



## The Goat in the Rug

As told by Charles L. Blood & Martin Link

### Ag Literacy Project with FFA, 4-H & Volunteers

Lesson Plan (K-5, variations are adjusted to fit K-2 & 3-5 grade bands throughout the lesson plan)

#### Introductory Concepts to NMSSS – Ethnic, Cultural, and Identity Studies

Theme 2 – K.14

Theme 5 – K.22, 1.21, 2.28, 3.26, 4.25, 5.30

Theme 6 – 2.29

\*Expand and explore full standard after presentation.

#### Book

Geraldine is a goat, and Glenmae is a Navajo weaver. One day, Glenmae decides to weave Geraldine into a rug... well, her mohair. First Geraldine is clipped. Then her wool is spun into fine, strong yarn and dyed into beautiful colors. Glenmae weaves the yarn on her loom. The reader learns along with Geraldine about the care and passion involved in the weaving of a Navajo rug, and about cooperation between friends.

#### How the Project Works

Presenters read to students in K-5 classrooms and completes two hands-on activities with the students. Suggested time approximately 1 hour or longer if students have questions or comments. Can be broken into segments, if needed.

#### Supplied Materials in Kit:

- 1 Paperback book – “The Goat in the Rug”
- 1 Ag Magazine - “Natural Resources”
- 1-qt sized bag of wool for spinning
- 2 Wool Carding Brushes (1 medium, 1 small)
- 7 Sets of Beads (enough for 25 bracelets – 1 classroom)
  - Red, White, Brown, Blue, Yellow, Green, and Clear

#### Not supplied, but encouraged

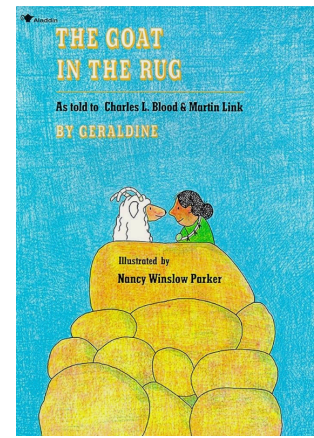
- Examples of mohair/wool made items (blankets, scarves, etc.) are always a plus to show final products.

[First slide]

#### Part 1: Introduction and Recruit for Future Agriculturists (Time: 3-5 minutes)

1. Briefly introduce yourself and talk about your program (FFA/4-H/volunteer group).

**Suggestion (Optional):** Visuals help! If you live on a farm or ranch, bring props! Ex: crop samples or photos of the farm equipment, buckles/ribbons/awards from FFA/4-H/volunteer activities.



#### Common Core Standards – English

K.RI. 1	2.RI. 1	4.RI.1
1.RI. 1	3.RI. 1	5.RI.1

#### Checklist

- Make sure you have ALL your supplies you need to present (PPT, complete Materials Kit, handouts (K-2 or 3-5), & eval form for the teacher to fill out).
- Give Teacher Evaluation Form BEFORE you start presenting.
- Ask the teacher to take photos (back of students only), and email those in to [agclass1@nmflb.org](mailto:agclass1@nmflb.org).
- Wait for the teacher to complete the eval form and take with you.
- Clean up presentation area.
- Have a great time & remember to smile!
- Scan/Email ([agclass1@nmflb.org](mailto:agclass1@nmflb.org)) the Participation Form once you have completed all presentations.

- 1 Wool Yarn Section (enough for 25 bracelets)
- 1 “One-Ply Wool/Mohair Color Swatch
- 2 Samples of Unprocessed Wool
  - Debouillet and Churro
- 1 Sample of Unprocessed Mohair

2. Discuss your connection to agriculture. Explain what FFA/4-H has done for you or what you look forward to doing through related volunteer activities. If you weren't involved in agriculture prior to FFA/4-H, share how your life still connects to agriculture (things you eat, where, and use every day).
3. Encourage students to consider joining FFA/4-H/volunteer group when they can! \*Remind them they don't have to live on a farm or ranch to be in FFA/4-H – you just need to be interested in learning and willing to work hard!

[Next slide]

## Part 2: What is Agriculture? (Time: 5-8 minutes)

**Suggestion (Optional):** Bring examples of everyday products that come from agriculture or show pictures on PowerPoint.

1. Say, "Today, we're going to be talking about this awesome word "AGRICULTURE". Has anyone ever heard or seen this word before? Raise your hand if you've ever heard of that word before.  
"Okay - does anyone want to share what they think the word agriculture stands for?" ... Pause for sharing... If not, much is being shared, say, "That's okay if you don't know what it means because that's why we're here today. We're going to learn about it, right this very minute."

[Next slide]

Tell students to, "Raise your hand if they..."

