Duck, Duck Goose



A basic guide to caring for your new waterfowl

Congratulations on making the choice to raise waterfowl! These little waddlers are a great backyard pet that will provide you with a lot of enjoyment, fresh eggs, and more than a few good belly laughs.

It's my very strong belief that all creatures should be treated with kindness. All of my poultry are given lots of sunshine and forage space, plenty of treats, and a clean, safe environment. They're all loved and cared for. It's my genuine hope that you will afford them the same attention, kindness and protection when you take them home.

Most of the information included in this booklet is common sense stuff. However, there are also some very specific guidelines for raising waterfowl that I've learned over the years and have incorporated into my management practices. Some of my approach to raising poultry has been learned from the gracious advice of other waterfowl raisers as well as books, but most of it comes from hands-on experience. My management practices may not be totally appropriate for your unique situation but most of this is basic information that anybody can use when raising ducks or geese.



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BROODER HEAT

For day olds to 4 weeks, have their brooding area set up in a safe, draft and predator free area and warmed in advance of adding babies. It's extremely important to ensure the area is large enough so they can escape from beneath the heat if they get too warm. So place your heat source in a manner that heats only a portion of their brooder. My placement depends on the amount of birds I'm brooding and how cold it is inside my barn. One 250 watt brooder lamp will warm up to 30 ducklings. If they pile up under the heat source, it's too cold; if they all stay outside of the ring of heat source it's too hot. They should be scattered throughout the brooder.

Place 4- to 6-inches of fresh litter material on the floor of the brooding area and adjust the brooder to the proper temperature: 85-90 degrees F. reduced by 5 to 10 degrees per week until they are about 4 weeks of age. High temperatures may result in slower feathering and growth. Be sure to dip each baby's beak into the water to teach them how to drink. Sprinkling a bit of greens in the water will also encourage them to continue drinking.

A simple brooder set up:



BROODER BEDDING

Do not use newspaper for litter since it is too slippery for their tiny, smooth duckling feet and can increase the odds of getting spraddle legs. Pine shavings work well, is readily available at most pet stores, and is very absorbent. Sometimes the babies will eat wood shavings, if this happens try to use bedding with larger pieces to discourage this behavior. Straw can be used; it's a good idea to chop it smaller until they grow a bit. Change litter frequently to keep bedding dry and avoid disease, bacterial contamination, mold and fungus.

SPACE REQUIREMENTS

Inexperienced raisers often underestimate the growth rate of their new babies and are unprepared for how much space they will need. Overcrowding invites disease, pecking problems, and losses.

Allow 1/2 square foot of floor space per bird during the first two weeks. Increase this to at least 1 square foot by 4 weeks. After the first month, provide them an outdoor area with at least 10 sqft per bird in addition to housing space with at least 5 square feet of floor space per bird.

Sometimes folks can't resist the temptation to continue buying or breeding and end up with far too many birds in too small a space. Overcrowding can quickly lead to death from suffocation, parasites, diseases, and certainly leads to pecking

behavior. It's just cruel to keep your birds all squished together without the proper elbow room. Do not keep more animals of any kind than you can properly manage, feed, and house.



FOOD & SUPPLEMENTS

Waterfowl babies should be fed non-medicated chick starter if



you cannot find a duck starter – beware that the medicated chicken feed is deadly to ducks. Also be sure to use feeders that the babies cannot climb into. Waterfowl can feed themselves from birth, but may not recognize the food so dip their bill to get it started. All food should be mixed with a little water for the first week or two. They should be switched over to a grower formula around 2-3 weeks old.

Then put them on game bird starter between 17-20% protein. Anything over that might lead to angel wing.

Sprinkle some feed very sparingly with chick size grit a few times a week. Chick feeds are lacking in niacin which can lead to leg problems (lameness, limping, even permanent crippling) in young waterfowl. Young ducks and geese require 3 to 4 times more niacin than other poultry. You can add it to their diet by sprinkling Brewers or Nutritional Yeast on their feed (2 cups niacin per 10 lbs of feed. Also access to grass and bugs helps avoid this problem.

Supplements

Add vitamins, minerals & probiotics to the drinking water of your ducklings for the first 5 to 10 days after hatching and

during times of stress. You can get "Rooster Booster" from your feed store or online at www.flemingoutdoors.com. I feed this to all my poultry about once a month and during times of stress or sickness. Strombergs and McMurray offer Avia Charge 2000. This product is all natural and contains minerals, vitamins, antioxidants, amino acids, and body



& blood building nutrients. I haven't used it but I hear it's a good product.

Apple Cider Vinegar (ACV) has long been hailed as having numerous health benefits for supporting a strong immune system for people, pets and livestock.

ACV is full of vitamins, minerals and trace elements. It helps to lower the pH level in the stomach, making it a less friendly

environment for harmful pathogens. The acid content of ACV gives it antiseptic value. It kills germs naturally and serves as a mild antibiotic in its raw unpasteurized form as it contains bacteria that destroy infectious organisms.

Raw, unfiltered/unpasteurized ACV can be found in some feed stores, health food stores, or can be bought online from suppliers like www.vitaminshoppe.com. You can use a good unfiltered ACV with mother to make your own,



eliminating the need to continually purchase more. See how here: www.vinegarman.com/VinegarMaking.shtml. Keep in mind that the ACV you see on the shelf in your local supermarket is normally filtered and pasteurized.

