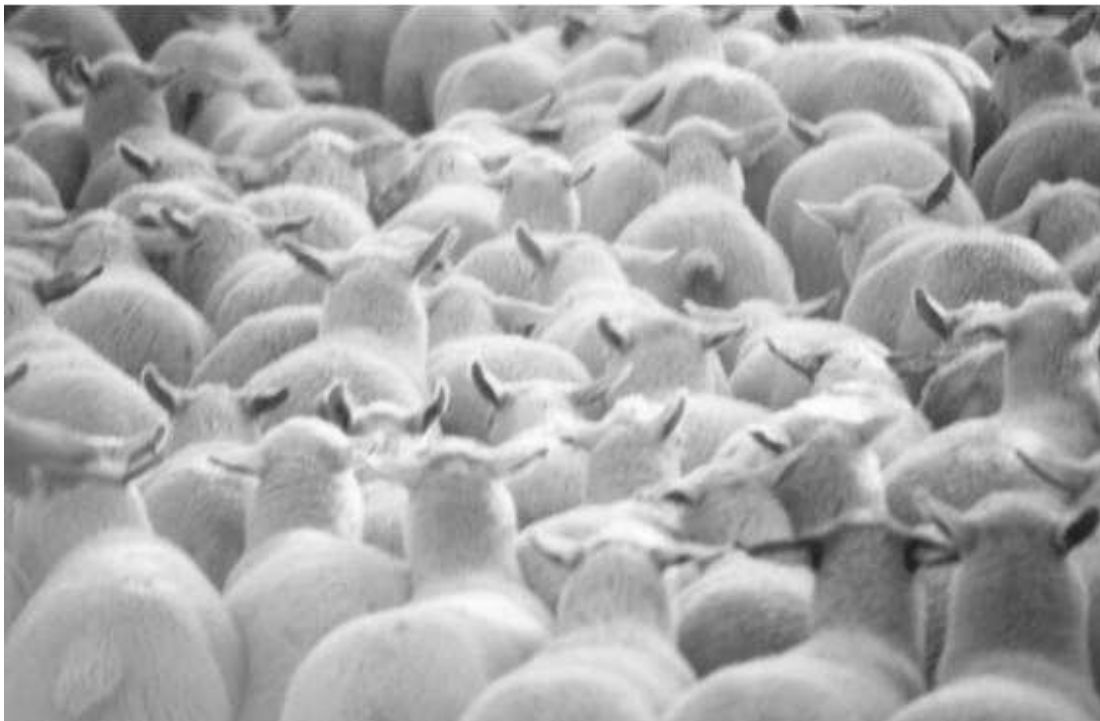




Shearing and Foot Trimming

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Preparing For Shearing

By Rick Metheral (Former OSMA Provincial Director)
(Modified by OSMA 2002)

Sheep should be shorn at least once a year, to help maintain healthy skin, and to minimize external parasites, wool blindness, and fly strike. Shearing day can be a hectic time in the shepherd's calendar, but with some careful planning the day should run smoothly.

When to shear:

There isn't a set time of the year when you should shear, however, there are a few guidelines that may be helpful in determining the best time for your flock:

- Producers often have their sheep shorn approximately a month before lambing. Be careful not to wait until the ewes are too heavily pregnant, as this will be stressful for the ewes and awkward for the shearer. Shearing a month before lambing helps keep the fleece clean during lambing. This decreases the chances that lambs will ingest manure by mouthing soiled fleece while searching for the teats. The lamb(s) will also have an easier time finding the teats for the first time if the fleece is short. Some producers may wish to crutch ewes prior to lambing rather than having them completely shorn (see the Code of Practice at the end of this binder for details on how to crutch).
- Shearing can reduce heat stress and humidity in the barn.
- Bear in mind weather conditions and housing facilities when planning shearing. Cold during the winter and sunburn during the summer can make life unpleasant for freshly shorn sheep.
- Shearing while the ewes and lambs are together may cause injury to the lambs and havoc on the shearing floor.
- Shearing ewes just after lambs are weaned or during periods of nutritional stress, may make shearing difficult. Talk to your shearer to see if he/she has a preference regarding shearing at this time.
- Avoid foot trimming for a few weeks prior to shearing as sharp hooves can cause serious injury to the shearer.
- Be sure withdrawal dates have been met for any pour-on medications used on the sheep. The shearer probably doesn't need to be dewormed and the chemicals may contaminate the wool.
- It may not always be possible, but try to avoid performing stressful handling practices, such as needling, deworming, etc, near to the time you are going to shear. The sheep will remember that the last time they were handled was stressful and/or painful, and may become agitated.