- begged your parents at the grocery store to get your favorite foods (like spinach, & broccoli).
- have ever bought flowers (for your hot date on Friday night).
- if you have ever worn: Jeans, t-shirts, socks, underwear.
- have ever taken medicine.
- know what the word agriculture means.

[Next slide]

2. Say, "Agriculture is SO important that we cannot live without it and has to do with the things we just mentioned and so much more!" Tell students the following statement.  
"Agriculture is very easy to remember because it mainly consists of two things:
  - Plants/Crops: things we get from the soil AND
  - Animals/Livestock: think animals you might see on a farm (like cows, pigs, sheep, chickens).
3. Ask, "Why are **animals/livestock** important?" They provide us with food like milk, meat, eggs, and clothing too!  
"Who raises these animals?" (Ans: Farmers and Ranchers)
4. Ask, "Why are **plants/crops** important?" Healthy food for us to eat, food for animals, gives us clothes to wear like cotton, gives us medicine (ex. Ginger root-great for upset stomach). "Who grows these plants?" (Ans: Farmers)
5. Tell students that today we are going to focus on the livestock part of agriculture by reading a story about an animal and her friend.

[Next slide]

### Types of Livestock Animals

6. Share with students the different types of livestock animals by clicking the arrow key to reveal the next name – Pigs, Beef Cows, Chickens, Dairy Cows, Sheep.
7. Ask the students, "What do these animals provide us?" Call on 3-5 students for answers, then ask "Can you think of anything else that they can provide us with?" This helps to get out any final answers.

[Next slide] "Which livestock animal have we not mentioned, yet?"

[Next slide] "GOATS!!!"

[Next slide]

### Types of Goats

- 4 main purposes for goats – milk, meat, fiber production, and weed control.
  - 2 popular breeds are boer (meat production), and angora (mohair).
8. Ask students, "Which goat on the slide is the angora goat? How can you tell the difference?"  
- ANSWER: Angora is on the right – full of mohair, ready to be sheared.

[Next slide]

### What do goats eat?

- Goats are herbivores – meaning they ONLY eat plants.
- Goats prefer a lot of the weedy grasses and are GREAT at Grass/Weed maintenance.
- Goats are the species of choice for controlling brush in pastures, abandoned farmland, and rangeland.
- When goats eat the plants that are NOT wanted, that gives more room for the plants that ARE wanted (like grasses and legumes)
- They will follow behind cattle and sheep and eat what they leave behind.

[Next slide]

### Goats and the fiber they grow!

- Goat fiber (the hair they grow) is called mohair, and never called wool. It can be referred to as fiber, goat fiber, or locks, in the case of Angora-like curls.
- Wool is grown on sheep.
- Both fiber goats and wool-growing sheep require a good source of food, and they need to be sheared each year. Some fiber goats require shearing twice a year for an optimal product.

[Next slide]

### Part 3: Book Reading (Time: 10 minutes)

*PRACTICE reading the book before your class visit. Make it exciting and remember time yourself to keep a good pace!*

Introduce story. Ex: “Geraldine is a goat, and Glenmae, a Navajo weaver. One day, Glenmae decides to weave Geraldine into a rug. First Geraldine is clipped. Then her wool is spun into fine, strong yarn. Finally, Glenmae weaves the wool on her loom. The reader learns, along with Geraldine, about the care and pride involved in the weaving of a Navajo rug -- and about cooperation between friends.”

\*Be sure and listen for important words such as:

#### **Navajo, Fibers, Weave, Wool, Comb, and Spinning.**

*(Have the slide up that shows these words & pictures – for recall after the book is read)*

1. Show off the great images in the book!
2. Timekeeper – Keep track of time.
3. After the book read, **if there is time ask these questions**,
  - a. Ask them if they remember hearing any of the “important words”?

[Next slide]

### We all live in unique ways – including Glenmae. (Time: 2 minutes)

What does Glenmae do that makes her unique in her village, and different from you?

Why does she have 2 different names? Do you remember?

Let’s share ways that we live similar and different from each other.

### BRAIN BREAK – Stand, Stretch & Dance (Time:5 minutes)

Get up, stretch, and DANCE!!! Presenters pick which dance option they’d like to do with the kiddos.

- OPTION 1: “Gathering of Nations” – Fancy Dance – Learn and Do! – YouTube
- OPTION 2: “Pump It” – Black Eyed Peas – Just Dance 2016 - YouTube

[Next slide]

Now, let’s learn about the goat and sheep herding process from a Navajo family! Show video clip of Navajo family herding their sheep and goat herd. \*Tell students to keep a look out to spot the goats, too! – Boer and Angora. After the video, ask students, “What was your favorite part about the video?”

[Next slide]

## Part 4: Geraldine Grows Mohair (Time: 15 minutes)

Show the video clip from Mr. Corn, from Roswell, NM, about his sheep getting sheared.