For the larger waterers that I typically fill every few days, in warm weather there's a noticeable difference in the sliminess and general smelliness of the old water when I use AVC. I also use regular white vinegar in the duck kiddie pools, pouring in about 2 cups per pool, to keep the water from becoming too stinky so that I only need to clean the pools once per week.

How to give ACV to poultry: Remember ACV is acidic and you should only put it into plastic water containers to prevent corrosion and poisoning of the birds.

For babies, you can give them a very weak solution to help them grow and feather up quickly. I normally make a 0.5% mixture which is 1 teaspoon ACV to 4 cups of water.

For adults use a dilution rate of 2%, in other words 3 tablespoons for a 1/2 gallon of water.

Kelp Meal is an excellent waterfowl supplement. Feed according to directions.

Oyster Shell & Grit: make sure to provide laying hens with free choice oyster shell but avoid giving it to younger poultry as it may cause bone growth problems.

For top egg production ducks should get an adequate amount of 16 - 20% crude protein. Avoid feeding fish products to your egg layers as it will cause the eggs to have a strong fishy flavor. Ducks that are overly fat are very unhealthy and that cause poor egg production and breeding.

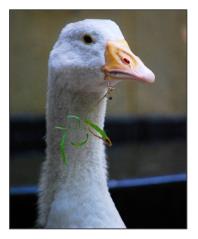
Feed

Waterfowl will forage for a great deal of their food whenever possible, but, if you want to keep your birds healthy, additional feed should be provided. Some form of commercial waterfowl "chow", unmedicated chicken feed (pellets are best) or mixed whole grains such as corn, wheat, barley, and oats. Corn is by far the birds' favorite meal but it's junk food for them - all carb and minimal nutritional value. In limited quantifies it's a great winter warmth provider but too much will make your birds fat. Waterfowl tend to store body fat around their reproductive organs so overweight birds can have fertility problems. And "maize" alone won't give them the balanced diet they need. Cracked Corn or Scratch Grains should not be fed to young ducklings or goslings. Remember, too, that you should never give your ducks any commercial feed with chemical additives (or with more than 20% protein), since such a dinner might kill young birds and cripple older ones.

Greens are also extremely important and should make up about a third of the bulk of a duck's diet. (You won't have to worry about what to do with the excess vegetables and fruit from your garden and orchard if you have waterfowl around!) Clover before it blooms—and alfalfa will increase the fertility of your flock. Geese love & thrive on grass. Give your babies (from day 1) chopped greens to nibble on such as non-chemically treated young, tender grass, lettuce, spinach, dandelion greens,

clover etc. if they do not have access to pasture. Provide fresh greens daily or as much as possible. This also helps to prevent boredom and pecking each other. When no greenery is available, feed pressed alfalfa such as Hay Stretcher (but not rabbit pellets because it has too much salt).

But whatever and whenever your birds eat be sure they get enough grit (coarse sand or fine river



gravel, for example) or the food will simply pass through them without being ground up in their gizzards. Typically, if your ducks are dabbling they're taking in enough dirt to provide all the grit they need. Ducks without access to grit will lose weight and be hungry all the time, and their droppings will be large and puffy instead of the "proper" watery splotches. (Calcium such as is found in ground oyster shells—is also essential for layers, but can be harmful to immature fowl.)

Along with food, ducks must always have fresh water nearby to keep them from choking on their food. The pond, tub, or whatever you use should be deep enough, too, to allow the birds to dunk their heads. Otherwise, their nostrils may get clogged, and they can get an infection called "sticky-eye".

Steam Rolled Oats & Whole Oats are favored by waterfowl if given early in their rearing. Most ducklings & goslings will eat uncooked oatmeal which can be used along with starter and grower rations. Oatmeal can be fed in amounts up to 20% of their daily feed ration.

Sunflower Seeds are a good waterfowl food supplement. Whole seeds can be fed to youngsters when they are big enough to eat them. Throw a handful into their feed and see if they'll eat them.

Bugs: ducklings love to forage for bugs and Muscovy are supreme bug catchers. Even winged insects are no match for the stealthy Muscovy. They do a bang-up job of keeping my mosquito, green-fly, and tick population in check! My Campbells and Runners are super slug catchers and will even gobble up the slug eggs like candy. Geese are strict vegetarians who are simply appalled and disgusted by the whole idea that they should eat bugs but they thrive on tender green grass, these greens are vital for ducks as well.

DRINKING WATER

This is a MUST and lots of it! Remember that eggs are 99% liquid and your girls will need lots of clean water to produce them. Ducks and geese consume an enormous amount of water

each day and fresh, clean water is your cheapest feed! Be sure to place plenty of water close to the feeders otherwise the birds may choke on their food, especially the babies.

It's important to use the right sized drinker to keep

babies from spilling it all or splashing too much on themselves which will cause chilling. It is highly recommended that you add poultry vitamin/electrolytes (pedialyte will also work) to the drinking water for about a week or so after you get your birds. This greatly helps during times of stress, such as introducing them to a new home.

Waterfowl babies are very messy and will soil their water fast by mixing food and dirt into it. Pooping in their water is impossible to prevent so it can quickly become a stinky, bacteria laden mess. I changing the babies drinking water at least twice each day and they're always excited to have fresh water. It is fine to use a chick fount for waterfowl babies but after the first week make sure to also provide a dish or pan that is just deep enough that they can submerge their entire snouts into it. This is



important to clean out their eyes and nostrils because their feed and bedding will stick to these areas. They need to have the ability to "wash up" at least twice a day, ideally at feeding times – they will probably try to swim in it so you don't want it too deep. If you keep this open waterer in the brooder you'll want it in an area that you can contain the slopped water since it'll be splashed all over. Some sort of tray

that you can easily remove to dump/clean regularly to save your litter becoming a big, soupy mess. Ducks have the unique ability to make a giant mess in just a teaspoon of water, but they have a great time doing it!

