

DENVER PUBLIC SCHOOLS

GOAT PROTOCOLS

MAY 2021 VERSION



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Denver Public Schools' Requirements and Guidelines for Keeping Goats on School Grounds

I. Introduction

Schools have a growing interest in teaching students about the sources of their food and animal fiber. To better educate students on the origins of what they eat and the science behind it, schools are opting to grow fruits and vegetables and raise goats and other food production animals. The following policy will outline the necessary procedures and protocols for installing a goat pen and shelter and caring for goats in Denver Public Schools.

Any school or program will be solely responsible for the funding, maintenance, relocation, removal and/or demolition of the goat program, pen and shelter. DPS operations and the building facility manager are not responsible for the maintenance and management of the goat program, pen and shelter. It is the school or program's responsibility to ensure students are supervised at all times while in the animal enclosure. Should the school wish to work with a vendor or third party company to manage the goats, consider the terms of your contract with them. Changes in administration or programming does not nullify the responsibilities of the school / program.

II. Getting Started

1. If you're interested in having goats on school grounds, please contact the Denver Public Schools (DPS) Department of Sustainability at 720-423-4171. Although DPS is willing to accommodate your efforts, the construction and maintenance of goat pens and shelter, and the care of goats are the sole responsibility of the school. Failure to follow the guidelines below may result in the removal of goats and their enclosure. DPS Sustainability staff will meet with you to help determine a suitable location for goats and review your plans as they are developed.
2. Familiarize yourself with the City and County of Denver's ordinances that apply to having two goats inside the city. Schools that wish to have goats on school grounds must follow all City and County of Denver ordinances Chapter 8, Article III, which can be found here:
https://library.municode.com/co/denver/codes/code_of_ordinances?nodeId=TITIREMUCO_CH8AN_ARTIIIILIFO

A City and County of Denver Food Producing Animals Permit is required for sites with more than two goats and must be renewed annually and a copy of the permit sent to the Department of Sustainability:

https://www.denvergov.org/content/dam/denvergov/Portals/682/documents/Animal%20Protection/FoodProducingAnimals_PermitApplication.pdf

Additionally, see the Food Producing Animals Suggested Care Practices and Resources

https://www.denvergov.org/content/dam/denvergov/Portals/682/documents/Animal%20Protection/FoodProducingAnimals_InfoPacket.pdf

3. Each school will build a relationship with a small ruminant veterinarian prior to developing a goat program and will use their expertise while developing the plan for pen design and ongoing care of the goats, including vaccinations, regular foot care, and eventual putting down and disposal of animals.

4. Familiarize yourself with the care of goats and how to protect the health and safety of students, staff and volunteers who will be involved with caring for the goats. See Section III: Care and Safety and Section IV: Goat Health.
5. Familiarize yourself with all DPS requirements for goat pen and shelter design. See Section V: Structures and materials.
6. Familiarize yourself with how to engage students (Section VI) and how to maintain good community relations (Section VII)
7. Complete a Goat Management Plan and Agreement including pen/shelter siting and design schematics and submit to DPS Sustainability for approval in conjunction with the Grounds Department and the Planning, Construction and Design Department. Once approval is obtained, you may start your goat keeping endeavor.
8. Build a sustainable plan to address the care and cost of goats years into the future.

