There is an inherent richness, a natural beauty to American wool. The fertile valleys, high plateaus and awe-inspiring deserts of the United States produce an environmentally friendly fiber with exceptional ‘memory’ and a high degree of crimp, imparting extraordinary resilience and loft to yarns and fabrics.

The American Wool Council developed the U.S. Certified Wool Program to help buyers identify the best wools in the United States. The program follows the Code of Practice for Preparation of U.S. Wool and offers a set of standards for a self-regulatory approach to wool clip preparation. In addition to producers, shearers are also encouraged to participate.

American wool has many uses and is known for its ‘loftiness.’ Blending is a common practice with buyers of American wool. Taking U.S. wool and blending it with other wools is an exceptional process to add bulk to finished products. With available wools that vary in diameter and frequency of crimp, buyers are sure to find suitable wools for their blending needs.

The value of American wool lies in its flexibility and versatility, allowing wool processors to use it in a wide range of products, by itself or in blends with wool of other origins and with other fibers.

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AMERICAN WOOL

RESILIENT
The natural resilience of American wool and its resistance to compression enables its products to retain their natural shape and bounce. These characteristics make U.S. wool ideal for use in knitwear, hosiery and other high-bulk end uses.

VERSATILE
American wool is well suited to produce high-quality knits and hosiery products. Additionally, U.S. wool is suited for fine- to heavy-weight fabrics, as well as wools for home furnishings or nonwovens. There is a good variety of high resistance-to-compression wools available in the United States that provide loftiness.

SUSTAINABLE
U.S. wool producers are committed to quality and conservation and are stewards of not only the animals but also the land. They produce wool by natural grazing compatible with the environment. American sheep producers are proud of the high-quality wool products they produce from nature’s renewable resources.

“Our European customers appreciate the diversity of the characteristics in U.S. wools. The ‘bounce’ and ‘loftiness’ U.S. wools add to yarns is very positive. Also, its resilience and special ‘hand’ fills the goals for manufacturers to offer products beyond the common standards. Europe is a highly competitive arena for U.S. wools and they have found a long-term client in this market.”

Bianca Losekoot
Lugresso Services Sagl
U.S. Sheep Production

Sheep production in the United States has a long and rich history. Sheep have been an important part of the American agricultural landscape since their introduction into the country by Spanish explorers in the early 1500s.

Today, wool is grown in all 50 states, with the majority of the wool produced in the western part of the country. As of January 2016, there were 5.32 million head of sheep in the United States and more than 88,000 sheep farms and ranches. The highest sheep-producing states are located west of the Mississippi River, where most of the larger sheep ranches reside. The eastern part of the country supports a greater number of moderate sized, pasture-based operations.

Although U.S. wool is available throughout the year, the larger quantities are available after shearing season and sold in April, May and June, when typically the majority of the total clip is marketed. Shorn wool production in 2015 was 6,078 metric tons clean or 12,320 metric tons greasy weight. The states of Texas, Wyoming, California, Colorado, South Dakota, Montana, Utah, Idaho, Arizona, Nevada and New Mexico produce 70 percent of the total U.S. wool clip.

Animal Welfare

Farmers and ranchers who raise sheep in the United States take great pride in the care they provide for their animals. Responsible sheep husbandry has always and continues to include a concern for the responsible and humane treatment of the animal.

The U.S. wool industry is committed to the highest standards of sheep care and well-being. U.S. sheep farmers and ranchers take great pride in the care they provide for their animals recognizing that animal welfare is an ethical responsibility that is fundamental for the humane care of animals, as well as the safety and quality of the food and fiber supply. ASI has developed science-based guidelines for producers to follow that will create a standards of excellence in care and management for their sheep. Due to the breeds of sheep produced in the United States, mulesing has never been a husbandry practice utilized by American wool producers.
Across America, people have rediscovered sheep for an age-old skill: grazing vegetation to create healthier landscapes. Folks who look after the health of our parks and resorts, our farms and ranches, our rivers and lakes and our country’s vast public lands are working to harness problematic invasive vegetation.