SWIMMING

Waterfowl babies DO NOT need to swim! Before they are feathered out do not allow ducklings or goslings to swim in water they cannot easily get out of on their own. They're not

yet buoyant and only covered in a thin layer of fuzz with no oil of their own to allow the water to be properly repelled at this age so they will sink and drown if the water is too deep and/or if they get overly tired. I use



new plastic paint trays to let them splash around in about their second week. The "deep end" of the tray provides enough splashing water that isn't too deep and the sloped end of the tray provides easy and safe access out of the water when they're ready to get warm again. They are very easily chilled before they are feathered out and can even become dangerously chilled in wet grass or wet litter. They must have a large enough heat source to dry off and warm up under at all times without causing them to pile up on one another which may cause some babies to be crushed and suffocated. It's also important to keep this splashing tray very clean so the babies remain healthy. Once they get feathers I use a kitty litter pan with a "step-in front" for the birds to splash in. This gives them an easy-in,



easy-out pond that's just deep enough to get a good duck-bath in. If the weather is warm enough I set it up in a movable play pen out in a grassy area so they can have a great

time making as big a mess as they like.

BEHAVIOR

You'll soon see that your waterfowl have distinct personalities and each duck and goose will have its own peculiarities and habits. However, there are some basic behavioral patterns shared by these feathered friends which you should get to know.

Social Needs

Ducks and geese have a form of communication that they use among themselves and also use to "communicate" with you. They're pretty happy creatures and they have few needs. Food,

water, community and more water, plus a clean barn and enclosed pen are usually all it takes to keep them happy.

Waterfowl are social birds and should not be raised alone. Ducks and geese



need the constant company of other waterfowl. These are such social birds that they will become very lonely and depressed very fast. The optimal number for a small flock is 4-6 ducks, or 2-4 geese, or any combination thereof. However, a pair of geese or trio of ducks will be perfectly content. Just be sure you don't have more than one male with a female as the hen will become overworked.

Pecking Order

We all have some understanding of this particular bird law. As long as everyone knows their place in the flock there will be peaceful coexistence. The pecking order is established early in the formation of the flock and then reestablished if a new duck is introduced. There may be some serious looking posturing,

pushing, or pecking but everyone will very quickly settle down and within a few days they'll be fully integrated. Don't get involved unless one bird is being denied food



or water. If this is the case, put out an extra food and water supply away from the primary source. There will always be an order, though among these gentle creatures it's not usually very obvious. Usually it's seen at meal times and I've only really noticed it with my Muscovy. The chief duck comes to the feeder first, and sometimes he'll eat out of my scoop if I offer it to him. He'll eat out of each tray that I put food in and all the other ducks will then dive in. There's usually a primary female too and they'll all move out of the way for her to get some food. Babies are at the bottom of the feeding chain so watch carefully to make sure they get an adequate share.

When introducing ducks, it is often best to allow as much space as possible so the bird that is lower in the pecking order can escape but the reverse seems to be true of geese. Removing the gander and confining geese in a small area seems to help the females bond. They don't fight as much as when having a larger area to roam and after a couple of weeks, they can usually be released to roam as a group together. Finally, the gander can be introduced to the group and he should accept them all as his "wives". December is the best time to introduce new mates so there's time for everyone to get to know one another before breeding season.

Fighting

Shy and gentle creatures, ducks are seldom aggressive towards humans. Of the larger domestic birds, they are the least likely to inflict injury to children or adults. Ducks get along well with other waterfowl and rarely fight. Of course, if a new bird is introduced into a flock, the pecking order is disrupted so there will be a short period of chasing, pushing and wing slapping, but this usually subsides quickly. It's unlikely they will ever inflict injury to one another but it's best to avoid having too many drakes in a flock during mating season. You'll find that drakes get along perfectly if there are no females around.

Like children and puppies, geese do occasionally challenge you, and when they do you've got to clarify who is boss. Geese are

certainly capable giving you a good old fashioned goose pinching with those powerful beaks and look out for the wings too! But you'll notice that the hissing and wing spreading is more bark than bite and will disappear completely when breeding season is over. The key to dealing with geese is the same as any livestock: never, never, never, let them think that they're the boss. If a goose issues you a challenge, raise your arms and look as big as



possible, walk towards it and make some sort of annoying sound, like honking. If the goose doesn't back away (like if it happens to be the alpha gander), then push it over with a stick, a bucket, or your foot. Geese are basically round, and this is not likely to cause injury or pain. You have, however convinced the gaggle that you are the alpha, or at least someone not to be trifled with.

Response to Fear

For your birds to perform in tip top shape they need to remain relatively calm. Ducks do not lay well when they're stressed and

frightened. It may take several days before they resume normal laying after a stressful event. Geese have excellent memories and do not soon forget people, animals or situations that scare them and they're slow to forgive. Dave Holderread notes in his book on geese, "After being badly frightened, they may not settle down completely for several days or even weeks. Because they are sensitive to the sight



and sound of death, whenever geese need to be, killed - either for butchering or due to illness or injury - it is advisable to dispatch birds out of sight and hearing of the flock." Also avoid reaching above or over their heads because this triggers an instinctual flight response.

