

UNDERSTANDING DEER HAIR AND SELECTING THE CORRECT TYPE FOR YOUR TYING APPLICATIONS

The whitetail deer provides the fly tier with a variety of hair for various patterns used in both salt and freshwater. This material is easily obtainable through the tier processing their own hides or purchasing hair at your local fly shop or favorite mail order catalog.

The two major species deer in North America are the whitetail (*O. virginianus*) and the mule deer (*O. hemionus*). Worldwide there are 30 subspecies of whitetail of which 17 are found in North America. Mule deer comprise 11 subspecies of which eight live in North America. This is an important fact for the fly tier to know since some subspecies have hair that is much more suitable for tying specific flies than other subspecies.

Different regions of the North American continent have specific subspecies and each of these deer have their own unique characteristics. The subspecies that inhabit the northern states and southern Canada generally possess the best overall hair quality for a variety of tying requirements. It must be understood that each whitetail deer is unique in terms of the qualities of the hair on that animal.

The hair that is used in tying flies is obtained from the "winter coat" (blue coat) of the whitetail. The term "blue coat" is derived from the fact that the hair grows through the deer's skin. Before the hair is fully grown out the roots make the inside of the skin dark or "blue". Once the hair is fully grown out the inside of the skin is pale or cream in color.

The summer coat ("red coat") lacks the qualities necessary to make good tying hair. It is solid in texture, much more tapered, and wirey in texture. The majority of the winter coat is kinky to wavy in appearance, and is described as "hollow". This is not a completely accurate description of winter hair as it not hollow like a drinking straw, but rather each hair is filled with hundreds of tiny air pockets which are known as vacuous chambers. The "guard hairs" that we use to tie flies are an important part of the insulation systems of the animal. Winter deer hair floats because of the "hollow" characteristics.

All of the hoofed animals or ungulates go through two complete hair molts every year. The most important molt to the fly tier is that which occurs in the fall. This process begins in late August or early September and is triggered by shorter periods of daylight in the fall. The pineal gland located in the deer's brain triggers the hair change. Altitude also has some affect on the beginning of the molting process. The new winter coat pushes out the summer coat until the entire coat has been replaced. The new winter coat is obviously very short similar to newly emerging grass seed that has just started to grow. This short hair when it reaches about one inch provides the perfect hair for caddis flies, comparaduns, and small muddlers or bullet heads, just to mention a few patterns. This shorter hair is generally available in Ohio, Michigan, Minnesota, and Wisconsin during the first three weeks of October.

The hair grows very rapidly and will reach about 1 1/4" in about 30 days and 2" in about 45 to 50 days. The molting process will begin later in the southern states. In the northern latitudes by mid to late November the hair is fully grown out and will remain until late April or early May.

The fully grown out hair makes for excellent spinning and stacking hair for tying bass bug or other large hair flies. Refer to the attached deer hide chart to identify the various parts of the hide which produces hair for specific tying purposes. No two deer hides of comparable age and geographic location are exactly the same in color and texture. The quality of a particular animal's hair for tying is determined by heredity, food, age, and sex. A quality diet of corn, beans, apples, acorns, and many other plants is reflected in a healthy animal's hair. Hair from slightly older deer (three to five years) is usually superior in terms of the qualities sought for spinning and stacking. It is extremely difficult to obtain deer over four years of age since the average deer only survives two and one half years.

If you have access to a processing facility or meat market that handles the deer for the hunter you will have the opportunity to view or inspect a large number of hides and begin to see the differences between them.

HAIR TEXTURE - TYING CHARACTERISTICS

Fine.....Will flare slightly; excellent for wings and tails. Hair will normally be dark in color.
 Medium..... Will flare to a maximum of 45 degrees. Color of hair will be brown/gray.
 Coarse.....Will flare to almost 90 degrees. Excellent for spun hair flies. Color can vary from white to brown/gray.