Preparing for Shearing:

Preparation for shearing should begin at least 3 or 4 months in advance. There is a shortage of professional shearers in Ontario, and their services are generally booked early for the busiest times of the year. Leaving booking until the last minute may mean that the shearer will be unavailable. This could seriously disrupt your management schedule and postpone shearing until an inopportune time.

Take care of the wool while it is still on the sheep by avoiding throwing hay and straw over the backs of sheep, and by removing any plastic twine from feeds and pens.

Contact OSMA for an updated list of shearers in Ontario.

With shearing day booked and fast approaching, begin to get the shearing area ready:

- Shear in an area that the sheep are familiar with and normally enter
- The shearing area should have:
 - Adequate ventilation
 - Good lighting
 - Ready access to a hydro outlet
 - Small catch area if shearing shed not available

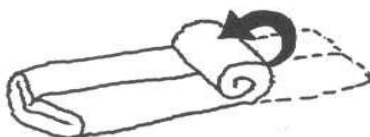
- You should have available:
 - Lots of eager help
 - Clean work area
 - Disinfectant approved for use on livestock for any nicks and scraps
 - Plywood; 4 X 8 to shear on
 - Rolling table for wool (slatted table or grated table to allow second cuts and vegetable matter to fall through when skirting fleeces)
 - Provisions for coffee breaks and meals
- Have the sheep inside and dry on the day before the shearer arrives. You will probably have to postpone shearing, if they are wet.
- Consider holding sheep off feed the night before. This is especially true if they are on an energy rich feed, such as lush grass or grain, as this may cause bloating and discomfort when sheep are tipped for shearing. Holding sheep off feed over night may also help keep the fleeces clean. Sheep should be allowed access to water.
- Try to separate your animals into groups to minimize the spread of diseases such as casous lymphadenitis by shearing healthy animals and/or those less likely to be infected first. This may include shearing young animals before older animals.
- If infected animals are detected during shearing, ensure the clippers are disinfected prior to shearing other sheep.

The Right Way to Roll a Fleece

1. After clipping, lay out the fleece on a clean surface, flesh side down. Pick off any extraneous matter, such as straw or twigs, and also remove heavy, earthy bellies and daggs that may have been missed when trimming. Fold in the flanks towards the centre (as shown by dotted lines)



2. Turn in britch end and roll the fleece firmly and neatly towards the neck.



3. Draw out the wool at the neck end and twist slightly to form a rope or band of sufficient length to wrap round the rolled fleece. Do not twine this band too tightly or the wool may be damaged.



4. Pull the band tightly around the rolled fleece and tuck in the loose end. Make sure the fleece is firmly secured or it will soon become unrolled.



Wool Handling and Grading

By: Bob Shopland, Alberta Sheep and Wool Commission
(Modified by OSMA)

Shearing and Care of the Fleece

The following practices will improve the quality and increase the value of the wool clip. The manufacturer (purchaser) makes use of the wool only and not the foreign material that may be present in the fleece. Therefore, the quality of fleece is based on its clean wool content. With the exception of lanolin, everything else is waste material. Consequently, it is in the interest of the wool producer to keep debris to a minimum by all practical means, as careful preparation of the fleece will result in higher returns.

