# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Our team</td>
<td>2</td>
</tr>
<tr>
<td>Horsepond Veterinary Centre</td>
<td>3</td>
</tr>
<tr>
<td>Where to find us</td>
<td>4</td>
</tr>
<tr>
<td>Services – Laparoscopic AI</td>
<td>5</td>
</tr>
<tr>
<td>Laparoscopic AI price list</td>
<td>6</td>
</tr>
<tr>
<td>Photo</td>
<td>7</td>
</tr>
<tr>
<td>Semen collection and freezing price list</td>
<td>8</td>
</tr>
<tr>
<td>Photo</td>
<td>9</td>
</tr>
<tr>
<td>Ram fertility testing and price list</td>
<td>10</td>
</tr>
<tr>
<td>Improve your conception rates by using teaser rams</td>
<td>11</td>
</tr>
<tr>
<td>Improve your AI results</td>
<td>12</td>
</tr>
<tr>
<td>Embryo transfer</td>
<td>13</td>
</tr>
<tr>
<td>Booking form</td>
<td>14</td>
</tr>
<tr>
<td>Terms &amp; conditions SWSBS services</td>
<td>15</td>
</tr>
<tr>
<td>Terms &amp; conditions SWSBS semen storage</td>
<td>16</td>
</tr>
<tr>
<td>Lambing calendar</td>
<td>17</td>
</tr>
</tbody>
</table>

TORCH Farm & Equine Ltd  
Horsepond Veterinary Centre  
Horsepond Meadow  
South Molton  
Devon EX36 4EJ  

Tel: 01769 610000  Email: info@torchfarmvets.co.uk  
Fax: 01769 575789  www.torchfarmvets.co.uk
Introduction

Recent improvements in the success of embryo transfer have led to an increased interest in advanced sheep breeding techniques. Developments in this technology have brought greater consistency in the success rates of embryo transfer programmes. A new super-ovulatory regime and changes in the timing of AI have led to improved responses from donor ewes and better recovery rates of fertilized embryos.

Ram semen quality is often variable again when collecting fresh on farm for AI’s. A lot of time can be wasted on farm whilst patiently trying to collect semen; thus it proved to be vital to have frozen ram semen as backup in the tank!

It’s good to see that so many of you are now using teaser rams to help improve your conception rates.

We would again particularly like to thank you for your generous hospitality when we have visited you on your AI date, it is very much appreciated; so a big thank you. We look forward to working with you again this year and welcome contact from any new faces.

Good luck this season from all the AI Team

After reading this brochure, should you require any further information please do not hesitate to contact us. If you have any ideas on how we can improve the services we offer to you and your flock please do speak to any member of our team.
Where to find us:

South West Sheep Breeding Services  TORCH Farm & Equine Ltd
Horsepond Veterinary Centre South Molton EX36 4EJ is just off the A361 which links to the M5 at Junction 27

Facilities

South West Sheep Breeding Services include

- Embryo Collection and Transfer or Freezing
- Artificial Insemination
- Semen collection and Freezing
- Ram fertility evaluation
- Bull fertility evaluation (on farm only)
- Semen storage

Most services are available on-farm or at centre

Our sheep breeding department here at Horsepond Veterinary Centre offers:

- Operating facilities to allow surgical procedures such as embryo collection and AI
- Laboratory area for processing embryos and semen
- Secure storage for embryos and semen for MV accredited flocks
- Sheep handling facilities for training and collecting semen from rams
- Secure indoor pens for rams

As this is a veterinary centre, 24 hour care, seven days a week is provided.

Embryo Transfer

Embryo Transfer can be a way of multiplying the offspring from your elite females. The donor ewe is super ovulated using hormones so that she produces more eggs than usual at a synchronised mating. The complex timed program usually takes 21 days with the donor ewe being AI’d on day 15 and the 6 day old fertilised embryos being flushed from her on day 21. Viable embryos are then transferred to suitable recipient ewes which have also been programmed. The flushing and transfer process is carried out under general anaesthetic. The viable embryos can also be frozen for future use.