Ask the questions: “What did you notice about this video?” “What is a shearing like or similar to that WE do about once or twice a year, as well?” and “What is something you didn’t know happened during a sheep shearing?”

[Next slide]

### Activity 1: Spinning the Wool

**K-2**

1. Presenters will split class into 4 groups.
2. Presenter will spin the rod.
3. Students will take turns spinning the wool fiber strand, working together to create a yarn circle.

**3-5<sup>th</sup>**

1. Presenters will split class into 4 groups.
2. Presenter will spin the rod.
  1. Unless 3-5<sup>th</sup> graders are well-behaved
3. Students will work one at a time to create a bracelet.

[Next slide]

### Spinning Wool Directions

Tutorial video available on YouTube, Utah Ag in the Classroom Tutorials “Hands on with Wool”.

1. Give each student a piece of carded wool approximately ¼" (6.35 mm) wide and 14" (35.56 cm) long. Fold about ½" (1.27 cm) of wool over the end of the spinning hook and begin spinning.
2. Back your non-spinning hand out as the wool is spun; this is called drafting.
3. Draft out the wool so that the spun wool is taut but not bumpy. If you get twisted bumps in your spun yarn, let out more unspun wool. When you have twisted the entire length of the wool, don’t let go—it will unspin. You are now ready to ply your yarn.
4. Plying the yarn will keep it from unspinning and make it stronger. Plying is the twisting together of two single strands of spun wool. Have someone hold the center of the twisted wool while you hold the ends.
5. Bring the ends of the wool together in one hand so that there are two strands side-by-side. Have your helper let go, and let the wool twist together. It should spring into a twisted strand. The double strand is now called plied yarn.
6. Tie the plied yarn around your wrist to form a friendship bracelet.

[Next slide]

## Part 5: Goats NEED Natural Resources (Time: 15 minutes)

### Activity 2: Build a Natural Resource Bracelet

There will be several slides to click through that help you walk through the important resources that a goat or sheep need to produce healthy and strong fibers. Presenters will use “Part 5” Activity 2: Natural Resource Bracelet” slides to help students see what each bead represents on their bracelet to remember what goats need to grow strong and healthy mohair.

1. What 4 Natural Resources do crops and livestock need to grow?” (Ans: water, air, sun, and soil)
2. “Let’s see what a goat needs to provide healthy and strong mohair.”

[Next slide]

- a. **Farmer/Rancher** – To be stewards of the land and animals – play the videos.

[Next slide]

- b. **Food - Grasses** – cut & dried. Forage on the rangeland, unwanted brush, shrubs, and weeds. Goats are EXCELLENT “garbage trucks” – they eat everything and can collectively clear out unwanted plants. Let’s hear from Cowboy Max – Galloping Goat Ranch!
  - i. WHERE does the food get its’ nutrients from?

*[Next slide]*

- c. **Soil** - These are the main nutrients that help the plants to grow. Nitrogen – Up (leaves, stem, etc.), Phosphorus – Down (roots – deep, wide and strong), and Potassium – All Around (overall plant health)
  - i. When goats go #2, it brings nutrients back to the soil. We call this a natural fertilizer.
  - ii. When a plant starts to grow, it absorbs the nutrients from the soil in through its roots and sends it to the part of the plant that it needs to grow big and strong.

*[Next slide]*

- d. **Sun, Water, and Air** - Animals need access to water, clean air to breathe (inhaling oxygen and exhaling carbon dioxide), and sunlight for the plants to grow so they have food to eat, too.

*[Next slides]*

Students will place beads on a thread of yarn and can work with a partner (or presenter) to tie on their bracelets. Handouts will be provided to show what each bead represents, so the students can share the information with friends and family. Each bead represents someone or something that is necessary to make sure the mohair (hair on the goat) is grown and produced to the best potential it can for use as a fiber that will be made into items that we can use on an everyday basis (like blankets or rugs).

- **Red: Farmer/Rancher** – Watch the health and wellness of the herd
- **White: Goat** – Breed, color, and use (milk, meat, fiber, and weed control)
- **Green: Food** – Forage, grass, brush, weeds, etc.
- **Brown: Soil** – Healthy soil to help grow good plants for the goat to eat
- **Yellow: Sun** – Photosynthesis provides energy for the plants to grow healthy and strong
- **Blue: Water** – Goats and plants need to drink water
- **Clear: Air** – Goats need to breathe and so do plants

*[Next slide]*

## Part 6: Review - Can “ewe” recall what we learned? (Time: 5 minutes)

- What is Agriculture? \_\_\_\_\_ & \_\_\_\_\_
- What is Spinning?
- Recall some facts about goats and sheep.
- Restate the 4 Natural Resources goats and sheep need to grow strong and healthy fibers.
- What kind of goats are there?
- Who are we? What program is visiting you today?
- Is agriculture something you use every day?
  - If yes, how?

