Pigeon Eggs: Problems/Answers

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No matter how much care you take in raising your pigeons sometimes problems are going to happen. The best step to correcting these problems is being able to understand the situation and recognize the symptoms. The most important step in making sure that you are having a successful mating is to make sure that you have healthy eggs. Healthy eggs and eggs that hatch successfully are always very important. There are many factors that can lead to your eggs not hatching or worse not developing properly. Below in the most laymen terms possible I will go over a few problems that you may encounter when your birds are laying eggs. All of this information is gathered from renowned sources, Universities, Veterinarians, etc.

Soft Shelled Eggs

Soft-shelled eggs in pigeons can be caused by one of two problems. The first of which is the uterus, the second of which is calcium deficiency. These egg laying problem areas are usually treatable. However, obviously age will play a factor. If you have an older bird then you will sometimes as time progresses have problems with eggs. This is a fact of nature and there is very little that can be done. However younger birds can still be worked with and treated to solve any egg related issues.

Calcium deficiency works almost the same as in human bones. If you do not have enough calcium in your system then you end up having brittle bones. In the same token when you do not have enough calcium in your system (if you are a bird) then you will lay eggs that have thin and very weak shells. If you are unsure as to whether your birds suffer from calcium deficiency one of the most obvious clues will be rough and even chalky eggs or soft-shelled eggs. If you take the time to inspect your bird's eggs then you will be able to determine what is wrong by inspection. The best solution for this problem is a calcium supplement. What this means is that you will then be introducing the calcium that the bird requires so that the eggs will have the rigidity that they should have. Please be aware though that the uterus can also cause weak shells. What this means is that you might not necessarily have a calcium deficiency problem. Make sure you are 100% sure of exactly what the problem is before treating. Calcium is an excellent supplement to give your birds right up until they are laying eggs because not only will it improve upon the soft-shell problem it will also strengthen their muscles for when they go to lay the egg to prevent them from becoming egg bound. Calcium will strengthen the eggshells, the bird's muscles and its bones.

When you give calcium to your birds it is absorbed through the gizzard and the bird's proventriculus. That is why it is also important to make sure that the bird has a healthy gizzard. The best way to ensure that your birds will be able to absorb the calcium is to provide them with plenty of dietary fibers. This will enable the gizzard to remain healthy and absorb the calcium.

It has also been shown that vitamin D assists in the absorption of Calcium so if when possible make sure that the supplements contain both Calcium and Vitamin D to enhance the whole process. Be sure to give your bird a variety of sources of calcium so that you are sure it is getting the quantities that it needs.

The Uterus problem is very complex and by no means is there a simple solution. In the creation of the egg inside of a pigeon there are very clear and concise steps that the egg will go through. If any of these steps are missed, or rushed through by the pigeons internal system then you will get eggs that are not fully developed. Spastic contractions in the uterus will cause your eggs to not properly develop and the end result will be a weak shelled egg. Now although I already mentioned that calcium is an important part of the pigeon eggshell creation, there is something else that you must be aware of. If

the egg is passing through the oviduct too quickly then the result will be that the shell will not get the salt it requires or the proper "sitting" time. What this means is that the egg can still result in a week shell despite the amount of calcium in the bird. If the uterus is spastic and/or one of the steps is skipped in the development of the egg then you will have definite problems.

Usually this is caused by an infection in the uterus or the ovaries. It is always best to consult an Avian Veterinarian for further advice on how to solve the problem.

