

## SO YOU WANT TO WASH YOUR OWN WOOL...

Qualicum Bay Fibre works is happy to accept pre-washed fleeces for processing - IF they are adequately clean. However, we cannot process fibre that is not absolutely free of grease (or other protective coating, in the case of alpaca), for the following reasons:

1. Residual grease in a fleece makes it sticky, and, particularly with fine wool, more prone to tearing and producing nibs.
2. Greasy wool doesn't feed well off the carder, resulting in thick-and-thin rovings.
3. Residual grease holds dirt, and the dirt and grease come off on the machinery, resulting in increased cleaning/maintenance time.
4. The grease can build up on the rollers causing the fibre to cling and causing tangles and down-time while everything is being straightened out.
5. Insufficiently cleaned wool doesn't feel nice, doesn't draft well in spinning, and is generally unpleasant to work with.

In short, insufficiently washed wool results in increased processing time and a lower quality product; therefore, my policy has to be zero tolerance for grease in fibre.

3 and 4 above also apply to alpaca fibre. While alpaca doesn't have the perceptible grease of sheep's wool, it does possess a protective coating, which while not perceptible to touch, nevertheless will, if not washed out completely, cause similar problems with the equipment.

I hate having to re-wash fleeces, so to avoid disappointment to all parties, please be sure your home-washed wool is truly clean before sending it in. Following is the method which I have developed over the past 3 years, and which I find to be effective for both wool and alpaca.

Washing wool or alpaca fibre starts with skirting and sorting your fleece. See Fibre Selection and Evaluation for an overview of this process.

First, I strongly recommend always washing fibre in a laundry bag or bags. First and foremost, in hand-washing this helps keep the washing-person from over-handling the fibre, lowering the risk of felting (I have never had a fleece felt using this procedure). Secondly, if you are spinning your wool out in a washing machine, this keeps detritus from escaping and possibly clogging up your outlets. Thirdly, while this may not apply to many home washers, it makes it possible to wash several different fleeces at the same time without getting them mixed up with each other.

A word about detergents. I have spent a lot of time washing wool in the last three years, and I have tried a number of detergents, soaps, cleaning solutions, and combinations thereof. My primary criteria are 1) it's safe for the fibre, 2) as cheap as possible, 3) it works first time every time, and 4) it works on all fibres all the time. The following is my current methodology, which I will continue to use until and unless I find a reason to change it. I use an inexpensive laundry detergent for the main wash, and a small amount of dishwashing liquid for the second. I am currently using washing soda in both washes – I tried it after I got some for de-gumming silk, and now I wouldn't be without it. It does a great job of getting the grease out. Other than that, use what works for you.

I do not pre-soak, as my experiments have shown no advantage to doing so, but go ahead, if it makes you feel better.

I do a two-stage wash, with 3-4 rinses. The basic procedure is:

- 1) First wash – “Bath-hot” water. You want the water to be comfortable to get your hands into, but it should not feel lukewarm or cool. The combination of detergent, lanolin and cool water can sometimes result in a greasy coating that appears to be next to impossible to wash out. This does not happen always, but you don't want to take the chance. I try to make this wash as hot as possible while still being able to work in it.

Run your water, and add detergent. On this first wash, I use laundry detergent and washing soda – about  $\frac{1}{4}$  cup each for ~3 pounds (~1.33 kilos) of fibre. Be sure that your washing solution is thoroughly dissolved, and add your fibre. Press it gently beneath the surface, and squeeze to make sure that the washing solution penetrates completely. Let it sit for a few minutes, and repeat the pressing and squeezing. If you're getting bubbles coming up, this means that there was still air trapped in the fleece, and that means that your washing solution is only now reaching those areas – leave it for a few more minutes. Continue until there are no more bubbles when you squeeze. Drain and spin out in your washer, if possible – I usually run it through 2 spin cycles to be sure of getting as much water out as possible.

- 2) First rinse. Bath-hot again – run your water and add your fleece. This time, it should sink quite readily. Press and squeeze, then drain and spin out again.
- 3) Second wash. HOT water – as hot as possible. It should be too hot to put your hands in. I use about 2 tablespoons each of dishwashing liquid and washing soda. Use an implement to gently push your fibre down until it is completely submerged. Leave 5-15 minutes.

