The wild ancestor of the Muscovy duck that lives on the edges of tropical forests, mainly in swampy areas and nests in the trees, is equipped with strong claws to hold on to the branches and, in contrast to our domestic ones, are able to fly very well.

The ones that now are our tame pets, have become much heavier and especially have lost much of their ability to fly. The ducks have retained their preference to nest in holes and cavities, and each offered nesting that imitates such a space, is happily used.

These silent ducks are hardly heard because they do not mimic the quacking of (descendants of) the Mallard. This is evolutionarily understandable, since the wild Muscovy duck does not roost on the water but in the trees. On the water, ducks are relatively safe from predators and their quacking will not attract land predators there, while for the Muscovy duck that lives in the forest and sleeps in the trees overnight, it is of utmost importance to keep as quiet as possible so as not to attract predators.

If the drake is excited he emits a hoarse hiss, accompanied by a violent up and down movement of the head; the females are only heard in a panic situation. If they are disturbed during breeding, they will utter a violent quacking or hissing and if necessary they will attack, where they can really hurt you with their sharp claws. Also the spraying of their almost liquid excrements is one of the defence mechanisms and any breeder who has had to catch his birds for one reason or another, will have already been sprayed with this extremely foul-smelling substance.
Living together with other poultry is not a problem if the birds are put together from an early age. Supplementing existing groups at a later age with another group is more difficult because of the hierarchy (like the pecking order in the chicken). In the worst case, the newcomers may be attacked so that the entire hierarchy is disrupted and everyone starts fighting with everyone, sometimes to the death. The only manageable way to introduce newcomers is to move all birds to a temporary new home that is unknown to all of them. Every bird will have to get used to the new residence and at the same time to each other. Vigilance is still required for the first days.

One should not think that it is always the biggest that automatically will be the dominant figure, on the contrary, it’s often the smaller ones that are the worst. Once I saw how one of my roosters set my turkeys aside at the trough and they were only allowed to get back to the through when he had eaten enough, if not, he flew at them furiously. No turkey, nor the other roosters, questioned his authority. The observation of the hierarchy is therefore most apparent at the food tray at the time of feeding.

**Aggression**

In the social media pages people sometimes tell horror stories about Muscovy ducks that attack people, children and other animals. Over the many years in which I have kept Muscovy ducks I have never experienced this, but I have seen problems occur with other breeders. Everything has to do with dealing with your animals. When Muscovy ducks are raised as pets, and especially when the ducklings are hatched in the incubator and see humans as first imprinting, they perceive you as their kind. As long as the Muscovy duck is young, there are no problems, but when the drakes reach sexual maturity, they will see man (especially its caregiver) as a contender. In the wild, at this moment of its maturing the drake must acquire its social status and this can only be by
positioning itself against other drakes and fighting. As with many social animal groups the goal is to reach the top of the social ladder in order to secure as many females as possible to mate with. The advantage is that these females will get the strongest candidate, which is beneficial for the survival of the offspring.

Right: This blue Muscovy duck is hissing to protect the ducklings. Photo: Norbert Schollaert.

When man is perceived as a mate then it must also be fought during that period. This implies that the drake will fly up to his caretaker, biting and scratching, trying to subdue him using all means just as he would do to another drake. This is perfectly natural hormonal behaviour and makes your drake no monster; the bird has only got a wrong imprinting by your own doing. Such a collision, especially when it is the first time, is so shocking to most people that they run away and no longer trust the drake. For the drake however, this means that he has overcome the opponent, that has accepted the defeat by running away. This drake will now keep attacking people as long as the breeding season lasts and may be even afterwards too.

The solution to this problem is to avoid having the drake imprint on a human, or to deal with the consequences. (Read about the miracle of imprinting here.) When you as a breeder hatch ducklings in the incubator, then you will always have ducklings who see you as their kind. For exhibition this does have an advantage, because the birds are used to human presence and are easy to handle. This is why at shows young birds are mostly shown that are not yet sexually mature. With older drakes it is more difficult and you as the breeder will have to make clear to the bird that not he but you are the boss.

I have never experienced this conflict myself because I put my ducklings together with their own species as soon as possible, or a mature mother duck. I try to let the ducklings grow up as independently and naturally as possible and keep myself on the side as an observer. My birds don’t like stroking or handling, but have never attacked anyone.

