

Chapter 10

Potential dangers



Avocado



As mentioned earlier, the avocado originates from Central and South America. There are a number of species of this fruit, which grows on trees reaching 20 m. The fruit is sometimes known as an "avocado pear" or "alligator pear" because of the shape and texture of its skin.

There are a number of cases where birds have died of cardiomyopathy as a result of eating avocado, including a group of ostriches that wandered into an avocado orchard in S. Africa. Research has shown that it is highly toxic to budgerigars and less so to canaries.

It is best avoided when feeding fruit to birds as only the Quetzal and Hoatzin seem totally immune to the toxicity of avocado. It is amazing how many valuable pheasants have been lost when keepers have forgotten the dangers of this fruit.

Non-stick coating on cooking pans

The non-stick coating applied to many cooking pans is called PTFE – polytetrafluoroethylene. DuPont's Teflon is possibly the most well-known PTFE coating, but there are a number of manufacturers.



PTFE itself is not harmful, but its fumes can be if the pan is empty and heat is applied. Birds have very sensitive lungs and they are quickly affected by any toxic fumes in their vicinity. This explains why many coal miners in olden times would take a small bird in a cage down the mine with them. The bird would soon collapse in the presence of carbon monoxide gas, which is odourless to humans, but its collapse would warn miners of impending danger.

There are many instances of pet birds dying from exposure to PTFE fumes when these have burned dry in a kitchen. A number of scientific research projects have verified this toxicity in birds such as quail, parakeets and cockatiels. The fumes of a number of other substances have been recorded as having very serious detrimental effects on birds, including burning butter. It is obviously best to ensure birds are not exposed to any such dangers. Even garden bonfires have caused major tragedies when substances such as polystyrene have been burned on them.

Aerosol sprays

This Himalayan monal was rescued from the wild in Himachal Pradesh, North India. It was found to have a growth above its beak. The local veterinarian sprayed it with a disinfectant and the bird collapsed and died from the fumes.



All birds have extremely sensitive lungs and even small amounts of a toxin in the air can have serious effects.

Sprays to kill flies, wasps and other insects are frequently used around the home, but most of these can be very harmful to pheasants. It is stating the obvious that substances such as ant powder should also not be used within an aviary.

Salt

All animals need a certain amount of sodium in their diet, but birds seem to need very little. Even quite small amounts have led to kidney dysfunction so salt should never be added to food. The most frequent incidents usually involve peanuts, which most pheasants love. Peanuts prepared specifically for human consumption often have salt added, and these should be avoided at all costs.

Mushrooms

Undoubtedly, wild pheasants will meet mushrooms in their natural environment and probably their hen will have taught them which, if any, are safe to eat. Within an aviary, fungus sometimes grows on old wood, so it probably should be removed. It is inadvisable to offer birds commercially grown mushrooms.

Onions

Limited amounts of onion are usually not harmful, but larger amounts have been known to cause anaemia and death.

Tomato and potato leaves

Tomatoes and potatoes belong to the nightshade family of plants and, although their fruits are very enjoyable, their foliage can be highly toxic. Since tomato fruits can come into contact with the green plant, it is always advisable to wash them before use.

Since many commercially grown fruits are sprayed to deter insects, it is always worthwhile washing these before giving them to birds, since even very small amounts of poison can build up in a bird's system over a number of years.

Chocolate

It is highly unlikely that any pheasant keeper would ever think of feeding chocolate to his or her birds. However, birds in zoos might well meet chocolate if it is thrown to them by visitors. Chocolate can be extremely harmful or even fatal to birds as it has a very severe effect on the central nervous system.

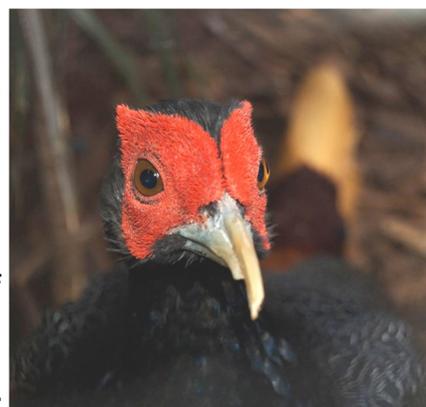
Chapter 11

Unusual medical problems

Deformed and overgrown beaks



Occasionally, pheasants seem to grow deformed beaks. There are a variety of possible reasons for this, some of which are mentioned below. Whatever, the reason, the keeper will need to decide whether this needs treating. If the bird can feed adequately, then probably no treatment is necessary, but regular



monitoring must still take place to ensure there has been no change.