There are many different situations that can lead to the egg development process not completing properly. It can be caused by infections that your bird has from different exposure to disease as well as bacteria. Another issue, which can cause your bird to have problems, is if it has a hormonal imbalance. My advice would be to consult your local Avian Veterinarian for further instruction on how to fix the problem. If you do not have an Avian Veterinarian in your area then feel free to contact Dr. Warren Shetrone. You can contact him by going to CedarValley Lofts and posting a question in the Vets Corner. Although sometimes bacteria/infections and or trauma can permanently cause damage to the uterus and the ovaries it is possible to treat with the proper medication. The key is to be aware of the problem and make corrections immediately. If in doubt always consult your vet. Dr. Warren Shetrone offers free consultations at CedarValley Lofts. You can go to the vet's corner and post a question at any time for him to answer. Although it is likely that you will never encounter a problem with your Pigeons not laying properly you want to be aware of the problems that could exist in your coop. If a bird becomes egg bound then you will definitely want to keep your eye on the bird. When a bird becomes egg bound it can cause permanent damage to the uterus if you remove the eggs. Although it is often necessary for you to intervene and remove the egg, be aware it may cause future laying problems. Watch your birds closely and at the first sign of problems step in to make correction and solutions (For more information on birds that become egg bound read the section called, “Egg Binding: Hens that become egg-bound,” further on down the page).

Development Stages of the Egg

The development stages of the egg are very important as mentioned in the section above which detailed the causes of soft-shelled eggs. If eggs are going to develop properly then there are important steps that must be followed inside the Pigeon.

Most importantly copulation must take place properly. If the cock is rushed or not allowed by the hen to properly copulate then the result can be infertile eggs. The cock must be given the proper amount of time to "complete the deed." If the cock successfully mates with the hen then the end result will be a fertile egg. The sperm from the cock, which is the reproductive cell of a male pigeon, combines with the ovum of the hen. The combination of the fertile sperm and the ovum result in a single cell that is called an embryo. After the baby has hatched out of the egg, you can take the shell and place it on a dish. If you look on the top of the yolk you will see a light round spot. This is called the germinal disc, true ova or the female egg.

When an egg is laid it is very difficult to tell if it is fertile but by looking at the shell after you can always tell. Below is a cross section of a hen's egg. This cross section shows you the different section of the egg and its areas.
The Pigeon egg is very complex and is still very much a big mystery. The development of eggs is very complex and involves many different stages and steps in its development. Each step is complex in its own right and plays a very important and key role in the development of the eggs. Most importantly each step must be completed properly in order to develop healthy and fertile eggs. The first step of an egg development takes place in the blastoderm. The Albumen is what surrounds the yolk and protects what will eventually result in a baby pigeon. The

Albumen is an elastic and shock-absorbing solid, which is made up primarily of water. When you combine the Albumen and the yolk you have the very beginning stages of life. The albumen and the yolk are surrounded by two different membranes and are surrounded on the outside by a shell. This shell is what allows for the exchange of gasses. It is also a means of conserving the food and water supply within the albumen and the yolk. This gives you a very basic understanding of how the pigeon egg is developed and the steps that are involved. I don't think that it is necessary to go into any further detail because most likely it is not of importance to what you need to know. IF you would like more information then I would advise searching the web for "pigeon egg development". You can find all kinds of great information related to pigeons just by searching the web.

Common Egg Hatching Problems

There are lots of problems that can develop when your hens are laying and the eggs are hatching. The most common problems are clear eggs, hens that become egg bound, babies that die right after hatching, and eggs that die before hatching.

A clear egg is a very serious problem, with a very simple answer. Clear eggs are caused when the eggs are infertile. During the winter months the cocks do not produce as much sperm. So once the breeding season first begins the cock is at a disadvantage of having a very low sperm count. The cock's "internal clock," as it can be called, tells it that it needs to begin producing sperm for the upcoming breeding. Once this process of sperm development begins in the cock the sex drive drops quite drastically. As well the cock will not breed as frequently or show as much interest in "completing the deed." Once the cock's sperm count is back up to its normal count then it is once again ready for the breeding season and the problem is usually solved. So, be aware that if your first few matings are not successful it could just be that it is too early and the cock is not ready yet. Now you have to keep in mind that there are other factors that play into whether the eggs will hatch properly.

The temperature plays a very key role in the development and hatching of healthy eggs. If eggs are not kept warm by their parents then they may begin to develop, but then die in the end. As well even the shortest cold spell can cause the embryo to die inside the shell. It is very important to make sure that the parents sit on the eggs. As well if you know in advance that the temperature could drop then it is important to keep the area where your eggs are warm enough that the result will not be embryo death. Make sure that your eggs are being incubated properly!