III. Care and Safety

1. Ensure students know how to properly interact with the goats safely before they enter the goat enclosure. Students must be supervised at all times while in the enclosure.
2. Wash hands before and after handling goats, equipment and tools. A hand-washing station outside the goat pen is recommended.
3. Do not eat or drink while in the pen or shelter or after working in the pen or shelter until hands have been washed.
4. The most common illnesses associated with children exposed to animals is diarrhea and fever. If these symptoms are observed in your students, you should contact a health care provider immediately.
5. Establish procedures that reduce the transfer of foreign substances into and out of the goat area.
6. House goats in an enclosed area down-slope from any food producing garden.
7. Ensure the goat area is the appropriate size with adequate ventilation and proper materials to accommodate the number of goats planned (see structure and materials section for details).
8. Provide adequate straw for bedding and during the winter (make sure that the straw is not contaminated by the herbicide clopyralid or glyphosate (RoundUp)).
9. The goat pen and run should be cleaned by properly trained individuals at the frequency determined by the cleaning schedule set in the management plan. Dust masks are recommended when cleaning the pen and shelter. It is the responsibility of the school to provide dust masks and other appropriate PPE for cleaning and manure handling purposes.
10. Waste bedding and goat manure should be placed directly into compost bins to be processed by Denver Waste. The Facility Manager is not responsible for any manure removal, moving compost or trash bins or other enclosure maintenance or animal care.
11. All students and volunteers must have a signed Waiver and Release of Liability (Appendix 1) on file with the school attesting that they have been instructed of the proper care of goats and the risks that may be associated with caring for goats. Waivers will be required for each student for each school year.
12. The following recommendations should be followed when working with goats:
 - Refrain from running, sudden movements and making loud noises.

- Milk producing goats should be milked daily (every 12 hours, 7 days a week) by properly trained staff, students or volunteers.
 - Goats that are producing milk need to be milked once or twice every day on a fairly consistent schedule in order to maintain milk production. If a goat is not milked regularly, she will “dry up” and her milk production will stop until she has kids again.
 - A Goat Stand is recommended for milking. The stand elevates the goat for easier milking access and helps to calm the goat and make her feel secure.
 - Female goats will need to be bred every 16 months to maintain milk production.
 - Denver’s FPA ordinance does not allow unneutered male goats in the city, even for a brief visit. In order to breed your doe goat, you will need to contact a breeder outside the city and bring your goat there for mating.
 - Kids born to mother goats are allowed on the property until they are weaned and must then be sold or given away.
14. If goat milk will be used, processed or sold; consider and create protocols to address:
- **Currently DPS does not allow any goat milk or milk products to be sold or consumed.**
 - Third party partners may distribute and sell non-food goat milk products such as soap away from DPS property and at their own liability.

IV. Goat Health

1. Establish a schedule to ensure that goats are monitored as frequently as possible. All animals should have proper documentation showing routine health checks, hoof care and shots have occurred.
2. Goats should be fed a high-quality feed that is clean, dry and kept free of mold.
3. Ensure clean water is always available. Goats drink 3-5 gallons a day and 7 or more gallons in hot weather. Water should be changed and filled daily.
4. Goats should eat a diet that consists primarily of hay. Grain should be given sparingly. Be sure that grain is stored securely where the goats cannot reach it, because if they are allowed to gorge on grain it could be fatal. Do not allow the drinking water to become dirty, particularly with goat manure, as it can cause disease.
5. Feed in the morning during hot weather to reduce stress on the goats.
6. Goats are omnivores and can eat most plant-based table scraps. **Do not feed goats fruit pits, green potato peels, bindweed (native vining plant with white flowers), white clover, rhubarb stalks or leaves, or nightshade (tomato, pepper, eggplant, potato) plant parts.** Goats that are milking should not eat onions or garlic as they change the flavor and odor of the milk.
7. Select a breed that is hearty, friendly, tolerant of cold winters and, if applicable, good fiber (hair) and / or milk producers. Purchase goats from a breeder with a herd certified to be free from Ca serous lymphadenitis, a contagious disease.
8. Post signs on each side of the pen with contact information for the goat program manager and an alternate so that community members can call to report issues.
9. Create a plan with the building Facility Manager and DPS Grounds to ensure herbicides are not used adjacent to the enclosure.