The beaks of birds grow continuously, some much more rapidly than others. The top mandible of digging pheasants beaks, such as cheer and monals, can overgrow, usually when they have been kept in aviaries where they cannot undertake the digging which keeps their beak neatly in shape. Because these species usually turn their aviary into something resembling a ploughed field, keepers often use a sand base within their enclosure. Sand that comes from the seaside is much harder than river sand and is much better at abrading the bird's beak when it digs. For those that have access to several sorts of sand, sand used by builders for mixing with cement is the best – known by builders as “sharp” sand. If sharp sand is unavailable, a bird can often wear down an overgrown beak by proving something for it to peck hard. Peanuts in their shells can work well, once the bird recognises that good food is inside. A hard eating apple can also work in a similar manner.

If the beak is actually deformed, not just overgrown, then the problem probably lies elsewhere. If this deformity happens to an adult bird which has previously shown a normal beak, then the problem is probably caused by either injury or by diet. A bird that flies into a solid object often damages the cere, where the nostrils are located. This usually causes little long term problem - just some bleeding which stops quickly and then heals. However, if the damage is more serious, particularly with birds that have been frightened at night, then more permanent damage occurs and this seems to result in the beak growing in an abnormal manner. It is also believed that dietary deficiencies can cause similar effects, and this is based on studies of wild black-capped chickadees in the USA which have shown nutritional deficiencies of Vitamin A, D3, calcium or an imbalanced ratio of calcium and phosphorus. If the pheasant is receiving a good balance diet, and other birds on the same diet are not showing similar problems, then it is more likely that injury is the cause. Certainly a close examination of diet would be a worthwhile step.

There have also been suggestions that in-breeding might result in beak deformity. Often, it is difficult to be aware of the degree to which in-breeding has developed in the ancestors of captive birds, particularly those that have been in captivity for many years. However, it is good practice never to pair related birds and also not to provide brother sister pairs to new owners.

Whatever the cause, a serious beak deformity will probably need treating for the rest of the bird's life if the bird is losing the ability to feed itself. Sometimes it is difficult to know how well a bird is coping with a deformed beak, so very close observation is required. Obviously, if the bird is used to its keeper, this will cause little stress, and many birds will actually become used to feeding right in front of their keeper.

Firstly, it will help the bird considerably if it gets used to regular handling, as this will reduce its stress levels. If you are uncertain about dealing with this yourself, then regular veterinary treatment will be required. However, it is not a difficult procedure for a confident keeper (but not for the bird). Before undertaking any pruning or filing of the beak, it is vital to stress that a bird's tongue has a very vigorous blood supply and any cut on the tongue can result in the bird bleeding to death. Therefore, the beaks should be held open when treatment is being undertaken so that the tongue can be seen at all times. Sometimes filing is all that is necessary, but if cutting is required, this is best done with nail clippers that have been designed to cut pet claws without them splitting. If a sharp knife needs to be used for final pruning, always cut in the direction away from the bird's head.

Bruising



Sometimes white feathers appear on a bird, similar to those on the back of this monal's head. Often this is diagnosed as a dietary deficiency. However, white feathers can also appear as a result of bruising, particularly if this happens during the moult. This monal was known to have flown in panic and hit its head on an interior beam



within the aviary. The white feathering disappeared during the next moult.

In one interesting incident, a game pheasant breeder asked for advice because all of his breeding flock had developed white feathers around their necks. On examination, it was noticed that his breeding pen, which covered half an acre used 3 inch galvanised wire mesh. When the birds were disturbed, they continually thrust their heads through the mesh in an effort to escape, thus bruising the area around their necks. The next year this breeder used smaller mesh and the problem was resolved.

Foot injuries

These blood pheasants were raised on a cement floor and their tender feet had eventually suffered considerable damage where infection could enter. Once they were moved to a less abrasive area with frequent access to a grass floor their feet showed a rapid improvement.

Bumblefoot usually occurs when a cut on a bird's foot allows infection to enter, most frequently by treading in one of its own droppings. This is a



strong reason for ensuring that perches are cleaned regularly and that good hygiene is maintained within aviaries.

Pheasants often seem to develop a limp - perhaps because they spend most of their waking lives on their feet. Usually, they recover quite quickly and within a couple of days the problem has disappeared, but if a limp persists, it is advisable to examine the leg more closely to see if there is an obvious cause. If unsure, visit the vet rather than letting the problem persist.