Building Trust

Sharing snacks with your waterfowl (especially Muscovy and geese) can be an excellent bonding process and helps build trust.



They love cooked or wilted asparagus, lettuce, grapes, etc. (bread is not an appropriate waterfowl treat!). Be sure to socialize the birds, but with geese especially, social boundaries are important. If the geese "imprint" on you they may become confused as they believe they are the same species as whatever they imprint

themselves on. This will lead to problems at maturity. I talk to my ducks and geese when I'm in the barnyard and I find the geese and Muscovy ducks to be the most responsive to my voice and the Muscovy will come right up and sit or stand beside me looking for a treat. The geese stretch out their long necks and chatter with me a bit but keep a comfortable distance. If they interact with you regularly in a non-threatening manner they'll soon see you as a safety zone.

Mating

While most domestic ducks and geese can mate successfully on land, they really prefer water. So keeping some swimming or wading water will likely increase the fertility rate of hatching eggs.

Ducks have been known to pair off, although domesticated drakes normally mate indiscriminately with hens in a flock. If you raise several breeds and want to hatch purebred offspring each variety needs to be penned separately three weeks prior to and throughout the breeding season. One drake can usually be given two to five hens, although males sometimes have favorites and may not mate with the all the girls.

The bond between male and female geese is stronger than in than in other domestic fowl. Changing mates can be difficult,

often requiring several weeks or months. When one member of a pair is lost or removed, the remaining bird sometimes refuses a new mate, and, though rare, has even been known to die. However, most geese will eventually



accept a new mate after a period of mourning.

The number of geese a gander can be expected to service varies with the breed and is anywhere from 2 to 6, but as they age they will typically stick to a favorite one or two. Geese also easily bond together in bachelor groups. It should be noted that if you keep two males without any females for a couple of breeding seasons they may not form a bond with any introduced females as they'll already be in a comfortable bond with each other and quite happy as bachelor brothers.

HOUSING

Unlike chickens, ducks prefer to stay outside at night even in bad weather. But because they are ground nesters they are more susceptible to predation than other poultry and need to be taught to go into secure housing at night.

Housing doesn't have to be fancy, it just needs to be secure from predators, have a sturdy, locked door, and clean, comfortable bedding. I've used various doghouses for young ducks that I'm keeping in pasture pens but I have a large duck barn with an attached duck yard for regular use. Depending on the size of your flock, a shed with good ventilation will work

just fine. You'll want to be practical about it, the easier it is for you to clean and to collect eggs the happier you'll be. For some really good ideas check out the gallery at BackyardChickens.com for tons of pictures of poultry housing and/or Dave Holderread's book *Storey's*



Guide to Raising Ducks for some great ideas on housing and detailed, expert advice on waterfowl care.

Take care if you're raising ducks with chickens. They can be comfortably housed together at night as long as adequate space is provided, since ducks will sleep on the floor of the house and chickens like to perch (Muscovy do perch if given the opportunity). However, ducks are sloppy, wet creatures which can create an unhealthy environment for chickens. Also, ducks don't sleep through the night like chickens. They like to get up and chatter, get a drink, walk around, etc. Either way, provide lots of outdoor space for the ducks to get wet without creating a mucky problem for your chickens.

It goes without saying that bedding should be kept clean and comfortable for your birds. Keep 4 -6 inches of clean, mold-free litter such as straw, pine shavings, sand, peat moss, etc. on the floor of your duck-house. As the litter becomes soiled or wet, new litter should be added to maintain a safe, clean environment for your ducks and geese. If the duck yard becomes overly wet, add straw or other litter to the area to give your ducks a dry, cozy escape from muddy conditions.

Training

Ducks and Geese are creatures of habit so it's best to get in a routine with them right away. I let mine out of their houses



after they've laid their eggs in the morning and I've trained them to go into their house at dark. Unlike chickens, waterfowl don't have a natural desire to go inside at night. It's easy to teach your goslings and ducklings to be herded with a bamboo rod or long stick when they are still small so you can easily herd them when they are grown just by holding your arms out. They tend to stick together like glue so it's simple to get them to go where you want. At night a

flashlight makes and excellent herding device.

It will probably take about 3 nights of manually stuffing them one by one into their house through the pop-hole, but they quickly get into the routine if you're consistent and will soon go in all by themselves so that you simply have to say goodnight and lock up the door.

Nests

Having adequate nests for your flock will net you clean, unbroken eggs. To allow hens to become familiar with them, install or open up nests 2 weeks before you expect your first eggs. One nest for every 4 or 5 hens is sufficient as they prefer to share anyway.

For medium to large birds, a nest approximately 18 inches square is adequate for eggs you plan to collect every day. Keep nests supplied with clean bedding to encourage hens to use them. I place a plastic egg or ping pong ball in the nest to give them the right idea – works like a charm. If your girls are going to raise babies you'll want to give them extra setting room and a bit more privacy from the other birds.

It's best to have the nests inside the duckbarn so that your brooding hens have a safe, secure place to raise babies. With Muscovy you'll want to give the hen a lot of privacy as randy males have been known to pull setting mothers off the nest.

CATCHING AND HANDLING

Ducks and Geese must be handled carefully since their legs and wings are easily injured. When catching, remain calm and keep your movements minimal. Avoid as much chasing as possible by reducing the available space and ensure it's free of obstacles that they can trip on like feeders and water dishes.