10. Goats live 12-18 or more years and it's not legal to harvest/slaughter animals in Denver. Be considerate of the animals' quality of life. Reference the City and County of Denver's Best Practices Guide in the resources section.
11. Forge a relationship with a local veterinarian that can provide expertise and care to sick animals.
12. Establish protocols in advance in how to deal with an animal that becomes too aggressive.
13. Goats in Colorado benefit from an annual CD-T vaccination. This protects against enterotoxaemia and tetanus, which are problematic for goats but do not transfer to humans. In addition, goats should periodically be given a de-wormer, according to the product instructions. Both herbal and medical de-wormers are available for goat owners to purchase and administer. Vaccination and de-worming records must be kept for each animal.
14. Goats need to have their hooves trimmed periodically. The frequency varies but is typically around once every couple of months (depending on the goat). When you purchase your goats, ask your breeder to show you how to trim their hooves.
15. Winter Care: Dwarf goats grow a winter coat during winter months, provided they are outside during the fall months. They are generally well-equipped to handle cold weather provided they have a shelter to keep them out of precipitation and drafts. A heat lamp can be placed in the shelter during cold nights.
16. It is generally best for goats raised in the city to be disbudded (have their horns removed). Horns can get caught in fencing material, and horns raise the likelihood that goats will injure each other during play. The safest time for a goat to be disbudded is when it is 2-4 weeks old. If the horns have become established, surgery would be required to remove them. Purchasing a mature goat and getting the horns removed is not advisable; it is best to purchase goats that have already been disbudded.
17. Develop a plan for finding and returning animals that may get out of the enclosure.
18. If one of your goats dies, there are two methods of disposal that are recommended:
 - a. Dead animal pick-up can be requested by calling 3-1-1. The city will provide this service free of charge, though it may take some time for them to pick up the animal.
 - b. You can take your animal to the veterinarian to be disposed of, as you might with a dog or cat.

V. Structures and Materials

General: Inspect all structures and materials in the animal enclosure monthly and record in log. Take care to inspect any electrical and water equipment. Replace any damaged or unsafe equipment.

Fencing

1. Goats should be kept on the school grounds within the existing fencing that surrounds the outdoor space. A 6' fence for the pen is typically adequate to keep dwarf goats contained, provided climbing materials are not set next to the fence. In areas where coyotes and other predators are active, an 8' fence is necessary.
2. Chain link, stock wire, or other sturdy fencing materials are appropriate. Chicken wire is not adequate fencing for goats. Wooden slat fences are also not appropriate, as goats can break a slat and get their head caught between the slats.

3. Close and secure all gates during off hours.
4. When deciding on a site for the pen and housing, maintain at least 15 feet from a fence shared with a neighbor or from a public sidewalk. Additionally, the pen must be located on the back 50% of the property.
5. Be proactive in protecting your animals from predators. There are dogs and coyotes throughout the Denver area and all are potential threats to your goats.
6. Be proactive in regards to potential vandals. Goats may attract unwanted attention to your site.

Goat Shelter Specifications:

1. The basic requirement for all goat structures is a dry shelter that minimizes drafts. It must be large enough for the dwarf goats to move around freely without coming into contact with another goat. Shelter must provide protection from precipitation, wind, and sun. Be aware that construction of a structure requires a zoning permit in Denver, except for portable structures not larger than a typical dog house. For more information contact Denver Zoning by email at zoningreview@denvergov.org or phone at 720-865-2984.
2. How you build your structure depends on what you will use it for – is it just shelter for the goats, or will you feed and water them there? Consider how you, the human, will maintain the structure.
3. The shelter should be an inviting space for people to work with the animals and clean, and should be at least 6.5 feet tall.
4. Make a structurally sound frame for the shelter, consider the type of wood to be used to provide a durable, long-lasting structure that is easy to maintain and disassemble if necessary.
5. Locate the Shelter away from the fence to prevent goats climbing out.
6. Run an underground electricity line to the shelter for heat lamp, water heater in winter and light for cleaning the shelter

Goat Pen:

1. Allow at least a minimum of 130 square feet of permeable space (ground or grass) per goat. However more space is encouraged and will allow for a greater recreation area. If you are keeping your goats on bare ground, cover their living area with straw. This will provide mulch for goat manure, which helps to reduce smells.
2. Include food and water supply.
3. The entrance to the shelter should face away from prevailing winds.
4. Provide some shading. Trees adjacent to the run can provide shade and help keep the area cooler in hot weather.
5. Goats enjoy climbing, so it's a good idea to provide them with straw bales or other safe, small things to climb on. Keep the climbing materials in the center of the barnyard, away from fences.