Sheep eat away at the invasive weeds that are rapidly engulfing millions of acres, they control brush that fuel wildfires, help forests grow more vigorously and fight weeds and insects on cropland. The result: controlled vegetation without the use of costly herbicides and gas-powered machinery. At the same time, sheep producers are harvesting economical feed sources that nourish their animals.

- Sheep eat a wide range of plants, even some which are toxic to other animals, making them ideal for tackling noxious weeds invading millions of acres of public and private land.
- Sheep can promote healthy forests by grazing the vegetation that crowds out and competes with trees.
- Farmers and ranchers are finding that sheep grazing can fight weed and insect pests in agronomic crops.
- Sheep eat woody and broadleaf plants and tall weeds and grasses, making them useful for reducing the dangers of wildfire that have scarred millions of acres.

Sheep are providing valuable services beyond wool, meat, milk and lanolin. And these ecological services are in demand from a widening array of customers.

As sheep continue to prove their ecological worth, municipalities, government agencies, airports and private companies have become willing to pay for their service. At the same time, producers are using great care in shepherding their flocks to protect water, employ proper timing, avoid overgrazing and mitigate negative interactions with people and wildlife. The industry has developed guidelines to help sheep producers refine the techniques of ecological grazing resulting in healthier landscapes and stronger sheep operations across America.
CHARACTERISTICS

COLUMBIA
A crossbreed from a Lincoln and Rambouillet, the Columbia was the first breed developed in the United States. They yield heavy, medium wool fleeces with good staple length.
Micron: 23-29
Yield: 45%-60%
Fleece Weight: 5.4-7.3 kg
USDA Wool Grade: 54s-62s

TARGHEE
Predominantly located in the intermountain and northern states, Targhee produce good quality market lambs and yield a heavy, medium-wool fleece with good staple length.
Micron: 21-25
Yield: 45%-60%
Fleece Weight: 4.5-6.4 kg
USDA Wool Grade: 58s-64s

RAMBOUTLET (American Merino)
This Merino sheep breed is the foundation of most western U.S. range flocks, which was developed from the Spanish Merino in France and Germany. This breed produces a high-quality, fine-wool fleece.
Micron: 19-24
Yield: 45%-55%
Fleece Weight: 4.5-6.8 kg
U.S. Department of Agriculture (USDA)
Wool Grade: 60s-70s

CALIFORNIA WOOLS:
• Variable flock size
• Wool is sold through warehouses
• 21-24 microns
• Staple length: 65-80 mm
• Good to average color

TERRITORY STATES WOOLS:
• Medium to large flocks
• Wool is sold through private treaty, cooperatives and warehouses
• Good to average wool-clip preparation
• 21-26 microns
• Staple length: 75-90 mm
• Good to average color with low colored fiber counts
OF U.S. WOOL

MICRON PROFILE
- Finer than 20.5: 7%
- 20.6-22: 17%
- 22.1-23.5: 25%
- 23.6-25.9: 21%
- 26-28.9: 11%
- 29-30.9: 11%
- Over 31: 8%

STAPLE LENGTH
- Finer grades: 65-80 mm
- Middle grades: 70-85 mm
- Coarser grades: 85-100 mm

YIELDS
- Farm Flock Wools:
  - Small flocks
  - Wool is sold through cooperatives, warehouses and wool pools
  - 25 microns and coarser
  - Staple length: 60-90 mm

- Texas/New Mexico Wools:
  - Medium to large flocks
  - Wool is sold through warehouses
  - Good to average wool-clip preparation
  - 18.5-22 microns
  - Staple length: 65-90 mm
  - Good to average color with low colored fiber counts

FARM FLOCK WOOLS:
- Small flocks
- Wool is sold through cooperatives, warehouses and wool pools
- 25 microns and coarser
- Staple length: 60-90 mm