Never, never, never grab ducks or geese by their wings or legs. Use your arms and hands to grasp them gently around their neck – this will stop forward motion. Immediately move your hand to the breast and the other over the wings to keep them from flapping. Lift them and support their feet or belly with your forearm. You can tuck your duck under your armpit much like a football with their head facing behind you holding their wings between your elbow and body. This is more comfortable and reduces struggling and injury.



Geese and Muscovy are large and will need to be embraced in front of you while you support their feet and keep your arm gently around their breast or hand high on their neck to keep them away from your face. Allow the Muscovy to "perch" on your hand or arm supporting them below and you'll know it's in a comfortable position when it relaxes a bit and sort of sits or settles low into the perch and stops pushing against you. Both geese and Muscovy are extremely powerful birds and, Muscovy especially, with their giant pterodactyl-like claws, can cause injury. Wear gloves and a long sleeve shirt to avoid being scratched – long, deep scratches can happen accidentally even by your gentlest bird.

BASIC SAFETY

- Do not allow small children to handle baby birds excessively or unsupervised. Many birds are accidentally squeezed to death this way.
- Protect your waterfowl from pets from predators when they are outside. Remember no matter how nice your Muscovy drake is, they are known to kill and even eat small ducklings.
- Even friendly pet dogs can playfully maul small ducklings or goslings.
- If your ducks have access to a pond they'll eat small fish and frogs, but remember when allowed on ponds or lakes, small ducklings or goslings are easy snacks for large turtles and fish like pike and bass.

When older, if allowed to free range... make sure to enclose your quackers in a predator proof shelter every night! While there are predators out and about during the day the risk is much higher at night. Birds that can escape to a pond are NOT safe enough at night! There are many dog breeds that are expert swimmers and hunters. Even adult Muscovy, that can fly, or large drakes can easily be killed by hawks, owls, coons (that can climb up to roosting birds) fox, coyotes, or stray dogs. Birds that are roosting high up in trees are not safe from coons which are skillful tree climbers and poultry killers.

It comes in waves; you may have long periods that you don't suffer any losses but eventually, if you don't provide nightly, predator proof shelter you will lose birds, perhaps even all of them in one terrible event.

During the day I have lost many ducks and chickens to hawks and it's a constant battle to give them safe free-range from these aerial predators. Vigilance is key! I use 50lb test fishing line to make a fine web approx 7 feet off the ground over forage and enclosure areas. This is pretty effective, but definitely not 100%, and requires regular maintenance.

INJURIES

I'm not a vet, so I'm only going to cover small injuries here that you would normally treat at home for yourself, your kids or your pets. Please use your best judgment. I recommend you

assemble a first aid kit well before you need it and build out a sick-bay too.

Ducks and geese are wonderfully hardy and sturdy animals that are seldom sick or injured. But



sometimes they do experience things like respiratory illnesses from moldy bedding, leg injuries, and wounds from predators.

Waterfowl are very good at hiding most illnesses and injuries from you, this is instinctual. You may not notice until they reach the critical stage. Unfortunately, by the time you can see respiratory issues it's too late to treat. So be sure to keep bedding clean, dry and mold free to avoid the issue altogether.

For minor injuries like cuts, scrapes, or bites, if it looks severe, is bleeding heavily appears be infected, get your little guy to the vet right away. If you plan to treat the injury yourself, you'll likely need to separate the injured bird from a larger flock by confining them in a small (but not too small) area like a dog crate because others will probably pick on an injured flock-mate. However, ducks and geese are very social and will be quickly depressed if left alone so you may want to bring along a companion fowl to keep it happy dabbling and eating while it heals.

If you notice your duck or goose has a cut, scrape, or bite you should get your sick-bay ready and all your first aide supplies together and set up for quick application before you catch the bird so you don't spend too much time stressing him out. You also might need an assistant with the bandaging part.

Start by washing the area gently with soap and water or rinse it well with a vinegar solution (½ AVC & ½ water), dab with a paper towl, coat it with antibiotic ointment and/or spray with Bactine, then bandage it up as best you can (not too tight!). Avoid overly loose bandaging that he can become snagged in. Some old timers recommend coating the wound with honey to keep out bacteria. And of course, make sure the bird has constant access to fresh, clean water and food such as a little hardboiled egg yolk mixed with his regular feed. You may also want to include an electrolyte for the stress (pedialyte is good if you don't have poultry supplements). It goes without saying that the sick-bay needs be kept clean and that you'll need to change the bandages often. Depending on the injury you should be able to get him back out to the flock in a few days.

If your bird is limping or lame, you really should try to figure out how it happened first so you can properly diagnose and fix the problem. They can strain leg muscles while scrambling over obstacles, so if that's what happened, it'll correct itself with no special care on your part. However, it's far more serious if the hock joint is swollen. This can be caused by an infection, so if his leg feels warm or hot to the touch and is visibly swollen that's probably the issue. This can be fixed by a series of antibiotic injections from your vet. In this case, you should NOT confine the bird, but give it plenty of access to swimming water, which seems to help recovery. If left untreated, this sort of lameness can become permanent, and putting the duck down would be the most humane solution.

Beak injuries may require a period of feeding special mashed food, but in most cases, the beak will heal to a point that the duck can feed normally.

Prolapse (Eversion of the Oviduct)

This ailment can be the result of a hen straining to lay an unusually large egg or can be caused by oviduct muscles being weakened due to premature or high egg production or obesity. Unfortunately this disorder occurs most frequently among the best layers.