FLY TYING HAIR FROM ROCKY MOUNTAIN DUBBING

TYPE	MEDIUM	HAIR LENGTH
ELK		
Bull.....	Medium.....	1" - 2 1/2"
Cow (Bass Hair).....	Coarse.....	1 1/2" - 2 1/2"
Yearling.....	Medium.....	1 1/2" - 2 1/2"
Hock.....	Medium.....	3/4" - 1 1/4"
Mane.....	Fine.....	3" - 6"
Rump.....	Coarse.....	2 1/2" - 4"
DEER		
Body Hair.....	Coarse.....	1 1/2" - 2 1/2"
Neck Hair.....	Medium soft.....	3/4" - 1 1/4"
Texas Whitetail.....	Fine.....	3/4" - 1 1/4"
Early Season.....	Medium Stiff.....	1/2" - 2 1/2"
ANTELOPE	Coarse-brittle.....	1" - 1 1/2"
CARIBOU	Fine.....	3/4" - 1 1/2"
MOOSE		
Body.....	Medium - Stiff.....	1/2" - 2"
Mane.....	Coarse.....	2 1/2" - 8"



Most processors and distributors of whitetail hair obtain their hides from Minnesota and Wisconsin. A small percentage also comes from the northwestern whitetail and Dakota whitetail.

Texas also provides some hides that are used for small trout flies. The length and texture of the Texas whitetail is quite different for the various northern subspecies.