TEXAS/NEW MEXICO WOOLS:
- Medium to large flocks
- Wool is sold through warehouses
- Good to average wool-clip preparation
- 18.5-22 microns
- Staple length: 65-90 mm
- Good to average color with low colored fiber counts
PURCHASING U.S. WOOLS

PRIVATE OR COOPERATIVE WOOL WAREHOUSE
In the western United States, wool producers typically use this method to sell their wool as they provide larger volumes of wool. The wool warehouses are particularly concentrated in Texas where nearly 100 percent of the wool grown in this state is marketed through a warehouse. In total, there are more than 30 warehouses scattered throughout the country.

DIRECT MARKETING
There is a network of dealers and brokers who buy wool throughout the western United States. Some travel from ranch-to-ranch to buy wool, while others deal directly with the warehouse to purchase their needs for either domestic use or exports. There are more than 20 brokers/buyers of wool in the United States.

WOOL POOLS
Wool producers in the eastern two-thirds of the country produce mostly smaller volumes of wool. These small volumes are not efficiently handled individually. Consequently, many growers in this region market their wool through wool pools. These pools are producer run and bring together smaller volumes of wool to improve the marketability of the wool by consolidating smaller lots. There are more than 50 wool pools located throughout the country.

U.S. WOOL EXPORTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports Metric Tonnes (clean)</th>
<th>Percent Greasy</th>
<th>Exports ($,000)</th>
<th>Exports as % of U.S. Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3,627</td>
<td>82.4</td>
<td>22,931</td>
<td>54.5</td>
</tr>
<tr>
<td>2012</td>
<td>2,802</td>
<td>88.1</td>
<td>18,580</td>
<td>43.4</td>
</tr>
<tr>
<td>2013</td>
<td>3,529</td>
<td>83.7</td>
<td>22,371</td>
<td>57.6</td>
</tr>
<tr>
<td>2014</td>
<td>3,295</td>
<td>79.4</td>
<td>19,737</td>
<td>54.4</td>
</tr>
<tr>
<td>2015</td>
<td>3,419</td>
<td>72.7</td>
<td>20,036</td>
<td>55.6</td>
</tr>
<tr>
<td>Ave. per year</td>
<td>3,334</td>
<td>81.3</td>
<td>20,731</td>
<td>53.1</td>
</tr>
</tbody>
</table>
### U.S. Wool Exports by Country

<table>
<thead>
<tr>
<th>Year</th>
<th>China (MT clean)</th>
<th>Percent Total Exports</th>
<th>India (MT clean)</th>
<th>Percent Total Exports</th>
<th>Western Europe (MT clean)</th>
<th>Percent Total Exports</th>
<th>Mexico (MT clean)</th>
<th>Percent Total Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1,544</td>
<td>42.6</td>
<td>943</td>
<td>34.4</td>
<td>576</td>
<td>15.9</td>
<td>84</td>
<td>2.3</td>
</tr>
<tr>
<td>2012</td>
<td>1,483</td>
<td>52.9</td>
<td>845</td>
<td>30.2</td>
<td>191</td>
<td>6.8</td>
<td>96</td>
<td>3.4</td>
</tr>
<tr>
<td>2013</td>
<td>1,812</td>
<td>51.3</td>
<td>1,081</td>
<td>30.4</td>
<td>234</td>
<td>6.6</td>
<td>228</td>
<td>6.4</td>
</tr>
<tr>
<td>2014</td>
<td>1,165</td>
<td>35.4</td>
<td>1,297</td>
<td>39.4</td>
<td>526</td>
<td>15.9</td>
<td>39</td>
<td>1.2</td>
</tr>
<tr>
<td>2015</td>
<td>1,742</td>
<td>54.4</td>
<td>761</td>
<td>25.8</td>
<td>474</td>
<td>13.9</td>
<td>222</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**Notes**

1) China continues to be the No. 1 buyer of U.S. wool. Average is around 1,500MT clean per year and approximately 50 percent of total U.S. wool exports.