There is potentially a lot to gain from using embryo transfer, but there are risks associated with the procedure. The gains arise from the possibility of rapidly increasing the number of offspring from an elite female in your flock. The risks lie principally in disappointing results either from low numbers of viable embryos being collected from the donor, or from failure of embryos to become established in the recipients.

Embryo Transfer

- Flushing embryos from donor ewe
- Searching and grading of embryos
- Embryos under a microscope
Embryo Transfer

Other points to bear in mind with embryo transfer are:

1. Choose the best candidate for the donor, e.g. a proven older ewe with no previous breeding or health problems.

2. Avoid flushing show sheep unless feeding regime is sensible and showing stress is moderate.

3. Use recipients from your own flock or ones that have had several months to ‘acclimatise’ to your farm.

4. Start preparations early as with AI.

Embryo Transfer
Price List

<table>
<thead>
<tr>
<th>Service</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superovulation, AI &amp; Flush donor ewe (embryos collected) capped fee</td>
<td>£220/ewe £720</td>
</tr>
<tr>
<td>Superovulation, AI &amp; Flush donor ewe (no embryos collected)</td>
<td>£100/ewe</td>
</tr>
<tr>
<td>Embryo Transfer (single)</td>
<td>£75/embryo</td>
</tr>
<tr>
<td>Embryo transfer (double)</td>
<td>£50/embryo</td>
</tr>
<tr>
<td>Freeze/thaw embryos</td>
<td>£15/embryo</td>
</tr>
<tr>
<td>On centre fee</td>
<td>£25</td>
</tr>
<tr>
<td>Visit fee*</td>
<td>£110</td>
</tr>
</tbody>
</table>

(Distances over 140 miles round trip are subject to a charge of 65p per mile)

How Laparoscopic AI can aid with flock improvement

- Fresh semen from your own ram can be inseminated into a large number of ewes, ensuring tighter lambing period and increased sire use. Infertile rams can be identified.

- Frozen semen can be purchased from rams of high genetic merit, rather than buying an expensive ram.

- AI assists in the efficient operation of national breed Sire Reference Schemes.

- Ewes conceiving to AI will lamb over 5-7 days, thereby reducing labour costs at lambing and allowing better utilisation of staff.

- Lambing can be timed so that a high percentage of lambs will be born within 2-3 days of your most suitable lambing date.

- AI allows efficient ram sharing.
Laparoscopic Artificial Insemination (LAP AI) - what’s involved

LAP AI involves the insemination of ewes synchronised with sponges and PMSG with fresh or frozen semen, using a laparoscope to enable insemination directly into the uterus.

- Up to 150 ewes can be inseminated by one vet per day.

- Fresh semen from one fertile ram can be used to inseminate up to 150 ewes/day.

- Conception rates of 65-75% are typical using fresh or frozen semen.

- Only Veterinary Surgeons experienced in this field of work are able to carry out this technique.

Laparoscopic Artificial Insemination
Price List

<table>
<thead>
<tr>
<th>Ewes</th>
<th>Price per Ewe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>£20 each</td>
</tr>
<tr>
<td>11-15 (ie next 5 ewes)</td>
<td>£15 each</td>
</tr>
<tr>
<td>16-20</td>
<td>£12 each</td>
</tr>
<tr>
<td>21-50</td>
<td>£9 each</td>
</tr>
<tr>
<td>51-110</td>
<td>£8 each</td>
</tr>
<tr>
<td>Over 111</td>
<td>quotes available</td>
</tr>
</tbody>
</table>

Goat AI - price on application

Visit Fee per farm £90
Distances over 140 miles (round trip) are subject to a charge of 65p/mile
A minimum of £425 + travel is charged for on farm work

On Centre Fee £25.00
( it is your responsibility to provide labour to load cradles)

Collect semen and dilute for fresh AI £25.00 per ram - capped @ 4 rams

Frozen semen handling charge £8.00 per batch - capped @ 4 batches

Frozen semen transport charge £30 per shipment.

All prices are excluding VAT @ current rate.
**Improve your AI results**

1. **REPRODUCTIVE HISTORY** – avoid presenting ewes which have a history of problems such as bad lamblings, caesars, failed to lamb last season, not held to AI (returned) - AI is not a cure for fertility problems.