Another issue, which can cause problems with the eggs, is aggressive handling or infection in the eggs. If your eggs are jarred at the wrong point in the embryo development in some cases the result will be an embryo which does not develop properly, or even at all. Infections in the egg are very common problems. There are many different things that can lead to infections and cause the embryos to not develop, the first of which is pigeon feces. The combination of dampness, fecal matter and nesting materials is a definite problem. The combination of these three items leads to bacteria growth and your eggs becoming infected. As mentioned above when I went into infections in the ovary this to can lead to problems with the baby's hatching properly. If the bird has an infection in its reproductive organs then the babies may not hatch properly. Now sometimes your babies can get infected inside the pigeon and still hatch properly. However if the mother pigeon has an infection feeding the newly hatched pigeon will result in it getting infected and dying within a few days. To prevent infections in the nest and your babies' death it is best to keep the nesting materials in your coop as clean as possible. If you are expecting babies and it has become damp in your coop it is very important to make sure that the nesting materials are changed. This dampness and the feces as mentioned earlier will lead to serious problems in your nests. Always

make sure that if you are having trouble with your pigeons not hatching healthy babies that you treat them immediately.

Incubation/Caring of the Eggs

Once the hen has laid her eggs in the nest the cock will sometimes become excited, running about the loft and bringing her more nesting materials. Once the first egg has been laid it is usually a few days interval before you will see a second egg in the nest. The incubation of a Pigeon egg usually lasts for about 17 to 19 days although this time varies depending strongly on the temperature and the climatic situations where the pigeon has nested. Both of the birds will take care of the eggs and take turns nesting on the eggs.

If you watch you will notice that the cock will rest on the eggs for intervals during the day. The hen will nest on them for most of the day and the entire evening. Pigeons are very defensive birds and will protect their nests vigorously from intrusions human or otherwise. The way that they will defend the nest is through cooing at you loudly, flapping their wings and pecking. Pigeons will at times allow the owner of the birds (if he has domesticated them) to view the eggs and sometimes handle them. However they can still be very defensive despite the relationship you have with the birds. When you are inspecting or tampering with the pigeon's eggs you must be careful. If you pigeons are not use to your handling they can abandon the eggs, the result being that they will not hatch. Pigeons have also been known to deliberately crack the eggs, or to drag the young out of the nest if it has been tampered with. It is very important when the pigeons have young in the nest to not handle the babies too often or interfere too much. This is not a part of the normal breeding and raising of baby pigeons and the end results can be negative.

Diagnosing Pigeons in the Shell for Problems

Often times when your pigeons are exposed to bacteria or infection they will die while they are still in the shell, which is a very serious problem. The questions that came to me were, is there a method of determining when the embryo has stopped developing, and the egg is lifeless. There is not much point in caring for eggs that are not going to hatch in the end. As I mentioned many times already there are many bacteria's that can kill a baby pigeon while it is still in its shell. The eggshell is very porous, meaning that it is full of very tiny holes. This is how the pigeon embryo gets infected by disease and bacteria from the parents and the nest through these tiny holes in the shell. One of the easiest methods of determining whether the embryo is dead or not is called "candling." Because the shell is very porous and allows bacteria, fluids, infections, etc. to pass through the shell, it will also pass light through it. If you examine your eggs at about three to four days with the use of a candle you will see blood vessels which are visible in the egg. As time passes and you periodically check the egg, the vessels should increase in density and the egg should darken in color as the embryo grows and takes up more of the egg’s space. The air sac inside the egg should stay about the same size. An easy way to determine whether or not the embryo is not developing or has dies, is that the embryo is not growing, there is a large increase in the air sac in the egg or the egg shell color has turned to a dull gray color. As well if the egg appears cloudy inside or the shell of the egg is transparent then these are signs that the embryo is dead in the shell. For your own curiosity you can take a dead egg and open up the shell carefully at the end that has the air sac in it. There is a very small membrane inside the shell that separates the embryo from the air sac. If this membrane is not broken then it is most likely that the egg being chilled, or a drastic adjustment in climate or temperature, caused cause of death. If when you look at the shell the membrane around the embryo has been broken then examine the baby pigeon. If the death was caused by humidity in the nest then the chick will appear to be stuck to the side of the egg. When there is not enough moisture then the baby pigeon becomes literally glued to the side of the shell and is

unable to break free of the shell. The chick will be fully developed but the liquid around the pigeon is usually very thick and has a sticky appearance. Just as a point of reference bacterial problems, which result in the baby pigeon's death, do not usually occur in nests which are dry and where the eggs are kept clean.

