



denver animal shelter

Food Producing Animals (FPA)

Suggested Care Practices and Local Resources

Chickens, Ducks, and Goats

Fowl

Backyard chickens and ducks can be wonderful pets, in addition to providing delicious healthy eggs for their owners. There are a couple of important things that future fowl owners should consider before getting their birds:

- Fowl need regular daily care. If you have a daytime/nighttime setup, they may need to be taken out of their coop every morning and put away every evening (see “Setup for a Flexible Schedule,” below). Their daily needs also include fresh food and water, plus coop/yard cleanup tasks. If you’re going on a vacation, fowl typically should not be brought to another fowl owner’s backyard to be cared for, since mixing flocks can create behavior problems. You will need to plan on finding someone to come by and care for your chickens while you’re away. Neighbors are often a great option for this, and you may also be able to find someone on a local homesteading message board (see “Resources” below).
- Fowl do not lay eggs regularly for the duration of their lives. Chickens only produce eggs consistently for 2-3 years; ducks for about 5 years. Fowl can live to be 8-10 years old. Therefore, fowl owners need to be prepared to either explore retirement options for older birds (see “Retirement Options,” below) or make allowances to keep their older birds as pets. If you’d like to keep your older birds until they pass away from natural causes, start with just 3-4 fowl. After 2-3 years, you can add 2 more young birds, and then 2-3 years later add 2 more. This will allow your older fowl to live out their lives and die of natural causes and you’ll still have consistent egg production within the 8-bird limit laid out in the FPA ordinance.

Permeable Space

The ordinance requires that FPA owners have at least 16 square feet of permeable space per bird. 16 square feet is certainly adequate, but it’s always a good idea to give the birds as much additional space as you can. The fowls’ permeable space (as well as the shelter) must be on the rear 50% of your zone lot.

“Permeable space” means ground or grass (i.e. not concrete). If you are keeping your fowl on bare ground, consider covering their entire living area with straw or pine shavings. This will provide mulch for fowl manure, which helps to reduce smells and keeps the birds from walking through wet manure.

Fencing

If the fowls’ permeable space is an open-air barnyard (as opposed to an enclosed chicken wire run) then you need to provide adequate fencing. Fences that are 3’11” tall are typically adequate to keep fowl contained. Fencing can be made of chicken wire, stock wire, chain link, or any other durable material.

If your fence is not containing your birds, you have a few options. You can make your fence higher (be aware that construction of fences 4’ or higher require a zoning permit in Denver), keep your fowl in an enclosed run, or secure netting over the top of your barnyard. You also have the option of performing wing clipping on your fowl, though this leaves them unable to fly if confronted by a predator.

Be a good neighbor and do not make a common fence with your neighbor one side of your fowl/goat fencing.

Structures

The successful chicken shelter has the following features:

- Provides adequate space for the number of birds
- Is well ventilated
- Minimizes drafts
- Maintains a comfortable temperature
- Protects the chickens from wind and sun
- Keeps out rodents, wild birds, and predatory animals
- Offers plenty of light during the day
- Has adequate roosting space
- Includes clean nests for the hens to lay eggs
- Has sanitary feed and water stations
- Is easy to clean
- Is situated where drainage is good

The structure should be predator-proof and provide protection from rain, snow and wind. Fowl-sized doors (called a pop hole) are recommended. It will be more convenient to clean the shelter if there is a way for humans to access the inside, either through a human sized door, or through hinges on the walls or roof. Be aware that construction of a structure requires a zoning permit and 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 720-865-2984.

The floor of the enclosure may be: 1) solid wood, if the floor is at least 1 foot off the ground to protect from rodents, 2) concrete, or 3) permeable ground, if the soil and slope encourages adequate drainage to dry every time it gets damp from outside weather. If the floor is permeable ground, bury chicken wire or hardware cloth at least 12 inches around the perimeter of the enclosure, to prevent predators from digging in.

Nighttime enclosures should be large enough for fowl to rest comfortably and walk around each other. Plan on four square feet of coop space per bird. For Bantam sized chickens (less than two pounds) two square feet per bird is adequate. Fowl should not sleep on hard wood or concrete. Each coop should have perches and/or bedding of straw or pine shavings. Nest boxes (1 for every 4-5 hens), and automatic food and water stations should be provided.

The well-constructed coop will be well ventilated, but also be insulated to guard against both hot and cold temperatures. Ventilation should be breezy enough to remove excess moisture and prevent respiratory diseases, to which chickens are especially prone, but not drafty during winter. Some chicken breeds are very susceptible to the cold weather, so the coop should not be drafty.