A hen with this problem is easily identified by her droopy appearance and the expelled oviduct protruding from her vent. An ailing hen can be saved only if she is discovered within several hours after the oviduct is dislodged and prompt action is taken. Even then, her chances of healing are marginal.

To treat, wash the oviduct thoroughly with clean, warm water. Apply an antiseptic ointment, then gently push the organ back into place. Confine the hen in a clean pen for several days. To give the muscles a chance to heal, the hen should be fed small quantities of feed that will discourage laying. Hens that aren't valuable enough for treatment should be killed immediately and dressed for meat or buried. Left unattended, they will suffer a slow, painful death.

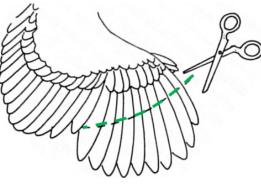
To prevent this problem, don't push hens to produce early or in greater quantities with unnatural lighting and make sure hens are not excessively fat. You can keep the oviduct of highproducing girls healthy and lubricated by mixing cod liver oil (one teaspoon per bird) with the feed one day per week.

Most waterfowl injuries are not permanent or fatal, and with some common sense TLC they'll be acting silly again in no time.

WING CLIPPING

Clip your waterfowl's flight feathers so you will have more control over them. You

only have to clip your bird's wings once a year after they molt and their new feathers come in. To learn how to clip wings including how to do the "beauty clip" visit this website:



www.poultryconnection.com/quackers/clip.html

RECOMMENDED READING

You should do your homework so that you can provide the best care for your new waterfowl. Here are a few books I found helpful. Hobby Farms magazine and Mother Earth News also feature regular articles on keeping poultry so keep your eye out at the newsstand. MuscovyCentral.com and BackyardChickens.com (BYC) are great forums where other poultry keepers discuss issues and I've learned a lot there. BYC also has an extensive gallery of coop designs to give you good ideas for your own.

- Storey's Guide to Raising Ducks by Dave Holderread
- The New Duck Handbook by Heinz-Sigurd Raethel
- Raising the Home Duck Flock by Dave Holderread
- The Ultimate Pet Duck Guide Book by Kimberly Link
- The Book of Geese: A Complete Guide to Raising the Home Flock by Dave Holderread
- Poultry and Waterfowl Problems by Michael Roberts

COMMON DUCK BREEDS & VARIETIES

Many people love ducks for their utility — they're great at eating bugs! But hobby farmers can raise them for their meat or eggs, or for exhibition. Plus, their animated behaviors make them a joy to have around the farm.

HEAVY WEIGHT DUCK CLASS

Silver Appleyard

 Listed as critically endangered by the American Livestock Conservancy. Raised for exhibition, pets, eggs, and gourmet roasting. Sturdily built and weighing between 6 -8 lbs live, the meat is lean and flavorful. They are one of the best layers among the heavyweight ducks, averaging 220 to 265 white shelled eggs per year. They are active foragers with calm temperaments and will tend to stay close to home if well fed. They have a friendly temperament and make good pets.

Aylesbury

 Listed as critically endangered by the American Livestock Conservancy. One of the largest known breed of domestic ducks, although exceeded in weight by the Muscovy and equaled by the Rouen. There are two types: exhibition and utility. Utility will mate naturally and reach harvest weight of about 5 lbs in 7 - 9 weeks. Often preferred over the Pekin as it's considered more flavorful. They lay 35-125 moderately sized, white or tinted green eggs annually. Typically described as slow moving, and exceptionally tame, they're not particularly active foragers.

Muscovy

 A large duck native to South America and best known for distinctive large, red warty face. Muscovy is the only domestic duck that is not derived from the Mallard stock and are genetically different. Very broody and excellent mothers; hens will lay up to 180 cream colored jumbo sized eggs a year and if properly managed will hatch 3 or 4 sets of ~15 ducklings annually. They are extremely friendly, calm and quiet. They don't quack; the male has a low breathy call, and the female a quiet trilling coo. There is not a better bug catcher! Each duck will eat hundreds of flying insects every day. The recommended ratio of drakes to ducks in a flock should be about 1:4.

Pekin

 A dual purpose bird kept for egg and meat production. Meat is very tender and mild. They grow fast and early, expected to weigh 5 lb. at eight weeks. Live weight at maturity is between 8 and 11 pounds. Broodiness varies; they will lay an average of 200 jumbo white eggs per year. Because of their huge body and skinny legs, they are prone to leg injuries. Ideal companion animals as they're very intelligent, active, very gregarious, and are capable of strong bonds to humans. Their average lifespan is 9 to 12 years. These ducks have chatty nature with a loud quack.

Rouen

 Listed in a "watch" status by the American Livestock Conservancy. Docile, friendly birds valued for their meat. The production Rouen averages 6 - 8 lbs at maturity. They are poor layers, producing only 35-125 jumbo white eggs yearly, but make fine roasting ducks and have abundant, delicately flavored flesh. This unsurpassed gourmet quality comes at a price, though, as Rouen ducks are slow to mature (6-8 months) which makes them impractical for commercial meat production.

Saxony

 Listed as critically endangered by the American Livestock Conservancy. A multipurpose duck derived from Rouen, German Pekin, and Blue Pomeranian resulting in a breed weighing between 6-8 pounds at maturity. Active forager and excellent layers producing 190-240 extra-large white eggs annually. They don't grow as fast as some ducks, but have interesting plumage, produce meat with more flavor and less fat, are better foragers, and are more likely to be broody.