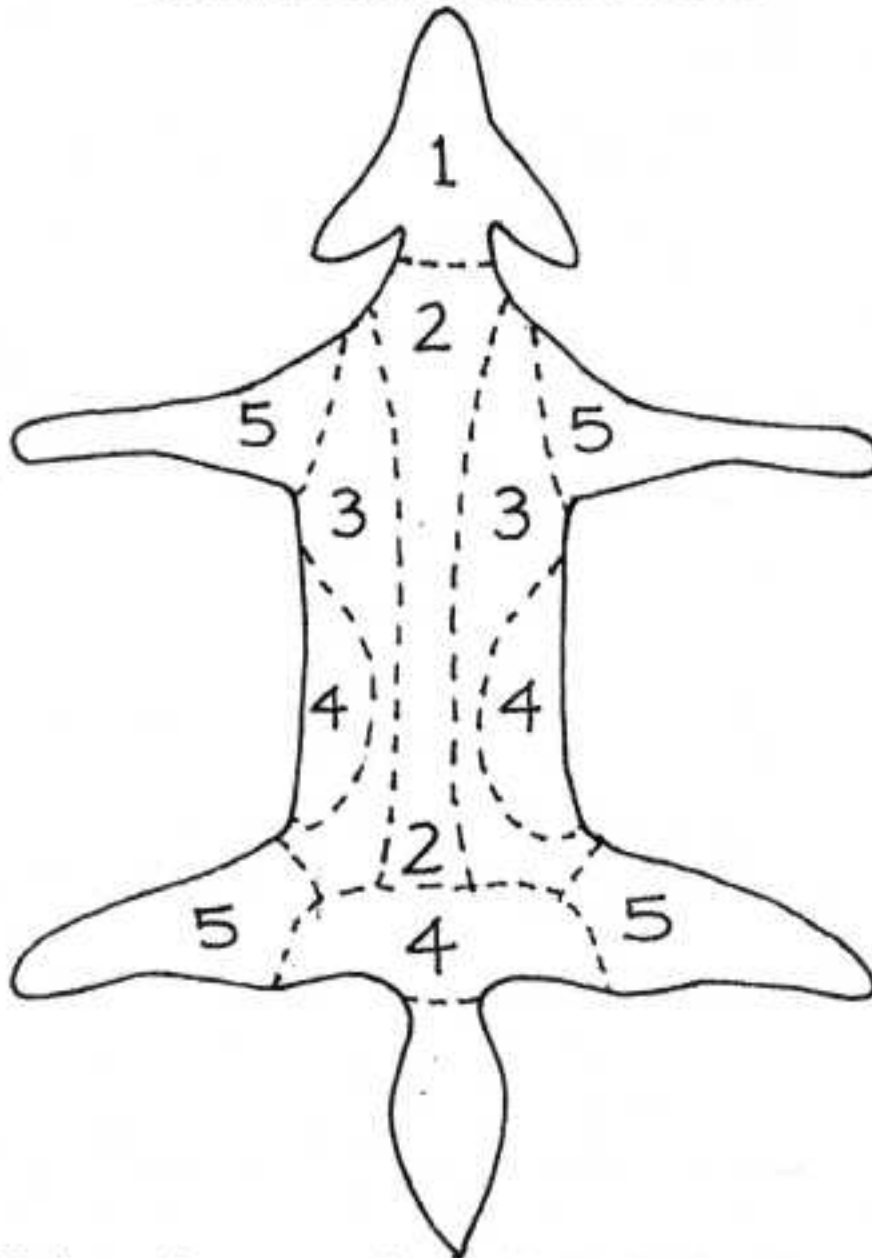
Mule Deer Subspecies Ranges



Sitka blacktail deer
Columbian blacktail deer
Rocky Mtn. mule deer
California mule deer
Southern mule deer
Inyo mule deer
Burrro deer
Desert mule deer

Although mule deer is not as prevalent as a fly tying material it is very similar to whitetail hair in texture and length. The color of mule deer is much more consistent from one deer to the next. The Rocky Mountain mule deer is the most commonly used animal of this species for fly tying.

NORTHERN WOODLAND WHITETAIL DEER
HARVESTED DURING NOVEMBER - JANUARY



1. MASK - short, medium texture, usually not straight. Marginal for caddis, comparaduns.
2. SPINAL CORD (GRETZEN). Fine texture, medium to long, usually dark color. For wings.
3. BODY HAIR. Medium to long hair, medium to coarse texture. Good for spinning medium to large bass bugs. Medium hair good for Madame X, hoppers and others where floatability is required.
4. RUMP AND BELLY HAIR. Long coarse hair ideal for spinning large bass bugs, mice, etc. White belly hair excellent for dying. Belly hair flares extremely well.
5. SHORT FINE TEXTURED HAIR (hock). Good for small Wulff patterns and small caddis.
6. BUCKTAIL. Ideal for streamers, trolling flies, Lefty's Deceiver's etc. Hair length will vary. Saltwater tails will have hair at least 4" long. Average hair is 3".

USES FOR FLY TYING HAIR FROM VARIOUS UNGULATES

1. CARIBOU - Probably the best hair for tying Irrisistibles. Medium to short in length. Very soft Texture and gray to white in color.
2. ROE DEER - From northern Europe and Siberia. This hair is a cross between caribou and whitetail hair in texture. Medium length in late season animals. Gray brown in color.
3. MOOSE BODY HAIR - Very stiff, not suited for spinning. Makes excellent tails on dries, antennae on nymphs, etc. Length can vary for the short hock hair up to 3" long.
4. MOOSE MANE - Very long (3" - 8") with medium texture. Not suited to spinning. By wrapping a black and white hair, this material makes a beautiful mosquito or other segmented dry fly body. Also useful for tails.
5. TEXAS WHITETAIL - Very fine texture, short to medium length. Some hides tend to hair curved hair that is not useful for tying. Dark to light in color. Makes beautiful dry fly wings.
6. MULE DEER - Very similar to whitetail in texture and length. Hair can sometimes be curved. Consistent battle ship gray color. No white belly hair on this species. Gretzen hair is fine and dark.
7. COASTAL DEER HAIR - A little heavier than Texas whitetail but not suitable for spinning. This hair comes from the Columbia Blacktail deer and is not always easy to obtain.
8. ANTELOPE - An excellent spinning hair but susceptible to breaking under modest thread pressure. Soak in water before using. Antelope hair also tends to have broken tips which eliminates using the hair for collars. Rocky Mountain Dubbing treats their antelope with an oil to reduce the tendency to break easily.
9. ELK - There are three main types of hair in this species - yearling, cow, and bull. The yearling hair is excellent for small comparaduns down to size 22. Early season cow elk makes excellent caddis and humpy hair, while the late season hair is good for spinning bass bugs. Cow elk tends to be more durable than deer hair. Bull elk tends to be the stiffest of the elk hair and has a little more taper than the cow. Elk mane is right behind moose body hair as an excellent tailing material for dry flies. The hair tends to be fairly consistent from one hide to another of the same sex. It is important to carefully inspect each piece of hair to make sure it has the properties required to tie specific flies.
10. DALL SHEEP - A very dense, white hair that is similar to caribou in texture. Very soft texture but flares and spins very well. Most use for small spun hair bodies on dry flies.
11. IMPALA - Not easy to fine. A fine, straight hair that flares very little. Excellent dry fly wing material.