1. Consider culling ewes with black fibres and kemp in fleeces and use good-fleeced rams (not at the expense of strong growth and reproductive traits)
2. Use feed racks and feed roughages carefully to prevent seeds, straw and chaff getting into fleeces. Keep sheep away from burrs, if possible.
3. **Do not** use tar, paint, linseed oil, oil crankcase oil, etc. for marking or branding sheep. Use only water-soluble branding fluids, approved for use with livestock.
4. Shear sheep on a clean floor.
5. Avoid “second cuts” in the wool (first cut isn’t close enough to the skin, so a second pass with the clippers is required).
6. Keep fleece all in one piece if possible.
7. Do not shear when fleeces are wet or damp.
8. Spread the fleece skin-side down on a slatted or wire-topped table.
9. Face and leg pieces should be separated from the fleece. For the black-faced breeds in particular, these areas usually contain black or grey fibres that are particularly objectionable to the manufacturer, as they cannot be used in white or pastel-coloured goods.
10. All parts of the fleece that have burrs, chaff or straw, should be removed and packed separately.
11. All dirt and manure encrusted fleece (tag) should be separated and packed separately. Damp tag rolled up in a fleece discolours and damages the surrounding wool.
12. When the low-grade wool has been removed, the most valuable portion is now ready to be tied. One side of the fleece should be folded into the centre one-third of the way and then the other side should be folded in to cover the first fold. The fleece should then be rolled tightly from the britch (hind-end) to shoulder to expose the best portion for inspection when graded (see diagram on previous page). Tie fleece with paper twine or with a strand of wool, if paper twine is not available. **Never use binder twine for tying wool. Strands of twine are a major source of wool contamination.**
13. Black and brown fleeces should be kept separate from the white fleeces. The tags and skirting should be packed separately.
14. Pack wool in clean sacks or bags immediately after shearing in large wool-bags. The upper portion of these bags should be soaked to prevent slippage while being filled, and also should have a handful of tags tied in each bottom corner to facilitate handling of the bags when they are filled. The bag should be mounted on sacking stand with the upper end supported by a ring that holds it open. The fleeces should then be placed in the bag and tramped in firmly. Tight packing permits maximum loading of shipping cars and facilitates handling. When filled, the bag should be released from the ring and sewn with a bag needle and cotton twine. One bag will hold approximately 25 fleeces or over 200 pounds.
15. Storing the packed wool is an important consideration if it is not to be shipped to market immediately. Wool can be held in storage for relatively long periods of time if kept dry and protected from insects. Market wool annually if you can’t ensure that the wool will be kept clear of insects and moisture. Holding wool over may result in loss from shrinkage in weight, discolouration and moth damage

Wool Fibres:

Wool growth is a continuous process and, except for the ‘hair’ breeds, sheep must be shorn periodically. The wool fibre is divided into three sections: the root, the shaft and the tip. The tip of a fibre on a lamb’s fleece is pointed, while the tip from a mature fleece is flat, because of previous shearing.

Sheep breed has a significant bearing on the characteristics of the wool fibre. Representative breeds of various wool grades are shown below (see page 179 for details on grades). Individual sheep of the same breed may have wool that varies either one grade finer or one grade coarser than the breed average

| | |
|--------------|----------------------------------------------------------------------------------------|
| Fine | - Rambouillet, Merino |
| Fine-medium | - Columbia, Romnelet, Targhee |
| Medium | - Southdown, Corriedale |
| Low-medium | - Hampshire, Suffolk, Shropshire, Dorset |
| Low-quarter | - Leicester, Lincoln |
| Carpet Wool | - Scottish Blackface |
| Specialty | - Icelandic, Shetland (often highly valued-contact breeders for marketing information) |
| ‘Hair’ sheep | - Katahdin, Dorper (these breeds do not require shearing, as the fibres are shed) |

Within different breeds, the rate and uniformity of wool growth is very dependent on the sheep’s nutritional status. A sheep on a high plane of nutrition grows wool with a thicker fibre than a sheep on a poor ration. Increasing protein in a ration, for example, can increase the weight of the fleece from 3 lbs to 9 lbs or more. Animals on a sub-maintenance ration will produce a weak fibred and light fleece clip. The diameter within a given fibre can vary as much as 5 microns due to changes in nutrition and the environment. A break or tender spot in the fibre may occur due to a drop in feed quality or an increase in production demands (e.g. ewes in early lactation). Fibre dimension may also be compromised when the animal is stressed (e.g. illness). Studies have also indicated that exposure to short day length results in smaller fibre diameter.