Setup for a Flexible Schedule

If you have a situation in which you can't reliably be around to let the chickens out of their coop every morning or secure them every evening, you can construct a setup that still allows your animals to be safe from predators. Attaching a large (at least 16 square feet per bird), predator-proof chicken run to a reasonably large predator-proof coop will allow your birds to roam freely inside and outside, while remaining safe. Fowl will wake up in the morning and venture into their run, where they will spend the day. At night they will go into their coop to sleep once the sun goes down. Stable food and water that cannot be knocked over is a critical part of this equation. A hanging feeder and waterer will accomplish this.

Winter Care

While fowl are generally well-equipped to deal with cold daytime temperatures during winter, they often need supplemental heating at night when the temperature drops below about 20°F. You can add a heating lamp or light bulb (the necessary strength depends on the size of the enclosure) to your enclosure during winter months. In addition, fowl with large combs and waddles (like Leghorns) may need to have petroleum jelly applied to their combs and waddles during very cold nights to prevent frostbite.

Food and Water

Chicks should be given a “chick starter” feed until 8 weeks old. Fowl should eat a “growing” feed (which contains extra protein) from 8 weeks until they start laying. At or immediately prior to laying, fowl should be eating a “laying” feed that contains supplemental calcium. Do not allow the drinking water to become dirty, particularly with bird feces, as it can cause diseases.

Fowl can eat most table scraps, but they should not be given green potato peels, dried or undercooked beans, avocado skin or pit, raw eggs or egg shell pieces, raw meat, rhubarb leaves, or nightshade (tomato, pepper, eggplant, potato) plant parts.

While ducks do enjoy having water to play in, providing bathing water is not required when keeping ducks. Be aware that bathing water that is not cleaned regularly can potentially introduce problems, as it may quickly become dirty and the animals might try to drink it.

Veterinary Care

Fowl in Colorado do not require preventative vaccinations in order to remain healthy. If your fowl experiences a minor injury or problem, help can often be found in books or online message boards. For more serious injuries or illnesses, contact a local veterinarian (see “Resources,” below.)

Retirement Options

While many people choose to keep their fowl as pets after they stop laying (see introductory paragraphs, above) some decide to retire non-productive hens. The sustainability groups in the “Online Resources” section below should be able to provide recommendations for places outside of Denver that are willing to take older fowl. Animal Care & Control can also give you the names of local animal sanctuaries. You can advertise your chicken as a pet on public web sites if it is important to you that the animal be kept as a pet and not used for meat. Be sure to specify that in your ad. Slaughtering is allowed in Denver as well as many rural areas surrounding Denver. If you’d like more information about this option, contact the local sustainability groups.

Disposal of Dead Fowl

If one of your fowl dies, there are a few methods of disposal that are recommended:

- Dead animal pick-up can be requested by calling 311. The city will provide this service free of charge.
- You can take your animal to the veterinarian to be disposed of, as you might with a dog or cat.
- Fowl can be buried on your property if they are buried at least 24” down.

Chick Care Tips

Chicks should be provided with an indoor brooder which keeps them secure from predators and provides them with ample room to move around. The larger of a brooder you can provide, the happier and healthier your chicks will be. Many people choose to make a brooder out of large cardboard refrigerator boxes and chicken wire, rather than purchasing one. Your brooder should include an adjustable heat lamp or light bulb (250 watts is recommended for chicks) to maintain a temperature of up to 90 degrees.

Chicks should be given a “chick starter” feed and clean water. Do not feed produce or other table scraps to chicks. Chicks should have their vents (their bottoms) checked daily for pasting. Any dried feces should be removed so that the vent is clear. Chicks should be brooded inside for 6-8 weeks.

When ordering chicks, be sure to purchase females and not “straight run” (which is always a mix of males and females). Even if you order all females, there is still a small chance that you could end up with a rooster.

Dwarf Goats

Backyard dwarf goats can be wonderful pets, in addition to providing healthy milk for their owners. There are a few important things that future goat owners should consider before getting their goats:

- One suggestion is to have two dwarf goats for companionship. One goat raised alone may be stressed and become sick and may be much louder than a goat with a companion. Dogs or other pets are not suitable companions for goats. If you prefer to own just one milking doe, the ordinance does allow the keeping of wethers (neutered male goats), which cost a fraction of the price of a doe.

- Doe goats must be bred in order to produce milk. A dwarf goat's lactation cycle is about 300 days long. Their gestation is 5 months, and the goat kids need to nurse for 6-8 weeks. Given these timeframes, if you are keeping two doe goats you would need to breed each one every 16 months (or one goat every 8 months) in order to have a steady supply of milk. Before you breed, check on the demand for dwarf goat kids both within and outside of Denver, but understand that you will be responsible for re-homing kids as part of milk production.
- Goat owners who plan to be away have different options, depending on whether or not their goats are currently being milked. Goats that are not being milked can be easily cared for by a neighbor. Goats that are being milked need a qualified pet sitter who is familiar with milking, or to stay with another goat owner who will be able to maintain their milking schedule. Some rural goat breeders outside of Denver will also allow you to board your goats with them, for a small fee.