**REMINDERS** – At the end of the presentation.

1. Ask if students have questions (Questions begin with a who, what, where, when, why, or how.).
2. Tell class that you will be leaving the “The Goat in the Rug” book in their teacher for them to check out later.
3. Thank the teacher and students for allowing you to visit their classroom and that you hope to see them again soon, and if they took any pictures (having only the backs of the students heads – for privacy/security) they can email those in to [agclass1@nmflb.org](mailto:agclass1@nmflb.org).

## Resources & Other Helpful Links

*Standards, Lessons, and Educational Resources*

- New Mexico Standards – K-12<sup>th</sup> grade (Ethnic, Cultural, and Identity Studies – Themes 2, 5, and 6 (see front page)
  - <https://webnew.ped.state.nm.us/wp-content/uploads/2022/02/NM-Standards-508.pdf>
- 7 Generation Games - <https://www.7generationgames.com>
  - Growing Math – Lessons, Games, etc. - <https://www.growingmath.org>
  - Bozeman Trail (Social Studies) - <https://www.7generationgames.com/bozeman-trail/>
- “Hands-on with Wool” <https://newmexico.agclassroom.org/matrix/resource/402/>
- “Farm Animal Life Cycles” <https://newmexico.agclassroom.org/matrix/lesson/81/>
- Rangeland Plants – NM <https://pubs.nmsu.edu/circulars/CR374/index.html>

### Webpages, Digital Resources and Digital Printouts

- Goats Vs. Sheep and other Ag Mix-ups – AgFoundation.org - <https://www.agfoundation.org/news/goat-vs-sheep-and-other-ag-mixups>
- The Oveja Project – Facebook Page - <https://www.facebook.com/theovejaproject>
- NMAITC – Sheep & Goat Fair Poster (PDF) [https://newmexico.agclassroom.org/teacher/poster\\_sheepgoats/](https://newmexico.agclassroom.org/teacher/poster_sheepgoats/)
- Wool Spinning Materials – NAITC Resource Store - <https://agclassroomstore.com/wool-spinning/>
- NMAITC Resource Search for “Goats”  
[https://newmexico.agclassroom.org/matrix/search\\_result/&search\\_term=goat](https://newmexico.agclassroom.org/matrix/search_result/&search_term=goat)
- NAITC – Resource Results for ‘Wool’ -  
[https://agclassroomstore.com/search.php?search\\_query\\_adv=wool&section=product](https://agclassroomstore.com/search.php?search_query_adv=wool&section=product)
- Goats Used for Weed Mitigation – USDA Publication – Range Management Research, Las Cruces, NM – 2.8.2009 - <https://www.ars.usda.gov/research/publications/publication/?seqNo115=237980>
- 12 Popular Goat Breeds <https://www.agriculture.com/12-popular-goat-breeds>
- Know the Difference – Goats & Sheep <https://backyardgoats.iamcountryside.com/ownership/do-you-know-the-difference-between-goats-and-sheep/>

*Books* – Additional goat and sheep books to keep the conversation of fiber production and livestock utilization going.

- *Homespun Sarah, Charlie Needs a Cloak, The Guardian Team, Amazing Grazing, If You Want To Knit Some Mittens (digital only), Sheep Dog and Sheep Sheep, Sheep Dog and Sheep Sheep – Baaad Hair Day, Woolly Jumper, Sheep Won’t Sleep, Wilford and Blue – Mud Madness, and One Smart Sheep*

### Helpful Hints Before Your Classroom Visit

- Wear official dress. It looks sharp and promotes FFA/4-H.
- Practice, practice, practice! Prepare by reading book and practicing activity. You want to fit your presentation and activity within the time scheduled. Teachers have very busy schedules so please try to stick to your allotted time.
- Check in with the teacher. If possible, before your presentation, briefly visit with the teacher. Share a copy of the activity and ask if there are students that need special accommodations.
- Can everyone see and hear? Before you start reading, make sure all the students can see and hear the book so they will be good listeners.
- Move the book close to the screen as you read. Either while you are reading, or after reading each page, move the book in close so each student can see the great images. This is especially important with younger grades.
- Pay close attention to the students’ mood. Move along fast enough to maintain student’s interest, but slow enough for all students to thoroughly enjoy the story.
- Most importantly, have fun! Enjoy this wonderful experience of reading aloud and teaching children about the importance of agriculture.

### QUESTIONS:

Contact New Mexico Ag In the Classroom with any questions you may have on the Ag Literacy Project or to request a training session.

Britney Lardner, Senior Program Coordinator [agclass1@nmflb.org](mailto:agclass1@nmflb.org)

Visit [www.nmaitc.org](http://www.nmaitc.org) for free additional lessons and resources.

NM Ag Literacy Project Sponsored by:

