in the farm (e.g. increased/decreased number of ewes, change of breeds, labour inputs and level of expertise). While most of us are not expert builders, discussing the importance of well-designed (ideally 6x3ft or 4x4 ft) and hygienically kept individual lambing pens is crucial as well as making sure a reasonable number is available according to the flock size (ideally 1 per 10 ewes). If lambing is outdoors, it should be in a clean, sheltered and easily accessible field. Careful shepherding, especially in face of the general reduction in labour inputs, is paramount. Assessing how spread the lambing will be, who will be available and what level of expertise they have, who will be in charge of the sick lambs are all important information to discuss in advance of the lambing season.

**Zoonosis.** Last but not least, this is also a good opportunity to remind your clients of the zoonotic potential of many sheep diseases. It is our duty to protect the public health and ensure clients are aware of the serious consequences of some diseases (primarily Enzootic Abortion of Ewes) for pregnant women and are planning accordingly to avoid any pregnant woman coming into contact with lambing sheep, clothing and equipment used for lambing or live vaccines(10).

**Ways to engage your clients**

The buzzword of the moment is probably knowledge exchange (KE). Knowledge exchange means coming together from academia, industry, policy and the public to share knowledge and make a positive and tangible contribution to what happens in practice. The key concept here is exactly in the sharing of knowledge, rather than passively dictating what to do (Figure 2). As vets, we should not be trying to educate or force our knowledge upon others, but really understand what the needs are and
work in collaboration with clients to help them achieve their goals(11). Knowledge exchange activities can take different forms and shape, like evening talks, workshops, websites and social media presence, newsletter, laminated fact sheets, as well as collaboration on research projects and creation of focus groups. What we need to know, in the first instance, is what the clients are looking for and what would be the best method to exchange this knowledge. All these activities can be very rewarding, as well as providing an alternative to our daily routine and something that should be encouraged and rewarded accordingly.

In case of pre-lambing preparation, an evening meeting, a half day workshop or simply having a display in the practice and some leaflets (maybe linked to a social media page and practice website/newsletter) are all great ways to engage your clients. Depending on the level of engagement with the clients and their previous experience, some suggested topics would be:

**Lambing equipment.** There is nothing like a nice, shiny laminated sheet listing all the must have for lambing. This is the opportunity for you to be creative and bring out you artistic side. Make something simple but catchy, a handout that you can give and maybe a “sample pack” with all the listed supply. Experienced farmers might not need any of those, but again they might be interested in finding out if they are missing something or seeing it exposed well in advance before lambing might make them question you about it (a bit like seeing Christmas decoration before Halloween).

A suggested list will have all these basic and essential equipment in it (plus anything else that might be appropriate for your clients or practice):

- lambing ropes and head snare
- obstetric lubricant
- long and short gloves
- 10% iodine solution and dipping cup
- hibiscrub (or other disinfectant)
- powder colostrum
- feeding bottle and teats
- stomach tube
- heat lamp
- prolapsed harness

**Medicine box.** Something else to consider is a separate box with all the necessary therapeutic items in it. Apart from a list of useful items, our role here is to make sure medicines are properly stored and, once open, are kept according to the manufacturer instructions. Useful items in this case would be:

- thermometers
- syringes (from 2ml to 30-50ml) and needles (from 16G to 21G)
- 20 or 40% calcium borogluconate
- 25% magnesium sulphate
- 40% glucose
- propylene glycol
- NSAIDs
- first line injectable antibiotics
Lambing workshop. This is a fantastic way to engage with farmers as well as being great fun to run. There are different ways to deliver one and again it is up to what it feels more comfortable for who will be running it and what the clients are looking for. Ideally, it should be tailored to different levels of experience, so try not to mix experienced farmers with small holder/hobby clients. Something practical is always good, with a top favourite being a hands on correction of common mal-presentations to practical procedures on how to stomach tubes lambs or perform intraperitoneal injections. You would need to prepare or borrow a lambing model (Figure 3) and either have a source of dead lambs or have them stored frozen from previous year (logistically that is probably the biggest challenge). Although these workshops should run close to lambing, start planning in advance, by setting a date in the calendar and advertising it widely, with a proposed list of topics covered and who will be delivering them. Also have a rough idea of how many clients you can comfortably accommodate. At this time of the year, there can also be thematic workshops related to the important topics discussed before (e.g. worming, vaccination etc.). For these workshops, a mixture of presentations, discussion groups and practical exercises are always well received, with plenty of food and drinks making it a successful event!

The silver lining
So, why should farmers spend their time planning so much in advance and for something they might have been doing since they can remember? The answer is because from one of the most stressful, difficult time of the year, they will get a positive and rewarding experience as long as everything is in place before it all kicks in and common practices are reviewed regularly, to account for differences within years or with a view to improve the performances of the flock. First of all, engage with your clients to find out what is their goal and what you can do to help them achieve it. At the end of the day, the profitability of most of our farming clients depends on how many lambs they can produce, but each of them will have different opinions and resources. Planning together will make sure lambs are born alive and stay alive, for everyone’s’ benefit.


Figure 1. Blood sampling ewes in the last 3-4 weeks of pregnancy can provide information on the nutritional balance and engage farmers in proactive flock health planning.

Figure 2. Exchanging knowledge with your client is a two-way process. You learn and appreciate all the hard work and passion that goes into sheep farming and help them achieve their goals while making sure animal health and welfare are kept a priority.

Figure 3. An example of a DIY lambing model.