Permeable Space

The ordinance requires that FPA owners have at least 130 square feet of permeable space per dwarf goat. 130 square feet is certainly adequate, but it's always a good idea to give the goats as much additional space as you can. The goats' permeable space (as well as the shelter) must be on the rear 50% of your zone lot.

"Permeable space" means ground or grass (i.e. not concrete). 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.

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.

Fencing

You must provide fencing adequate to keep your goats contained. Chain link, stock wire, or other sturdy fencing materials would be appropriate. Chicken wire is generally not adequate fencing for goats. Wooden slat fences are not generally recommended, as goats can knock out one of the pieces and get their head caught between the slats. A 3'11" fence is typically adequate to keep dwarf goats contained, provided climbing materials are not set next to the fence.

Structure

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.

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. Is there enough room for you to move around and clean it easily? Do you need a light source if you will be feeding/tending them during the winter? Where will you store hay and grain? Where is the water source? A number of considerations for your goat shelter are for the benefit of the caretaker.

Some areas of Denver contain more large mammal predators than others. If you feel that your dwarf goats would be at risk from large predators, you can provide a predator-proof structure.

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.

Food & Water

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.

Goats are omnivores and can eat most plant-based table scraps. Do not feed goats fruit pits, green potato peels, bindweed, white clover, rhubarb leaves, or nightshade (tomato, pepper, eggplant, potato) plant parts. Goats that are milking should not eat onions or garlic.

Veterinary Care

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.

See “Resources” below for a list of local goat veterinarians.

Other Goat Care

Goats need to have their hoofs 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 hoofs.

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.

Breeding

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.

Milking

Goats that are milking 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.

Disposal of Dead Goats

If one of your goats dies, there are a few methods of disposal that are recommended:

- Dead animal pick-up can be requested by calling 3-1-1. The city will provide this service free of charge.
- You can take your animal to the veterinarian to be disposed of, as you might with a dog or cat.
- Goats can be buried on your property if they are buried at least 24” down.

Resources

Online Resources

- **Chicken keeping forum** - www.backyardchickens.com –chicken keeping; information
- **Goat keeping forum** - www.thegoatspot.net – community forum on goat keeping
- **Duck keeping** – www.duckhobby.com/index.html - information on keeping urban ducks
- **Denver Urban Ag Center** - <http://www.denverurbanhomesteading.com/> - - urban agricultural center with activities and information on chickens and goats, including a monthly chicken swap.
- **Denver Poultry Meetup** - www.meetup.com/DenverBackyardPoultry – local poultry group (with message board)
- **Denver Homesteader Meetup** - www.meetup.com/Greater-Denver-Urban-Homesteaders -- local homesteading group (with message board)
- **Chicken Care eBook** - <http://www.mypetchicken.com/backyard-chickens/chicken-care/guide-toc.aspx> - eBook on chicken care
- **Backyard Animals** - www.sustainablefooddenver.org – information on backyard animals

Books

- **Backyard Chickens for Dummies** by Kimberly Willis and Rob Ludlow
- **Building Chicken Coops** by Gail Damerow
- **Storey's Guide to Raising Chickens** by Gail Damerow
- **Storey's Guide to Raising Ducks** by Dave Holderread
- **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
- **The Urban Homestead** by Erik Knutzen and Kelly Coyne
- **Urban Homesteading: Heirloom Skills for Sustainable Living** by Rachel Kaplan and Ruby Blume

Local Classes

- **Denver Urban Homesteading** – www.denverurbanhomesteading.com (chickens and goats)
- **Front Range Community College Continuing Education** – www.frontrange.edu (chickens and goats)
- **Heirloom Gardens** – www.eatwhereUlive.com (chickens and goats)

Local Veterinarians

- **Chickens or Ducks:** Dr. Ted Cohen with University Hills Animal Hospital (Denver) – 303.757.56383
- **Chickens or Ducks:** Dr. William Guerrara with The Animal Hospital (Broomfield) – 303.466.8888
- **Goats:** Dr. Leticia German with Front Range Equine and Livestock (Golden) – 970.420.5823
- **Goats:** Dr. Debra Mayo (Golden) – 303.271.9700

Feed and Farming Stores

- **Curve Feed & Supply** 6750 West Mississippi Avenue, Lakewood, CO 80226, (303) 934-1249
- **Denver Urban Homesteading/Earthdog Denver** 370 Kalamath Street, Denver, CO 80204, (303) 534-8700
- **Golden Mill** 1012 Ford Street, Golden, CO 80401, (303) 279-1151
- **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