Feed and Equipment Storage:

1. Ensure the storage is secure, weatherproof, rodent proof, and dry. Metal containers with tight lids are recommended.
2. Locate storage containers close to but outside the goat pen and shelter.

3. Provide space for feed, classroom equipment, cleaning supplies, safety equipment, and anything else to support lessons in the goat area.

VI. Engaging Students

1. Develop a school wide plan as to the purpose of keeping goats and incorporating with your curriculum. Consider the best interests of the students engaging with the goats. Ensure students will be trained on how to interact with the animals safely.
2. Develop a Care Schedule for students to learn to feed, water and care for the goats properly while helping to maintain the area.
3. Begin each year by setting students' behavioral expectations. Create and agree on rules that students will hold themselves accountable for when working with goats and assign roles/ jobs that students will be expected to fill.
4. Students should be taught how to approach, work alongside, and guide a goat properly.
5. Goats can be used to teach all subjects and a wide range of topics. Use the resources section at the end of the document for ideas as well as the resources available to you on the internet and libraries. When at all possible, strive to use goats to create connections between subjects.
6. Because goats should not leave the pen, consider constructing a large run and make it inviting for students.
7. Goats will eat random objects that look like food. Their area should be kept clean of trash and students should be instructed to feed goats only wholesome food.

VII. Community Relations

1. Post a notice on the pen / shelter notifying the community that the goats are the property of the school and that they are being cared for daily throughout the year, including school holidays. The notice must include contact information for the school goat program manager and an alternate so that community members can call with questions, concerns or to report a problem. Any complaints and concerns should be reported to First Call and dept_sustainability@dpsk12.net
2. Take precautionary measures to ensure that noise from the animals does not unduly affect neighbors.
3. Pest issues, as soon as they are discovered, will be communicated to DPS Facilities Management and handled by appropriate Pest Control staff. School goat programs are expected to comply and assist with pest management strategies as requested by DPS Facilities Management.
4. Complaints from the community will be responded to by the school within 24 hours and all formal complaints must also be shared with the DPS Sustainability Department.
5. Construct a pen and shelter that are attractive and won't be an eyesore to the neighbors.

VIII. Plan for Maintenance, End of Program / Relocation

1. Each school must allocate funds for ongoing maintenance of the fencing, pen, shelter and storage area.
2. Each school may choose to carry a separate insurance policy for the goats. Animals are not covered under Denver Public Schools' insurance policy.

3. Each school must allocate funds for the removal or relocation of animals and materials should it be deemed necessary or if the school or program relocates.

4. Any school or program will be solely responsible for the funding, maintenance, relocation, removal and/or demolition of the goat program, pen and shelter. DPS operations and the building facility manager are not responsible for the maintenance and management of the goat program, pen and shelter. It is the school or program's responsibility to ensure students are supervised at all times while in the animal enclosure. Should the school wish to work with a vendor or third party company to manage the goats, consider the terms of your contract with them. Should negligence, inadequate care or maintenance be determined by DPS, the school program has 30 days to rectify the grievances. If unable to do so, the program will be terminated at the logistical and financial expense of the school / program.

DPS Goat Management Plan Form and Agreement

School Information

Name: _____

School Address: _____

Goat Program Contact Information

Name: _____

Email: _____

Phone (accessible after school hours): _____

Affiliation with School: _____

Veterinarian Contact Information

Name: _____

Email: _____

Phone: _____

Number of goats on site: (2-4) _____ (more than 2 goats will require an annual permit and completion of the county's re-zoning process)

https://www.denvergov.org/content/dam/denvergov/Portals/682/documents/Animal%20Protection/FoodProducingAnimals_PermitApplication.pdf

Size of shelter (in square feet) _____

Size of pen (in square feet): _____

To be considered schools must:

Provide a map showing where the pen and shelter will be located on school grounds, delineating dimensions and distances from public sidewalks, school buildings, school walkways, playgrounds and school gardens.