2. **CONDITION** – aim for ewes to be ‘fit’ and not fat. An ideal condition score for AI is 3.5 with a rising plane of nutrition from sponge insertion. Fat ewes are difficult to AI and frequently give disappointing results.

3. **TEASER EFFECT** – run a teaser ram with maiden ewes for 3 weeks prior to sponge insertion and then remove. Put teaser ram with all ewes at sponge removal and leave him with them until after AI’s are complete.

4. **STRESS** – this will reduce conceptions rates - do not drive ewes any distance and do not use dogs - do not AI fat ewes; they quickly become uncomfortable in the cradles - offer hay and water immediately after AI - provide shelter in adverse weather conditions hot or cold - return ewes to familiar pasture that they were on before and do not make any sudden changes to diet. - transport carefully

5. **WEANING** – wean ewes at least 8 weeks before AI. Do not AI ewes which lambed late last season (returns) or not held previously to AI.

6. **HEALTH** – ewes and rams – worm drench, dip, treat feet, vaccinate for EAE/TOXO & supplement trace elements if deficient – all procedures at least 8 weeks before AI.

7. **SPONGING** – use a clean and gentle technique and abandon the procedure if the ewe cannot be sponged easily.

**Improve your conception rates by using teaser rams**

The use of a teaser (a vasectomised ram) is a very effective method of encouraging ewes to come into season a week or two earlier than normal and to help tighten up your lambing period. Many flocks are AI’d before the peak of their natural breeding season.

Teaser rams have proven to be very effective at improving conception rates to Laparoscopic Artificial Insemination when used at sponge removal. A 7-10% improved conception rate may be achieved where a teaser is put in with the ewes at sponge removal and left with those ewes until after they have been inseminated.

**Ram vasectomy - what’s involved**

1. **Plan ahead** - your teaser will need to be prepared 8 weeks before you wish to use him.

2. **Choose a suitable candidate**
   - a shearling ram - at this age he will last several seasons
   - a high libido - he needs to be extra keen to do a lot of chasing
   - healthy - he’ll have to work harder than a ram
   - feet and joints - sound with no history or recurring lameness
   - good teeth - to last you well and put on condition again easily after use
   - health status - MV/Scrapie to match your ewe flock status

3. **Surgery** - your own veterinary surgeon would normally carry out the necessary surgery but we would be happy to do this for you, with your vets permission. The procedure is relatively quick and can normally be carried out under a light sedation while you wait.

4. **Semen test** - your teaser should be fertility tested after vasectomy and thereafter annually just before you plan to use him. Re-canalisation has been reported to occur on rare occasions - so play safe and avoid any mishaps.
Ram Fertility Testing

Collection and evaluation of semen from rams can be useful

- to check fertility post purchase of a new or young ram(s)
- to identify rams of low fertility
- confirm fertility status of a suspect ram

Between 15 -20 % of rams can have poor fertility. Identifying these can have the following benefits to your flock:

- A single fertile ram can be worked with a large group of ewes. Working on his own he will concentrate his energies on serving ewes and not be distracted or intimidated by other rams.
- More ewes will be tupped in a day by a single fertile ram working more efficiently on his own.
- Lambing time will be tightened up with only minimal ewes returning after the 4 week tupping period.
- Barren ewe numbers will be reduced.
- Fewer rams will need to be purchased.

Prices List

Ex ram re fertility (AV) £84.00
Certificate of fertility £21.00
Ex ram re fertility (EJ) x 1 £48.30
- additional rams £15.75
Re ex ram re fertility (EJ) £15.75

All prices are excluding VAT @ current rate.

Semen collection and freezing

Training and collection of rams for semen freezing is carried out here at Horsepond Veterinary Centre. The ideal time of year for freezing semen is during the Autumn and early Winter months, when the ram has had a 6-8 week rest following their natural service period. Outside of this time rams can be collected from, but the quality of the semen can be variable and their libido may be low.

Semen collection and freezing can

- give you insurance against the death or illness of a ram of a high value and/ or high genetic merit.
- ensure the use of a particular rams semen for AI, early in the breeding season.
- make more efficient use of shared rams.