2) India has consistently been the No. 2 buyer of U.S. wool except in 2014 when it briefly took over the No. 1 position due to a drop in exports.

3) The above countries have accounted for a total of more than 95 percent of U.S. wool exports from 2011-2015.
ASI has assisted the U.S. sheep industry by initiating objective measurement programs. Today, internationally accepted objective measurement on the key fiber parameters (micron, yield, vegetable matter) of U.S. wool is available by an independent U.S. commercial laboratory. Additional measurement is also available, including length and strength parameters.

**AWEX-ID.** Almost all of the U.S. wool warehouses have staff available to apply an AWEX-ID description to U.S. wool. ASI has conducted several training programs for U.S. wool producers and warehouse staff to teach the AWEX-ID method of describing U.S. wool.

**Certified Wool Programs.** The goal of the U.S. Certified Wool Clip Program is to highlight U.S. wool that has been prepared properly for the wool trade, thereby, increasing the value of U.S. wool to end users. Producers can self-verify their wool clip based on the Choice Wool Clip, which is designed for all sheep producers wanting to improve their wool quality, or the Premium Wool Clip, which is directed at larger flocks of wool sheep in which table skirting will improve the marketability of the clip and the volume of wool is sufficient to allow for classing by a certified wool classer. Shearers are also encouraged to participate in the Certified Sheep Shearing Program. ASI conducts training at certified classing and wool handling schools to teach producers and shearers techniques for maintaining wool quality.

Also, ASI has begun conducting training at shearing schools in order to teach shearers techniques for maintaining wool quality.
The heart and soul of ASI are the thousands of farm and ranch families across America who raise sheep, as are the hundreds of individuals who volunteer a portion of their time, energy and financial support to work on behalf of the industry.

ASI provides the opportunity for growers to work with others in molding the policies and programs that improve the markets for sheep producers through enhanced marketing opportunities and reduced production costs.

Although ASI’s interests lie with a variety of industry topics and issues, one of the main divisions of ASI is the American Wool Council, which works to improve the American wool industry and to promote the usage of American wool – both in domestic and international markets. The council oversees wool promotion and merchandising programs that focus on wool quality improvement, product development and market promotion, direct marketing activities with international wool buyers and communications.

Although world-wool supplies have decreased over the past few years, there remains a strong demand from consumers for natural, renewable options for clothing, hosiery items, home furnishings and industrial uses. ASI has developed a strategy to strengthen the U.S. wool industry for long-term sustainability.

The Let’s Grow program was established to ensure that the U.S. sheep industry remained sustainable for future producers of lamb and wool. A strategy has been introduced to support, promote and ensure the U.S. sheep industry’s future through the development of innovative and sustainable initiatives that increase the productivity, profitability and growth of the American sheep industry, which will further enhance domestic wool and lamb production.

The Let’s Grow initiative also encourages new producers to enter the industry, whether they are new to agriculture or just adding sheep to their business enterprise. ASI has teamed up with its state associations to develop a mentor program to provide these new producers with a toolkit to serve as an educational resource to teach about the production of safe and wholesome food and fiber.
U.S. PELTS

Averaging 8.5 square feet with some skins as large as 12 square feet, American lambskins are the largest in the world. American lambskins have the added advantages of stronger leather and naturally dense wool.

Because of the diversity of sheep breeds and production practices, the United States can offer a large variety of skins – from raw, salted skins ready to begin the tanning process, to wet blue skins, to fully tanned leather and shearlings. They are used in a boundless array of high-quality products, including seat covers, medical pads, luxurious high fashion garments, paint rollers, industrial buffers and top quality footwear.

The export market is an important and highly valued market for U.S. lambskin processors. Currently, 60 percent to 80 percent of all U.S. lambskins are sold into export markets and American producers are dedicated to continuing this global expansion.

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