MEDIUM WEIGHT DUCK CLASS

Black Cayuga

 Listed as rare/threatened by the American Livestock Conservancy. Reputed to be one of the hardiest domestic ducks with a quiet, calm personality. Used for egg and meat production and are characterized by a jet black bill and black plumage which is an iridescent beetle green in the right light. Wonderful as a backyard pet since they are easily tamed, stay close to home, and doesn't quack as loudly or frequent as the Pekin. Generally weighs 7 to 8 pounds and lays an average of 100 to 150 eggs a year with black shells early in the season lightening to grey, hens are good setters and mothers.

Blue Swedish

 Listed in a "watch" status by the American Livestock Conservancy. These attractive ducks are known for their blue color and white bib. Exceptionally hardy, superior meat producers, and difficult for predators to see. This utility breed matures fairly slowly but provides wellflavored meat. Drakes will weigh up to 8 lbs. The hens will weigh up to 7 lbs and will lay 100 to 150 mostly white eggs with an occasional green, grey, or blue tinted egg. They have calm temperaments and make fine pets, preferring to range as they do not thrive as well in confinement.

Buff Duck

• Listed as rare/threatened by the American Livestock Conservancy. This breed has much to offer the farmer who is looking for an attractive, dual-purpose bird. It's a good layer of about 150-220 white to slightly tinted eggs per year, doesn't go broody, and it gains weight relatively rapidly, making it ready for market within 8-10 weeks; mature live weight is 7 to 8 lbs. Many consider the Buff a good meat bird that dresses out well because its light pin feathers do not show on the plucked carcass and has more flavor than the Pekin.

LIGHT WEIGHT DUCK CLASS Khaki Campbell

 Listed in a "watch" status by the American Livestock Conservancy. Best known for a high level of egg production, laying an annual average of 300 pearly white, extra-large eggs of superb flavor and texture. They are a cross between Mallard, Rouen and Runner ducks. A very adaptable, happy, busy duck they are good foragers and excellent slug catchers, but rarely go broody. The recommended ratio of drakes to ducks in a flock should be about 1:4.

Magpie

 Listed as critically endangered by the American Livestock Conservancy. A great general purpose duck with attractive markings, they're hardy, cheerful, and very active foragers. Their meat is of gourmet quality and they are highly productive layers of large eggs, laying between 220–290 extra-large green/blue eggs annually. They're a bit high strung but are still great with children and can live for about 9 years. Drakes have high libido, so a ratio of drakes to ducks in a flock should be no more than 1:5.

Mallard

 A very popular breed among backyard duck hobbyists for ornamental purposes as they are easy to raise and very social birds. Though domesticated, they retain their excellent flying, foraging, and swimming abilities but will usually stay at home if fed regularly. They do an excellent job of hatching and raising one or two broods a year. Eggs are lightly tinted blue green. When kept as pets they can live up to 30 years.

Runner

 Listed in a "watch" status by the American Livestock Conservancy. They stand erect like penguins and, rather than waddle, they run. The females lay typically 150-200 eggs a year, or more depending whether they are from exhibition or utility strains. Eggs are greenish-white, but this varies. They were found in Java and Bali where they were 'walked' to market and sold as egg-layers or for meat. Non-setters, often dropping their eggs wherever they happen to be. Excellent foragers and bug catchers they are very high strung but quieter than many other ducks. Drakes have high libido, so a ratio of drakes to ducks in a flock should be no more than 1:5.

Welsh Harlequin

 Listed as critically endangered by the American Livestock Conservancy. Originally from Campbell stock, they are equally as adaptable, are outstanding year-round layers, annually producing 240-330 pearly white-shelled, superbly flavored extra-large eggs. They are also active foragers, good setters and mothers, excellent producers of lean meat, beautifully colored and pluck almost as cleanly as white birds when dressed for meat. The recommended ratio of drakes to ducks in a flock should be about 1:4.

BANTAM DUCK CLASS

Miniature Appleyard

 It is a replica of the large Silver Appleyard duck, only 1/3 the size. Extremely easy to keep and an excellent egg layer.

Black East Indie

 The oldest Bantam duck they are best known for its striking appearance: very dark, lustrous green plumage and black bills. They essentially look like a miniature of the Cayuga Duck but weigh less than two pounds. They are relatively good fliers and generally shyer and quieter than Call ducks.

Call

• An energetic and active duck that's extremely vocal with a high pitched call. The breed was widely used in the Netherlands during the 17th century as a decoy. The highpitched distinctive call was use to lure other ducks into funnel traps. This breed weighs from 1 1/2 to 2 lbs depending on age and sex and produces 25–75 eggs a year.

COMMON GOOSE BREEDS & VARIETIES

Hardy birds that thrive largely on grass, geese are easy to care for. Raise them for their down, their meat or their eggs, or for exhibition. They're good at announcing predators and trimming weeds—and can even make friendly farm pets.