Wool Grading and Classification

To facilitate its sale, wool is classified and graded to determining its value and use. In Canada, wool is sorted based on its origin (Western or Eastern), and then graded for texture, length, and fibre strength.

Wool Grades

Texture, length and strength of fibre determine the grade of the fleece. The size of crimp or wave in the fibre varies with grade, e.g. crimp is barely discernible in fine fleeces while easily seen in coarse fleeces. Different grades of wool have different uses, e.g. fine and 1/2 staple used to make worsted cloth, 3/8 and 1/4 staple used to make blankets, coarse staple used to make carpets and rugs. The term staple denotes fleeces of fibre length of more than two inches. Clothing fleeces are those having a fibre length of less than two inches.

Range Wool is from range flocks predominantly in Western Canada. The breeds of sheep producing the finer grades of wool predominate. Wool is heavier with natural grease or oil. The following grades are found:

- Fine - 22/23 Micron Wool, 2.5” to 3” Staple Length
- Half - 22/24 Micron Wool, 2.5” to 3.5” Staple Length
- Range 3/8 - 26/27 Micron Wool, 3” to 3.5” Staple Length
- Range 1/4 - 30/31 Micron Wool, 3” to 4” Staple Length

Western Domestic from small flocks in Western Canada. The medium grades of wool predominate and there is less grease. The following grades are found:

- Domestic 3/8 - 31/32 Micron Wool, 3” to 3.5” Staple Length
- Domestic 1/4 - 33/34 Micron Wool, 3” to 4” Staple Length

Eastern Domestic is from sheep flocks in Eastern Canada. Medium grades predominate.

Domestic 3/8 - 32/33 Micron, 3” to 4” Staple Length

Domestic 1/4 - 33/34 Micron, 3” to 4” Staple Length

Misc. Grades

Lot A - Black or Brown fleeces

Lot B - White Fleeces Containing Black Fibres

Lot C - Grey Fleeces

Low 1/4 - Coarse - 34/40 Micron Wool Staple Length 4.5” to 10”

Separating Offsorts

S.B.O. - Sorted by owner, S.A.G. - Sorted at grading, Micron - Microscopic measurement of fibre diameter,

One micron = Thousandth part of a millimetre.

Wool Classification

Manufacturers buy wool on a clean or soured basis after all dirt, grease, etc. has been removed. The amount of clean wool is estimated, or determined on actual core test or scouring results. Classification of wool is estimating the amount of clean wool in any given fleece by means of subjective measurement i.e. Bright, Semi-Bright, Dark. The amount of clean wool in a fleece depends on the breed of sheep, geographic and climatic conditions and general care of sheep and fleece.

Rejects In Fleeces

Chaff: This probably makes up the greater percentage of Canadian wool rejects. This is due to the long feeding period in Canada, and where hay is thrown out on the ground or into feeders with a percentage landing on the backs on the sheep. The top half of a sloping hay feeder should be closed in with plywood to avoid a sifting of chaff on the necks and shoulders of sheep while feeding. It is advantageous to place the feed in the feed bunks and then allow the sheep to enter the feed area. Fence feeders prevent excess amounts of chaff getting into the wool.

Tags: Heavy manure tags and sweat locks should be removed. Soft manure can cause heavy manure tags and sheep out on lush grass or wormy sheep tend to be the worst offenders.

Kempy: Some sheep have hair growth well up the leg to give a mixture of hair and wool which degrades the fleece as it lacks strength and will not take dyes the same as wool.

Burry Wool: The wool contains burrs, which are difficult to remove from the wool.