One should not, however, generalize about this, because I know of people who have Muscovy drakes as a pet and have never had problems with it. However, I assume that if you as a breeder want a drake with good genes, you have to let nature take its course and interfere as little as possible. Every situation is different though and someone who has only one drake walking around will not experience this problem, nor the breeder who composes his breeding pens and provides every drake with two or three females. However, if you only have one drake together with only one duck, he will at all costs attempt
to safeguard his duck, especially during the breeding season and thus keep people away.

**Below: Two fighting drakes. Photo: D. Sörensen, Sweden.**

Rivalry between drakes will therefore only be seen in nature or where large groups are kept together. It is my experience that drakes can be kept together perfectly as long as there are no ducks around and if they are about the same age. Putting together older drakes and young ones will naturally result in battles to establish the hierarchy.

**Above: Two fighting drakes. Photo courtesy of Kelby Stapleton.**
**Behaviour**

You don’t very often see Muscovy ducks on the water, and they actually do not fly that much too, except for a little bit to get over a fence or when they are rushed. They mainly walk to move around.

While walking or while preening their feathers, they always vibrate their wings and let these also hang down a bit. This is a sign that the duck feels comfortable and relaxed.

Gently pecking between each other’s feathers is a behaviour usually exhibited by pairs; this behaviour confirms a mutual affection and strengthens their bond.

Standing up and flapping their wings as if to fly away can have various reasons. In can be done to shake off water from the wings but also to get their feathers in the right place after preening. It could simply be show-off behaviour towards conspecifics.

When a duck raises its head feathers, it is either anger, interest, or fear. This gesture has to be seen in combination with other factors in order to know which signal the duck is transmitting.

*Right: A drake with raised head feathers. In this case it was not a threatening, but a feeling of uncertainty, a doubt between running or attacking. The ‘crest’ is almost fully upright, but the total body talk was not threatening. Photo: Norbert Schollaert.*

Mating rituals are often difficult to distinguish from the aggression in the face of intruders, because here there is also an upright crest with horizontal tail shaking and back and forth motion of the head. Normally, Muscovy drakes are more aggressive toward others of the same species than toward other breeds of ducks.

*Left: Head study. Photo: Norbert Schollaert.*

**Keeping**

Muscovies are quite easy to keep and breed and are an asset to any farmyard because of the large amount of insects they eat. Muscovy ducks are omnivorous but need more animal protein than chickens. This they extract from the insects and worms. Besides insects Muscovy ducks eat snails and also - if they have access to ditches or similar - small fish, shellfish and small frogs. They also eat ants, spiders and even isopods. Besides these animal proteins, cereals and plants are also part of their diet. If they are roaming free on a meadow, you will see them graze like geese do, albeit much less intensively. Muscovy ducks can also be seen grazing on the waterfront with their heads under water but in the deeper parts of the pond or puddle you will never see them diving. Actually they are very opportunistic and will eat
almost any food that is provided; such as fruits like apples, pears and melons; all sorts of lettuce, endive and chicory; boiled potatoes, kitchen leftovers etc. Care is needed with the latter, because it will also attract rats when not eaten immediately.

Above: Beautiful or ugly? Head study of G. Hicks’s 'Big Dave the Muscovy duck', Champion in England. Photo: Rupert Stephenson.

Public opinion of this animal is very black / white. One is either for or against. Opponents especially find the warts on the head and beak (caruncles) of the drake repulsive, like eg. the snood of the turkey, which also deters many. Nevertheless, the Muscovy duck has had a very quick and worldwide distribution after its discovery in the 16th century in the New World. However, economically, this duck only means something in France, where they are crossed with other breeds of domesticated ducks to produce 'Mulards' for excellent meat.

Breeding
If you want to breed Muscovy ducks you must keep in mind that the eggs don’t hatch within 28 days as normal with other ducks, but the eggs of the Muscovy duck will take about 35 days to hatch.

Left: Lavender Muscovy duck brooding in a basket. Photo: Norbert Schollaert.

You need to have sufficient range area and healthy birds, and provide them with a nesting place like a barrel laid
flat, a wooden box or a plastic tub and nesting materials such as hay, straw, hemp or wood shavings. When you put some greenery around there, they will have the impression of sitting safely hidden, and the breeding can begin.

