

Getting The Most  
From Your Animal's  
Fiber

Courtesy of Fantasy Fibers

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**PURPOSE**

This document is intended to help people understand, how they may be able to get more value, from their animal's fiber.

## HOW CAN I GET THE MOST FROM MY FIBER?

### WHY?

The cost and upkeep of our fiber animals is substantial. It is therefore important for us to get the most out of our investment. Getting the most from their fiber is one way to improve our return. Based upon our processing experience here are some worthwhile considerations that might be helpful.

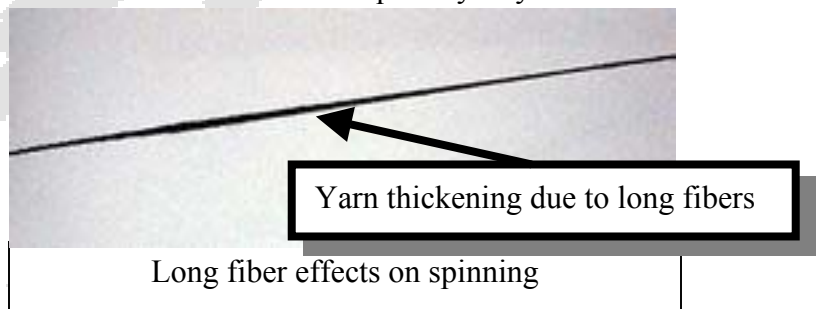
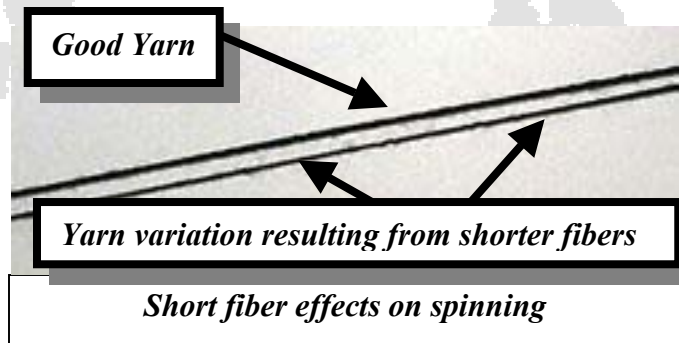
### FACTORS

Thanks to our Customers, at Fantasy Fibers, we are in the unique position, of seeing a variety of fine and beautiful fibers. While some fiber may be physically similar, the quality of the batts, roving or yarn, that they become, can be quite different. Unfortunately, the potential for the fiber is not always realized. The major influencing factors we have seen are fiber cleanliness and length. We will start with fiber length.

### FIBER LENGTH

Our equipment, best processes fiber into yarn at lengths of three (3) to six (6) inches. While we can tolerate larger variations in fiber length, they have the potential to cause thicker and thinner areas within the yarn. Second cuts, less than two (2) inches in length, do not card well, degrade quality and cause weakened areas in the yarn.

Fibers longer than seven (7) inches, present a challenge in the draft, causing heavier areas. Significant thick areas need to be removed and reduce the quantity of yarn. The production of batts or roving is not as critical, but cannot be disregarded. Fiber that is less than two (2) inches has a tendency to fall out in the carder. Fiber greater than twelve (12) inches can wrap in the carding machine and not make it to the finished product.



### Recommendation

The rate of fiber growth is different for all animals, even within a species. Some can only be sheered once a year, some twice. Determine the frequency, which best suites your animal's fiber growth to insure optimum (3 to 6 inch for machine spinning) fiber length. Do not include your second cuts. Discard them or plan on making something other than yarn (i.e. pet beds). In all cases, it is easier to initially exclude second cuts than it is to try and remove them later.

## **FIBER CLEANLINESS**

Dirty fiber creates a variety of problems, none of which are any good. Dirt and lanolin generally presents more of a problem than vegetation. Some vegetation will fall out during processing, but much of it will be returned in your product (roving, batts or yarn). In the carder, dirt causes fiber to



*Yarn slub from dirty fiber*

abrade and stick in the carding cloth. This reduces fiber quality and quantity of finished product. As an example: A two (2) pound run of dirty fiber can lose 8 ounces or more, as compared to a clean run, of the same quantity, losing as little as one (1) ounce. When it comes to yarn, there is again more of loss with dirty versus clean fiber. Half ( $\frac{1}{2}$ ) an ounce or less for clean fiber, while dirty fiber can easily lose four (4) ounces or more. To top it all off, charges are normally based upon the yielded product weight, which, in this case, includes the dirt. Do you really want to be paying for dirt? To get the most from your fiber be sure to get it clean. This is easier said than done. And what is clean enough?