Black Grey or Brown: Coloured fibres or patches of coloured wool in the fleece. These degrade the wool as the fleece cannot be dyed uniform and can only be dyed a dark colour.

Cotted Fleeces: These are fleeces in which the fibres have become matted or felted together while on the sheep. The condition is usually caused by sickness and lack of yoke to protect the fleece. **Soft cotts:** only a small length of the fibre affected. **Hard cotts:** most of the fibre length matted tightly.

Second Cuts: Short pieces of wool produced by cutting the staple twice in shearing.

Stained Wool: Wool that has been stained mainly by urine which cannot be scoured completely white.

Rebates and Deductions

Wool handling Rebate: is a refund based on a pre-determined rate for wool slips that are well packaged and prepared by the producer. Criteria as follows:

1. Minimum shipment 200 pounds.
2. All offsorts, dark fleeces etc., separated from main grades.
3. High percentage of bright wools.
4. Well packed sacks to reduce freight costs.

Scrutiny Fee: is a charge based on a pre-determined rate for extremely poorly prepared wool clips that require additional time and effort to grade and process, i.e. fleeces tied with baler twine or containing other contaminations.

Freight Rebate: an additional rebate for exceptionally well packed wooolsacks

Supplies, Sacks and Twine: refers to purchases made of these items and charged on account. At the time of wool settlement any outstanding amount is transferred to the wool account.

The Canadian Co-operative Wool Growers

The Co-operative was established in 1918 by the sheep industry as a national system of collecting and marketing its members' wool on a co-operative basis. This meant that regardless of the size of the wool clip, the time of year received or distance from the market, each member was paid the same price for the same grade of wool. Being merely an instrument of the growers, the company is non-profitable and thus operates quite simply. It collects, grades, measures and markets the wool and after deducting the cost of operations returns the entire difference to the growers.

The Co-operative grades and markets approximately 2.5 million pounds of raw wool each year; the majority of this coming from Alberta and Ontario. Each of the three general classes of wool (fine, medium and coarse) are sold wherever the best price is available.

Wool is received directly from the producer by way of truck or rail. The wool arrives in large sacks, raw from the sheep. At the warehouse it is graded according to type classification, quality (diameter and length of the fibres, amount of grease, amount of foreign matter present) and method of preparation. Wool of similar types and quality are hydraulically packed in bales weighing 600lbs. or more. They are stored until sold. Ninety percent of all the wool is exported out of Canada.

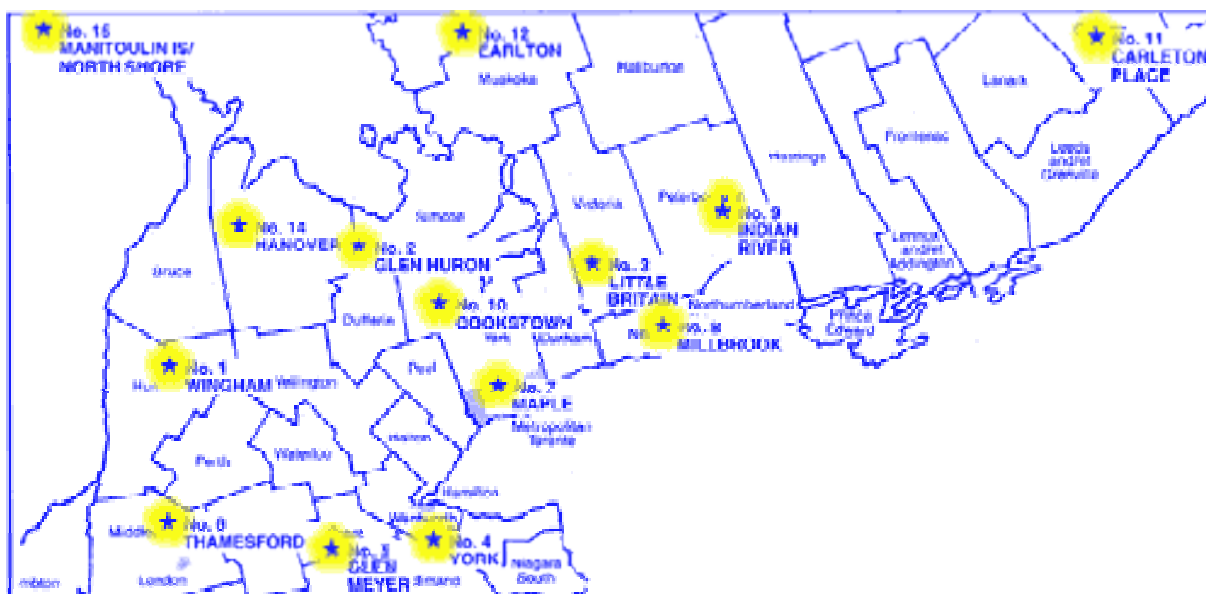
In addition to handling wool, the Co-operative operates Stockman Supply outlets across the country and a Real Wool Shop at Carleton Place. The Co-operative also publishes an annual magazine entitled *The Canadian Co-operative Wool Growers Magazine*, which is designed to assist the wool producer with information and a mail order catalogue for sheep supplies.