Provide detailed schematic drawings of the pen and shelter design indicating all materials used for flooring, walls and roof as well as electric line to the shelter.

Answer the following questions:

1. What procedures are in place to ensure hands are properly washed and that shoes are clean before and after handling of goats and entering goat area?
2. What procedures are in place to ensure staff, students and volunteers have been properly trained to enter the goat area, work with the animals and their milk?

3. How will you care for goats in the event of unplanned school closings or extreme weather?

4. How will you ensure that the goat area is secure?

5. Describe the feeding and watering schedule including:
 - a. What watering and feeding systems will be used?

 - b. How frequently will feed and treats be given?

6. Describe the day-to-day care and cleaning of the goats as well as the goat area. Include frequency of cleaning the run and shelter as well as who will be responsible.

7. What procedures are in place to ensure the goats are properly cared for over extended breaks of three or more days?

8. How will the milk be collected, stored, and used?

9. What is the purpose of having goats at your school? How will the goat program be incorporated into the curriculum?

10. What is the exit plan for the goat program if it is discontinued?

We, the undersigned, attest that we have thoroughly reviewed the DPS Requirements and Guidelines for Keeping Goats on School Grounds. We attest that we will properly care for goats under our care and that all staff, students and volunteers will be properly trained in proper care and safety and informed of the potential risks associated with caring for goats and their milk. Furthermore, we will obtain and keep on file a signed Waiver and Release of Liability for all students and volunteers that will be involved in the care of goats and maintenance of the pen and shelter. Finally, we recognize that the choice to keep goats on school grounds is entirely that of the school and that DPS is not responsible for the goats, the pen and shelter, nor the health and safety of anyone engaged in the care of the school's goats, nor the removal or relocation of the goats, pen and shelter, and that failure to comply with the management plan is grounds for the loss of the privilege to keep goats at the school.

School Principal	(Print Name)	Signature	Date
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School Goat Program Manager	(Print Name)	Signature	Date
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Veterinarian	(Print Name)	Signature	Date
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DPS Sustainability Representative	(Print Name)	Signature	Date
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DPS Grounds Representative	(Print Name)	Signature	Date
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DPS Planning Representative	(Print Name)	Signature	Date
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Resources

Please read the documents hyperlinked below:

1. City and County of Denver, Food Producing Animals: Suggested Care Practices and Local Resources, Chickens, Ducks and Goats.
<https://www.denvergov.org/content/dam/denvergov/Portals/682/documents/Animal%20Protection/FPA%20Best%20Practices%20Handout%20-%20EV.pdf>
2. Food Safety Begins on the Farm: A Grower's Guide/ Good Agricultural Practices for Fresh Fruits and Vegetables, Assessment Sections – Petting Zoos, Manure (www.GAPs.cornell.edu)
3. Denver Urban Ag Center - <http://www.denverurbanhomesteading.com/> - urban agricultural center with activities and information on chickens and goats,
4. City and County of Denver ordinances Chapter 8, Article III, which can be found here:
https://library.municode.com/co/denver/codes/code_of_ordinances?nodeId=TITIIREMUCO_CH_8AN_ARTIIILIFO
5. City of Denver: Food Producing Animals Suggested Care Practices and Resources
https://www.denvergov.org/content/dam/denvergov/Portals/682/documents/Animal%20Protection/FoodProducingAnimals_InfoPacket.pdf
6. A City and County of Denver: Food Producing Animals Permit is required for sites with more than two goats and must be renewed annually and a copy of the permit sent to the Department of Sustainability:
https://www.denvergov.org/content/dam/denvergov/Portals/682/documents/Animal%20Protection/FoodProducingAnimals_PermitApplication.pdf

General info:

- **CSU's guidance on goat keeping**
<http://veterinaryextension.colostate.edu/News/backyardgoats.shtml>
- <http://veterinaryextension.colostate.edu/menu2/smruminants.shtml>
- Connect with opportunities right here in Denver at The Urban Farm www.theurbanfarm.org
- <https://greeningyourschoolyard.com/projects-and-examples/getting-started-with-goats>
- Local classes on chickens and goats at Denver Urban Homesteading
www.denverurbanhomesteading.com
- Keeping Backyard Animals Guide - www.sustainablefooddenver.org
- The New South Wales guide to keeping and teaching with goats at schools
<http://nswschoolanimals.com/goats/>

Goats, feed & supplies

- Denver Urban Homesteading/Earthdog Denver 370 Kalamath Street, Denver, CO 80204, (303) 534-8700
- Curve Feed & Supply 6750 West Mississippi Avenue, Lakewood, CO 80226, (303) 934-1249
- Murdoch's Ranch and Home Supply 12154 N. Dumont Way, Littleton CO 80125, (303) 791-7800 or 9150 Wadsworth Parkway, Westminster CO 80021, (303) 422-9100
- The Old Feed Store - Meat processing, goats, feed and supplies (970) 493-0320, 3612 W County

- Rd 54g, Laporte, CO 80535
- Golden Mill 1012 Ford Street, Golden, CO 80401, (303) 279-1151

Veterinarians

- Dr. Leticia German with Front Range Equine and Livestock (Golden) – 970.420.5823
- Dr. Debra Mayo (Golden) – 303.271.9700

Books

- **Storey's Guide to Raising Goats** by Jerome Belanger
- **The Complete Idiot's Guide to Raising Goats** by Ellie Winslow
- **The Complete Idiot's Guide to Urban Homesteading** by Sundari Kraft

Other

- Goat keeping forum - www.thegoatspot.net – community forum on goat keeping
- One school's story of introducing goats to teach
<https://www.fultonschoolstalbans.org/Our-Community/farmprogram/goats/>

Appendix A: Waiver and Release of Liability

In consideration of the desire to participate in the care of the school's goats, collection of milk and maintenance and repair of the pen and shelter, all students and volunteers must have a signed [DPS Waiver and Release of Liability](#) on file with the school for working with the goats, with the full understanding that working with goats and their milk and working in a goat pen may expose individuals to potential risks.

Denver Public Schools
ENTERPRISE RISK MANAGEMENT
Tel: 720-423-1300
HYPERLINK
"<https://financialservices.dpsk12.org/risk-management/>" <http://risk.dpsk12.org>
RiskManagement@dpsk12.org

Waiver and Release of Liability

In consideration of being allowed to participate in the **care and maintenance of school goats and their pen/shelter** ("Activity"), to the extent permitted by law I hereby forever discharge, release, and hold harmless School District No. 1, in the City and County of Denver and State of Colorado (the "District"), and its employees, officers, directors, agents, representatives, and authorized volunteers (collectively, the "Releasees") from any and all liability, claims, demands, actions, and causes of action arising from or related to any loss, damage, or injury, including death, that may be sustained by me, or to any property belonging to me, while participating in the Activity.

I am fully aware of the potential risks and hazards and I hereby elect to voluntarily participate in the Activity. I knowingly and freely assume all potential risks, known and unknown, including those arising from the negligence of the Releasees.

I, for myself and on behalf of my heirs, assigns, personal representatives and next of kin, further agree to indemnify and hold harmless the Releasees from any loss, liability, damage or costs, including court costs and attorneys' fees, that Releasees may incur due to my participating in the Activity, including those caused by the negligence of the Releasees or otherwise.

I have read this Waiver and Release of Liability ("Agreement") and fully understand its terms. I also understand that I have given up substantial rights by signing it and sign it freely and voluntarily without any inducement. I am at least eighteen (18) years of age and fully competent to sign this Agreement.

Participant (Print Name)

Signature

Date

*Parent/Guardian (Print Name)

Signature

Date

(* If Participant under 18 years of age)