Egg Binding: Hens that Become Egg Bound

Many breeders have encountered a problem that is all too common in breeding pigeons. It is the problem of hen birds becoming egg bound. So for starters what is egg binding? Egg binding is when the hen bird is unable to pass the egg. This problem is very serious because if not properly dealt with it can quite easily lead to the death of the hen. This problem has many answers and theories and I can't really say which one is the right one. So I will do my very best to cover as many aspects of the problem as possible.

Temperature: Many professionals believe that the temperature in your loft plays a very key role in whether or not your hens will become egg-bound. Wild birds commonly only will breed in the early spring while the outside temperature is still very cool. Wild birds very rarely seem to suffer from the problem of becoming egg-bound. This is why many people feel that temperature plays an important role in whether your birds will become egg-bound or not.

Age: Another very predominant theory is the age of the bird. Many people feel that if the hen is to young or if it is its first time giving birth (or laying), then the hen can become egg bound. Sometimes the hen has just not grown sufficiently enough to allow the passage of eggs. It is commonly thought that young birds do not provide the same quality offspring, as older birds will. The age factor is very debatable because many breeders do not feel that age plays a factor in whether this problem will occur in the birds.

Nutrition: Nutrition is very important when breeding birds, especially the calcium level in the birds. Most breeders make sure that their birds are healthy and are receiving the necessary supplements required for breeding. Although most times it is not necessary to provide supplements during breeding, it is however very important to supply your birds with multiple sources of calcium. Calcium plays an important factor in the bird's health and the eggs development inside the bird.

If you do have a bird that is suffering from egg binding then here are a few ideas that have been brought to me to help prevent this problem. First and most importantly, make sure that your hens are in a warm and quiet environment. This way the bird is comfortable and undisturbed, so that they can concentrate entirely on passing the egg and not on distractions around them and trying to stay warm. Although an immediate increase in calcium will not do anything for the eggshell development (preventing soft-shells) it will help the bird's muscles. What this means is that it will make it much easier for the birds to expel the eggs. "Calcivet" by Vetaform provides an ample quantity of the calcium birds need as well as d3 which assists the bird in absorbing the calcium. This supplement is placed in the bird's drinking water or food. If your birds are not eating or drinking it is safe to administer directly into the bird's crop. Another product by the name of "Poly-Aid" can also be given to your birds to help build up energy reserves while the bird is trying to pass the egg. Another solution is to massage a small amount of vegetable oil around the vent of the bird. This will help to soften the mucus membranes around the vent and help the hen to pass the egg successfully.

Washing of Hatching Eggs

According to the Mississippi State University Poultry Department, washing of eggs before hatching is a very big no-no. According to their research they have found that many breeders think that visual cleanliness of eggs will increase the productivity of their breeding rounds. Although they do agree that clean eggs are better than dirty ones, they strongly

urge people not to wash the eggs. The reason is actually very clear. The reason is actually very clear. The shells of eggs, as I mentioned earlier, are very porous in nature meaning that they will absorb any moisture, bacteria, etc. When you wash the eggs it actually aids the bacteria in absorbing itself through the eggshell. Their recommendation is to make sure that the nesting area and the coop are kept clean so that bacteria levels in the nest and the coop are kept at low levels. Eggs have many natural defenses built into them that prevent the growth of bacteria and keep it from moving through the eggshell. When you wash the eggshells not only are you going to remove the bacteria but are also going to remove these natural defenses. Any bacteria that are in the nest will be able to penetrate the eggshell much easier once you have washed away these natural defenses.

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