The company's mandate is to be a producer co-operative endeavouring to market wool at the top price it deserves while operating the business efficiently to maximize returns to the wool producer.

Canadian Co-operative Wool Growers Limited occupies what was once the round house and machine shops for the Canadian Pacific Railway. The Company is situated just off Moore Street in Carleton Place and is a totally Canadian Company.

Ontario Wool Collection Deposit (2001)

(Note: These locations and contacts may not be current. Check with the CCWG for current listings)
Contact the CCWG for bags for packing raw wool



(Note: These locations and contacts may not be current. Check with the CCWG for current listings)

| Number & Name | Location/Details | Contact & Number |
|------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| No. 1 WINGHAM WOOL DEPOT | R.R. #2, Wingham, Ontario NOG 2W0 (Formerly located at Ripley, Ont.) | John L. Farrell (519) 357-1058 |
| No.2 GLEN HURON WOOL DEPOT | R.R. #1, Glen Huron, Ontario LOM 1S0 | Richard Metheral (705) 466-3295 |
| No. 3 LITTLE BRITAIN WOOL DEPOT | R.R. #1, Little Britain, Ontario KOM 2C0 | Gord Mark (705) 786-2679 |
| No.4 YORK WOOL DEPOT | R.R. #1, York, Ontario NOA 1RO | Jerry Kelleher (905) 772-3298 |
| No. 5 GLEN MEYER WOOL DEPOT | R.R. #5, Langton, Ontario NOE iGO | Garnet Russell (519) 875-4007 |
| No.6 THAMESFORD WOOL DEPOT | R.R. #4, Thamesford, Ontario NOM 2M0 | Doug Kennedy (519) 285-2845 |
| No.7 MAPLE WOOL DEPOT | R. R. #1, Maple, Ontario L6A 1S1 | Wilfred G. Bowes (905) 832-1114 |
| No.8 MILLBROOK WOOL DEPOT | R.R. #2, Millbrook, Ontario L0A 1GO | Ruco Braat (705) 939-2366 |
| No.9 INDIAN RIVER WOOL DEPOT | R.R. #1, Indian River, Ontario KOL 2B0 | Bill McMaster (705) 295-4231 |
| No. 10 COOKSTOWN - BRANCH OF CCWG | Located at the Ontario Stockyards Inc. R.R. #1, Hwy. #89, Cookstown, Ontario LOL 1LO | John Cuthbert or Al DeGasparro (705) 458-4800 |
| No. 11 CARLETON PLACE | HEAD OFFICE & WOOL GRADING WAREHOUSE - C.C.W.G. LTD. 142 Franktown Road, Carleton Place, Ont. K7C 3P3 | Jim McNeely (613) 257-2714 |