"Whatever you say about geese with conviction, they'll make a liar out of you." ~Dave Holderread

HEAVY WEIGHT GOOSE CLASS

African

o Listed in a "watch" status by the American Livestock Conservancy. This is a massive bird. A relative of the Chinese goose, both having descended from the wild swan goose native of Asia. At maturity average live weight is 22 lbs (male) and 18 lbs (female) producing high quality, lean meat, considered a premier roasting goose. Young ganders can weigh 16-18 lbs at 15-18 weeks. Quality breeding stock may seem expensive, but are worth the investment. In the U.S., smaller, moderately priced Africans may be little more than oversized Chinese geese. They're long-lived and if well managed, they will reproduce in their first year. Eggs are large, weighing 5-8 ounces, and hatch in 30-32 days. Each gander can be mated with two to six geese. They can withstand considerable cold weather but need shelter to protect their knobs from frostbite.

Embden

Domesticated over 200 years ago in Germany. This is an excellent table bird, the breed is hardy and fast growing, maturing to over 3 feet in height, 30 lb (male) and 20 lb (female), reaching 13 lbs in about 8 weeks. It is a prolific breeder and has a quiet disposition. They are good sitters, usually laying February - June and producing 30 to 40 eggs (at 5-6 oz these are super jumbo), are easy to raise, very quiet and expert foragers who will make a meal out of virtually anything. An extremely friendly goose, and when raised from a hatchling will be docile. However, they can also be extremely protective, a characteristic

often displayed by the gander when he believes that his mate or youngsters are under threat which makes them excellent predator protectors for your duck flock.

Standard Dewlap Toulouse

 Listed in a "watch" status by the American Livestock Conservancy. Some strains are non-broody, are fair layers of 25-40 eggs per year, and they don't reproduce consistently until two or three years of age. Goslings tend to grow slowly and take longer than other breeds to reach market weight. At maturity they weigh in at 26 lb (male) and 20 lb (female). They are not good foragers but do well in confinement. Even when not confined, these massive birds do not wander far from their food and water. Their flesh is coarser than that of the Emden, and the proportion of bone and offal is high.

MEDIUM WEIGHT GOOSE CLASS

American Buff

 Listed as critically endangered by the American Livestock Conservancy. The largest of the medium weight class with mature weights at 18 lbs (male) 16 lbs (Female). Ganders can be mated with three to five geese. This goose is calm and docile, are good parents who attend well to their goslings. These attributes make it well suited for the average home flock. Additionally, they make a mediumlarge roasting bird. Its colored plumage does not soil as readily as that of white birds, yet its light colored pin feathers allow it to dress out as cleanly as a white goose.

American Saddleback Pomeranian

 Listed as critically endangered by the American Livestock Conservancy. Developed by German farmers, these geese average 15-17 pounds and lay 15-35 eggs annually. A good all-around breed for a colorful home flock; individual temperaments run from docile and sweet to fairly aggressive. They tend to be boisterous and talkative so the make good guard animals on the farm but may not be the best backyard birds if neighbors are close by.

Sebastopol

 Listed as rare/threatened by the American Livestock Conservancy. This goose originated in the region around the Black Sea. It's readily identified by its feathers: long, soft-quilled, curling feathers drape elegantly from its wings, body and tail. The curled feathers prevent flight, making them easier to confine. They produce 25-35 eggs annually, good quality meat for roasting, and mature to 12 - 14 lbs live weight. When handled carefully, they have a quiet and pleasant nature. While they're hardy and are raised successfully in cold climates, it is a good idea to provide more protection during wet, cold, and windy weather than normally afforded other breeds, as their loose fitting feathers do not provide as much warmth, nor do they shed water as well. Ganders can be mated with one to four geese.

Pilgrim

 Listed as critically endangered by the American Livestock Conservancy. Originating in the U.S., the sex of both goslings and mature geese can be distinguished by the color. Weighing 13 - 14 pounds at maturity and, when properly managed, they lay 35-45 six to seven ounce white eggs annually. They're rugged, quiet, docile, good foragers, excellent natural parents and make good medium-sized roasting birds. Because they are sex-linked for color, it is a simple matter to keep the correct ratio of males to females when selecting young for future breeders. Ganders can be mated with three to five geese.

LIGHT WEIGHT GOOSE CLASS

Chinese

 Listed in a "watch" status by the American Livestock Conservancy. Considered by many to be the most graceful and beautiful member of the goose family, Sometimes referred to as "Swan Geese" because of their long and graceful necks. These geese are exceptionally practical. Of all breeds, they are the best layers, most active foragers, produce the least greasy meat, and are one of the easiest to sex at maturity. With good management, the average Chinese goose produces nearly twice as many goslings as other geese, laying 40 - 100 white eggs annually. Live weight at maturity is 11 lbs (male) and 8 lbs (female). They have active foraging habits, moderate size, unmatched agility, good availability and reasonable prices." Poultry catalogs will commonly refer to this breed as "Weeder Geese." For those looking for "watchdogs" Chinese are an excellent choice for the home flock.

Tufted Roman

 Listed as critically endangered by the American Livestock Conservancy. Originating in Italy more than 2000 years ago, this goose is a small (10-12 lb), moderate egg-laying (25-35 per year) and are primarily ornamental-bred for a distinguishing crest, or tuft. Ganders can be mated with two to four geese. This goose is generally calm and pleasant. Despite their small size, they can produce a plump roasting bird.

Geese are never in the wrong, they have achieved a level of self-righteous justification seldom attained in the animal kingdom and are easily affronted by us: "What are you two doing on the porch?" they stretch their necks and their rusty gate intonations take on a note of disbelief.

"Queeee-eeg? Who, *us*? You are addressing us? We are as innocent of any wrongdoing as day from night... and what are you doing in our yard?"

~Pamela Shires Sneddon