## **Recommendation**

Here again, there are a variety of fibers and equally a number of approaches to cleaning. This is not the one and only solution, but a recommendation of what has worked for us. Fiber containing body oil like lanolin (some camelids can even have a grease/oil on their fiber) require more work to get clean. There are two opportunities for getting fiber clean. One is while the fiber is still on the animal. Covering the fleece to protect the fiber, bathing, brushing and blowing before shearing will remove dust, dirt, vegetation and particulates more easily. Once sheared, hand picking of vegetation and thoroughly washing the fleece is all that can be done to complete the cleaning.

## **WASHING**

Processing requires clean, grease-free wool and mohair (llama, alpaca, dog and some other exotic fibers that are not coated with a lanolin are easier to get clean, but should not be underestimated. Clean fiber should not be difficult to achieve and will produce a higher quality product. Two methods are detailed below. Regardless of which method you choose, keep in mind, four (4) key points to good cleaning:

1. LIMIT THE AMOUNT OF FIBER BEING WASHED TO YOUR EQUIPMENT  
Example:
  - a. Loose in a large washer place no more than 3 pounds of fiber at a time
  - b. If using laundry bags wash no more than 1.5 pounds of fiber at a time
2. VERY HOT WATER
3. LOTS of DETERGENT
4. NO AGITATION!!!!

### USING A WASHING MACHINE

Fill the washer with very hot water, as hot as you can get out of your water heater. If you have set the water temperature down on your water heater, you may want to add some boiling water, heated on the stove. Add four to five times the amount of liquid detergent that you would use for a similar size load of clothes. Turn off washer. Put the fleece in washer tub, pushing it under the soapy water, using a dowel or broom handle. Turn washer to the end of the LAST SPIN cycle. Close the lid and let soak for about 45 minutes. **Don't let the water get cold and do not turn on the washer agitation.** Spin the water out of fleece. Lift fleece out and wipe inside of washer with a paper towel. Fill the washer again with very hot water. Put fleece back in (now is the time to [test cleanliness](#)) and let soak for about 30 minutes with lid closed and washer turned off as in the washing of your fleece. **Don't let the water get cold and do not turn on the washer agitation.** Spin the water out of the fleece. At this point, some fleece may be ready to dry. If fleece is especially fine or dirty, you may need to repeat the wash, rinse steps again. Mohair often needs multiple washes, as does merino, rambouillet and sometimes other finer wools. Some fleece may need one last rinse. Use hot water and about one-half cup of white vinegar and soak fleece 30 minutes, then spin out. Spread fleece on window screens or some other open supports to air dry.

### USING A BATH TUB OR OTHER LARGE CONTAINER

Using very hot water and the same amount of detergent as above, follow essentially the same steps as for the washer method. The key to washing in some kind of tub is to have a container that you can lift the wet fleece into so that you don't have your fill water running directly on the fleece. Some type of netting can be made to help contain the fleece for lifting, but this can increase the number of wash and rinse cycles to get the fiber clean. Any liquid detergent without bleach, should work fine. Be sure to [test cleanliness](#) at the beginning of the rinse cycle. However, be cautious of products with conditioners. They can leave a residue on fiber, which after time or when exposed to heat will become tacky causing nepping, noiling fiber damage and impede the carding process.

### THE BOTTOM LINE FOR GETTING FIBER CLEAN IS:

1. LIMIT THE AMOUNT OF FIBER BEING WASHED TO YOUR EQUIPMENT  
Example:
  - a. Loose in a large tub (similar to a washer) place no more than 3 pounds of fiber at a time
  - b. If using laundry bags wash no more than 1.5 pounds of fiber at a time
2. VERY HOT WATER
3. LOTS of DETERGENT
4. NO AGITATION!!!!

**TESTING FIBER CLEANLINESS**

During the washing process a white coffee mug can be most effectively used, shortly after placing the fleece into the very hot water, to determine fiber cleanliness. [See WASHING](#). Take the following steps:

1. Wait 5 – 10 minutes after placing the fleece into the very hot rinse water
2. Get enough water in the cup to barely cover the bottom
3. In good light, tilt the cup
4. If the water is clear with no particles, the fiber is clean
5. If the water is discolored or you can see particles, the fiber needs to be washed again

Take the following steps to test a fleece that is not being washed:

1. Place an amount of water and detergent to just cover the bottom of the cup
2. Microwave the cup for about 30 to 45 seconds to get the water very hot
3. Place a small tuft of fiber from the fleece in the cup
4. Make certain the fiber is totally soaked (a tooth pick can be helpful)
5. In approximately 30 seconds remove the fiber
6. You may need to wait for the water to cool (make certain the fiber is removed)
7. If the water is clear with no particles the fiber is clean
8. If the water is discolored or you can see particles, the fiber needs to be washed again



Fiber immersed in solution



Fiber needs to be washed again.