All fleeces may not need this second wash, however, many do. It is essential with alpaca. I find it easier simply to do the double wash every time, rather than having to rewash in case the first wash doesn't quite get it all.

- 4) Second rinse. Bath hot. Press and squeeze, drain and spin.
- 5) Third and any subsequent rinses. By this time, water temperature is not a critical issue. Use what temperature is comfortable to you. After pressing and squeezing, observe the surface of the water. Is it clear, or is there a surface haze if very fine bubbles, or little rafts of same? This is the surest indication I have found that there is still grease in the fleece - and it works for both wool and alpaca. If you're seeing this, *rewash*.

How many more rinses you do is largely a matter of preference. My first spinning instructor, when asked how many times you should rinse your wool, said "Until you'd drink it!" I assume she meant "...if you didn't know you'd just taken a bunch of wool out of it." At any rate, I'm inclined to feel that if the water is so clear that it would appear drinkable, that means that there was nothing to rinse out - and therefore that the last rinse was a waste of time and water. So I will rinse until, in my experience, I feel that the *next* rinse would appear to be of potable quality. However, if you have done four or more rinses, and each time it looks like you need to do just one more - you probably need to re-wash. Alpaca is very prone to this, but I haven't had a problem since I started using washing soda in the wash.

Now, after your final spin, decant your fibre from its bag and spread it out to dry. Handle gently - it's still wet and you don't want to felt it - but open it out as much as possible. It may feel like its clumped and almost felted (especially alpaca), but don't try to pull it apart at this stage. You'll probably find that once dry it will come apart quite easily. Let it air dry, and about once a day turn it and start opening up any clumps that are still damp. Once the fleece is mostly dry, continue to evaluate for grease residue. As you handle the fleece, does it feel soft and resilient, or lumpy and stiff? Rub the cut end of a lock between your fingers, then rub your fingers together. Is there any sticky or greasy feel? If so, re-wash. Get your nose into your fleece. Lanolin has a sort of a waxy smell - actually quite pleasant, esthetically, but if you can smell it your wool is not clean - re-wash. Alpaca tends to have a dusty smell if it's not quite clean. Pull a few locks apart. Do the fibres separate readily, or do they tend to stick together? Check throughout the fleece - it is possible to have greasy sections in an otherwise clean fleece.

## Common problems

Don't try to wash too much fibre at a time. I do about 3 lbs (1.33 k) of wool – 2 (1 k) of alpaca – in a laundry sink about 19 X 20 inches (48 X 51 cm), and I run the water about 6 - 8 inches (15 - 20 cm) deep. Your fibre should be able to move freely in the water, and have room to be completely submerged. It will float, but it shouldn't stick above the water because there is no room for it to sink. If you're using a kitchen sink, a pound (.25 k) would be about the most you'd want to do at a time – maybe less, depending on the fleece. If you're using a washing machine, how much you can do will depend on the washer, but be sure that your fibre has plenty of room to move in the water.

Speaking of washing machines, several friends have reported using front loading washers with a wool cycle to wash their fleeces. I tried it out, and it does work in many cases, so if you have a front loader, you may want to try it. HOWEVER it is not safe for all fleeces – I found that it worked quite well with down breeds, or even fine-wool breeds, but longwools such as Romney or Cotswold are much more prone to felting with this technique. I didn't get around to trying this with alpaca, though rumour has it that it does quite well. I can't recommend it, but if you want to try it with your wool, it can be effective with the right fibre.

The other main problem is trying to wash fleece that has been stored unwashed or inadequately washed. The lanolin hardens over time, and the longer it's stored the harder it is to get the grease out – also, it seems, the more often it is washed without getting clean, the more resistant the grease is to washing. Unwashed fleece will also deteriorate over time, and may become brittle or tender, and thus unusable. I've found that the addition of washing soda to the wash is a major improvement in washing old or insufficiently washed wool, but if the wool has deteriorated in storage there is not much that can be done to rescue it.