Leg rings need to be monitored regularly particularly on older birds. An overly tight ring can need urgent removal to save a bird's foot.



Chapter 12

Hygiene

Whatever the size, shape or location of an aviary, or the materials it is made from, without a good hygienic environment, the birds will always face an uphill battle to survive and to breed. There is a further advantage in having a regular routine for keeping aviaries clean – birds are likely to stay healthier, to live longer and to breed better.

Disinfecting perches and other areas of an aviary where harmful microbes might build up should be part of the regular routine. It is also worth changing the brand of disinfectant from time to time. Different brands are likely to have differing formulae, and varying their use is likely to eliminate a higher percentage of harmful organisms.

Regular aviary cleaning

As well as providing an environment which is clean and healthy for birds, regular cleaning also allows monitoring closely the state of aviaries.

- The health of the birds can be checked by looking at their droppings.
- It allows familiarisation with the birds, so that they can be observed closely without raising their stress levels.
- It enables regular checks of the aviary to ensure that it is secure and safe, and that predators have not tried to find a way in.
- Any signs of vermin can be noticed quickly, such as mouse holes or droppings.
- Plants within the aviary can be monitored to ensure they are healthy and have not grown too much and put pressure on the aviary wire or framework.

Hygiene - using commercial products

Soiled perches, faecal droppings and spilt food all need to be cleared regularly. Avian Influenza and other viral infections have recently highlighted the need to maintain good hygiene in and around birds. It is worth remembering that most commercial products are much more effective if they are applied after faecal material and food waste have already been removed. Most general disinfectants are very effective against bacteria but are limited in their ability to counter viruses. The number of commercial products which are available changes quite rapidly so it is advisable to consult your veterinarian and websites such as DEFRA (in the UK) for the most recent information. It is probably advisable to use a substance which is effective against both bacteria and viruses. Most chemicals deteriorate with age so ensure that any product you use is still effective. Birds are extremely sensitive to harmful substances in the air they breathe, hence the coal miners using canaries to warn them of carbon monoxide in the air. Therefore it is best to ensure that any disinfection process will not take place where your birds might be affected. Some different products are described below.

Virkon S is a well-known product that is effective against many viruses. It usually comes in powder form and must be mixed according to instructions to create a dark pink liquid. This becomes paler as it is used and is ineffective once it turns yellow. Care should be taken to avoid inhaling the powder and gloves should be worn if you have any cuts on your hands. After application, surfaces need to be left for 30 minutes for disinfection to be effective. The liquid can also be applied by spraying. It is not harmful to animals provided that the correct dilution rate is

used.

Lifeline is DEFRA approved particularly for disinfecting soiled or contaminated surfaces. It is powerful and rubber gloves should be worn. It needs to be left for 30 minutes and then washed off. It can act against viruses if mixed more strongly than the standard rate (1/100 solution in water).

F10 has a much shorter application time - between 10 and 30 minutes - and is very effective against bacteria, viruses and fungal spores. It has a "zero hazard" rating and can be used safely anywhere, and can also be applied by spray. Gloves are not required.

Disifin Tabs are approved within the European Community for disinfecting contaminated surfaces. The powder is mixed with water and the resultant liquid is supposedly effective against all bacteria, viruses and fungal spores without having any corrosive effect on the surface to which they are applied. It can be applied to any surface and, unlike most other products, is effective at temperatures as low as 4°C.

Preventing the transmission of disease. Foot dip to decrease the possibility of transfer of infection

Visitors to aviaries can carry infection into an aviary complex, and this is particularly the case with visitors who breed birds themselves. This picture shows how one well-known pheasant breeder in Germany encourages all his visitors to disinfect their shoes before entering his aviary complex. Shallow plastic trays have been fitted with foam mats which are soaked in disinfectant. This procedure can be



set up easily, even when aviaries have already been constructed. Many collections create a foot dip at the entrance to each aviary so that the bird keepers do not carry germs and diseases from one aviary to the next. It is advisable to create such foot dips just inside the aviary door, probably within the safety porch so that members of the public, who do not have close access to the birds, do not need to use them, and the birds also do not have access to them. It is also very worthwhile considering a form of quarantine facility for times when new birds are acquired. By placing this facility away from the existing pheasant collection, one can limit the possibility of importing disease from another collection. The quarantine requirement at the time of publication is 35 days.