Ducklings from the incubator should certainly be kept inside during their first three weeks, and in the absence of a mother, a heating lamp must be used. However, be careful with infrared lamps, because they are not resistant to water, and splashing and splattering is precisely what ducklings do constantly. These lamps also give light during the night and this 24 hours lighting is bad because it will force skeletal overdevelopment. It is better therefore to use heating plates or ceramic heating bulbs that give no light. For the first days, the lamp should provide warmth up to 35° C., which can be lowered at the end of the week to 30° C. Then the temperature should be reduced further down by 3 to 5 degrees per week (depending on the outside temperature.) Because of their highly developed down, ducklings need less warmth than chicks. When the outside temperature is around 20° C. the ducklings can be allowed to go outside.

Right: A white Muscovy duck with her ducklings. Photo: Norbert Schollaert.

Be careful with water, for at this age, ducklings cannot swim and above that, they don’t have the oil or the feathers for waterproofing. The down will quickly absorb water and thus they can drown easily, so as a waterer use only a shallow dish with a couple of inches of water in it, but watch it closely. You need to refresh the water several times a day, because Muscovy ducks have the habit of dragging their food to the water to mix it there with water before swallowing it. Adult ducks can be seen dabbling at the water container, while making distinctive sounds. This sound is because the ducks sift the food from the water with their beak. The waterer is soon a mess and that is not conducive to hygiene.

At this age, the ducklings are fed (chicken or) waterfowl starter minipellets purchased at a feed store, which can be given till they are about 6 weeks old. For the first week or two all food should be mixed with a little water. Around day 35 the ducklings will be able to swim and you can start changing the food to waterfowl condition / show pellets with 16% protein.

It is now high time for the ducklings to forage outside too, where even at this young age you can see them chasing a butterfly or fly to snap it out of the air.

During the breeding season my ducks are fed waterfowl breeder pellets and the drakes the normal mixed corn, which is only possible when they are in a separated area. If they are kept together, I provide waterfowl breeder pellets one day and mixed corn the next.
When you see a Muscovy duck with ducklings, the father is mostly missing during the foraging around to find food. The drake participates neither with the search for the nest nor the brood care.

**Sexing**
Knowing whether your young Muscovy ducks are male or female is not so simple. This is especially important in this breed because at adulthood the weight of the drake will reach double the weight of the duck and Muscovy ducks are not only kept for show but also for their meat. In other duck breeds the difference between the sexes is clearer because the drakes have curled tail feathers and a different coloured plumage, but the Muscovy duck and drake are identical when they are still young.

How can we determine the difference?

- The first difference in the growing ducklings is the dimensions of the legs that grow more rapidly in the male and are thus larger than in the female. At the age of 4 months you can already clearly see the difference in overall growth capacity between the drake and duck.
- Listen to the sounds that they make. The male makes hoarse hissings, while the females have a more quivering voice.
- Once the young birds start maturing around the age of 8 months, the facial warts in drakes clearly begin to take shape and get redder and larger than the females’. By that time, obviously one also sees a clear difference in the size of the birds.
- The tail of the female ends almost in a point, while the tail of the male is spreading.

![Above: A young isabel colour hen (pointed tail) and black/wild colour drake (spread tail).](image-url)
To end with
I keep my ducklings and adult ducks together with my chickens, and the ducklings always go outside in groups.
It has been my observation that Muscovy ducks that come from the same brood, do recognize each other afterwards faultlessly. Once I had a litter of 6 birds of which one had been away for months, and when it came back, I wanted to introduce it back into the group by putting it among them in a movable cage, so they could see, hear and smell each other but not attack. However, this was totally unnecessary because a few minutes later they were already chattering to each other. It was a delight and I had never before seen the agitation that accompanied it. Both the sound and the gestures that were shown here resembled a really welcoming ritual. When I opened the cage this ritual continued, also with gently tapping each other with their beaks. (The beak is very sensitive and well equipped with well-developed receptors that allow them to determine which females are laying eggs during the breeding season and these are preferred when mating.) This was a very clear recognition and a fine example of species-specific behaviour.

Below: Ducklings feeding. Photo: Norbert Schollaert.