Chapter 9: Shearing and Hoof Trimming – The Canadian Co-operative Wool Growers

| | | |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| | Hours of Operation: 8:00 a.m. to 5:00 p.m. Weekdays 9:00 am. to 3:00 p.m. Saturday. Please call for more information. | |
| No. 12 EARLTON WOOL DEPOT | c/o SEMSI LTD., 69, 10th Avenue North, Earlton Ont. POJ 1EO | Madeleine Séjourné (705) 563-2671 |
| No. 14 HANOVER WOOL DEPOT | R.R. #3, Hanover, Ontario N4N 3B9 | Judy Miller-Shelley (519) 364-6193 |
| No. 15 MANITOULIN ISLAND / NORTH SHORE WOOL DEPOT | R.R. #2, Gore Bay, Ontario POP 1HO | Henry Chaytor (705) 282-3385 |

Hoof Trimming

By: Dr. Cathy Gallivan, PhD: 'Sheep Canada' Summer 2002
(Modified by OSMA, 2002)

Sooner or later most shepherds have to trim a few feet. The frequency of this job varies with the breed of sheep and the environment in which they are kept. In an extensive grazing environment, where sheep are required to walk long distances, hooves wear down naturally and generally require little trimming. Sheep housed in smaller areas or in pastures with soft, wet ground may require trimming at least once or twice a year. Sheep that are housed on manure packs, for instance, may require more hoof care.

The rate of hoof growth varies to some extent with the breed. Some breeds, such as Rambouillet, have been selected for their ability to travel long distances in very extensive grazing conditions. These breeds have feet that grow faster than other breeds commonly found in farm flocks grazing smaller areas, and may require more trimming. The other major difference between breeds is the hardness of their feet. Sheep with white feet generally have hooves that are softer and easier to trim than breeds with black feet. This is another example of breeds being adapted for a particular environment, as many of the breeds with black feet (such as the Suffolk or Hampshire) originated in parts of the UK where the ground may be soft and wet.

Regardless of colour, sheep feet are softer and easier to trim when the sheep have been standing on soft or wet ground (e.g. late spring) than they will be after standing on hard dry ground (e.g. mid-summer). Shepherds planning to trim the whole flock in one session would be well-advised to plan the event to coincide with a period when the feet will be softer and easier to trim.

In some flocks, foot trimming is done at least once a year on all animals, often before they are turned out onto summer pasture. However, a recent survey of sheep producers in Alberta revealed that many flock owners simply monitor the hoof condition of their sheep and trim individual animals as required.

There are a number of foot trimming tools available that are specifically designed for trimming sheep. The type of design you choose is a matter of personnel preference. Some have handles that roll back and forth to make it easier on the operators hands. Some have serrated blades and some blades are plain. Lighter-weight pruning shears are cheaper and may be suitable for small flocks, but won't stand up to trimming hundreds of animal's feet.

The typical method involves catching, tipping, trimming all four feet and then releasing the sheep (see Chapter 2 for information on catching and tipping sheep). Every shepherd will develop his or her own style of hoof trimming. The diagram below will get you started. Be careful and don't get frustrated. You'll get faster as you gain experience. If you make a mistake and cut too deep, don't panic. It's a bit like getting a hangnail – it does hurt and it may bleed, but no one ever died of a hangnail.

As sheep have gotten bigger and stronger and shepherds older and smarter, a number of operations have turned to tipping tables or crates. Crates are usually placed in the handling system so that a sheep walks down the chute, into the crate, and can then be easily turned on her back for trimming. These crates can considerably speed up the job of foot trimming, and make it so that the shepherd can walk upright when the job is done! Some models require turning the sheep (in the crate) by hand, while others are spring loaded or hydraulically operated. When there are a lot of sheep to be trimmed, feet are particularly hard and dry, or when the use of a tipping table makes it important that the animals be handled quickly, pneumatic hoof trimmers that run off air compressors can also be used to dramatically reduce the time required.

For more information regarding the magazine 'Sheep Canada' call the toll-free number 1-888-241-5124 or check out their web site www.sheepcanada.com

Trimming Hooves:

Fig. 2