Prices List

Semen Freezing

Semen collection and freezing £2.50 per dose frozen
Minimum charge of £65.00
Frozen semen storage £2.00 per goblet per month (goblet holds 100 doses)
Semen freezing – no freeze fee £75.00

Standard laboratory screening charge £48.36 - further lab charges may be applicable depending on screening results.

All prices are excluding VAT @ current rate.
Semen Collection and Freezing in the Laboratory Area

Terms & Conditions of supply of South West Sheep Breeding Services (“SWSBS”) trading as TORCH Farm & Equine Ltd Advice and Services

The terms and conditions set out below form part of the contract made by SWSBS with clients. Any variation must be agreed in writing and signed by an officer on behalf of SWSBS.

1. The service to be supplied by SWSBS will be detailed on paperwork. The amounts for payment shall be as laid out in current price lists.

2. Payment of account invoices will be due by the end of the month in which they are received and will be raised immediately following completion of the agreed work. VAT will be added if applicable. A credit charge of 10% is added to all accounts but is deducted if invoice is paid by the date due.

3. If payment is not made by the due date SWSBS reserves the right to cease work and if it thinks fit to terminate the contract. The client forfeits all rights to the receipt of confirmatory documentation if payment is not made as agreed.

4. SWSBS will treat as confidential all information obtained in the course of the performance of the contract which is specific to the client’s business but subject to any legal requirements to the contrary.

5. SWSBS shall not be held responsible for failure or delay in carrying out the work in whole or in part due to any circumstances whatsoever beyond its reasonable control.

6. SWSBS shall not be liable to the client in respect of any loss of profits, goodwill or any type of special, indirect or consequential loss (including loss or damage suffered by the client as a result of any action brought by a third party) arising out of the contract or the use by the client of any reports, results or information provided in pursuance of the contract.

Whilst SWSBS shall make every endeavour to ensure the safekeeping of all animals under their care and to provide reproductive services to the best of their technical ability, SWSBS shall give no guarantee as to the pregnancy rates which will result from the use of either artificial insemination or embryo transfer techniques nor shall they be held responsible for any loss, injury or death of any animal under their care, or for any loss of earnings whether direct or consequential.
1. The client shall be responsible for arranging delivery of the semen to SWSBS and not withstanding delivery, the risk in the semen shall not pass to SWSBS.
2. SWSBS will endeavour to check that deliveries of semen received on behalf of the client are correct only if SWSBS has received prior written notice from the client detailing the consignment.
3. The semen shall be stored at SWSBS premises as it may deem appropriate. SWSBS undertakes to take reasonable care of the semen, but shall not be liable for any loss of profits, or any type of direct, indirect or consequential loss arising from SWSBS storage of semen. In particular, SWSBS shall be liable only for its own negligent acts or omissions, and limits its liability to the costs of re-freezing an equivalent number of doses of semen in the event of such being lost or damaged as a result of its actions.
4. Each goblet of semen shall incur the current storage charge, of which the client shall be advised of from time to time and which shall accrue on a monthly basis.
5. Invoices for storage charges inclusive of VAT, if applicable, will be issued twelve months in arrears and will be payable by the end of the month in which they are received. A credit charge of 10% is added to all accounts but is deducted if invoice is paid by the date due.
6. If payment is not made within those 28 days, SWSBS shall be entitled to charge interest on the amount unpaid.
7. SWSBS reserve the right in the event of a client failing to pay invoices timorously to dispose of or destroy the semen stored by them on behalf of that client.
8. The client shall provide SWSBS with such accurate information and documentation as is necessary to satisfy them as to the nature and origin of the semen and such other information and documentation as SWSBS may require for the purposes of storing the semen.
9. In the event of ownership of semen stored by SWSBS changing, the client must give written notice of the change in ownership.

**Conditions for the Sale, Purchase or Transfer of Frozen Semen**

1. Insurance of semen is the responsibility of the client.
2. VAT at the standard rate is charged on all semen storage, handling charges and freight.
3. The responsibility for storage charges for semen passes from the seller to the purchaser at the time of SWSBS receiving written notice of the change of ownership.