The Care And Feeding Of Trained Hawks And Falcons

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The Care And Feeding Of Trained Hawks And Falcons

by

Jim Roush

Falconry is the art of training hawks, falcons, and eagles to pursue and capture wild game. It is perhaps the oldest field sport; in fact it was one of the ways of procuring meat for the table before firearms were developed. During the first half of this century this ancient sport has increased in popularity. This is probably due to the rising standard of living and a subsequent increase in leisure time.

The hunting birds are susceptible to a variety of diseases and injuries, and each falconer occasionally needs the services of a veterinarian. The diseases of raptorial birds are not well known, and the treatments for these diseases are either archaic or untested, and the veterinarian must rely on his general medical knowledge in these cases. However, the principles of care and feeding of trained hawks and falcons are well established, and have been for more than four thousand years. This article is intended to be a review and a summary of these principles.

Hunting birds can be trapped from the wild or taken from the nest when young. The former birds are called haggard falcons, and the latter are called eyasses. Briefly, a beginning hawk is trained to fly to the falconer for food. They are then trained to attack and kill game, and to hold this on the ground for the falconer without flying off. This is not as easy as it may sound, however. There have been volumes written on the proper procedure of training and a falconer may spend months striving for perfection. This makes a hunting hawk very valuable to the falconer.

The most crucial period in a hawk's life is the first few months after hatching. Baby hawks are extremely frail and tender and they are very susceptible to trauma and the forces of nature. They are also very susceptible to the nutritional disorders such as rickets, perosis (slipped Achille's tendon) etc. Louse powders commonly used on cattle and poultry can kill them. In fact, hawklets survive only because of the constant and very exacting care of the female hawk. Since it is most difficult for any human to duplicate the care and nutrition provided to the young hawks by nature, my advice would be to leave the eyasses in the nest until they are almost ready to fly. This is the only insurance of having healthy young hunting birds. It is suggested by prominent American falconers that young hawks in the medium size range should have at least eight inches of tail feather. If they are taken before this stage they will probably develop perosis. They will almost certainly become "screamers", a vice where the young hawk emits a piercing series of screams beginning at dawn and ending at dusk. "Screamers" are exasperating to say the least.

If, for some reason, one must care for extremely young hawks, the following points must be considered.

Keep them inside and at a reasonably warm temperature. When very young they should be kept in an environment with a temperature of about 90 degrees. This may slowly be lowered to room temperature as the hawks grow.

Diet is the most important aspect of raising very young hawks. An acceptable diet is one that closely approximates that fed by the mother hawk. In the wild the female hawk supposedly kills small birds and mammals and tears them apart, stuff-
CALCIUM AND PHOSPHORUS CONTENT OF SOME MEATS*

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ing the material into the mouths of her offspring. Since most falconers are reluctant to try this, the next best procedure would probably be to grind up small birds and mammals and feed this to the eyasses. This, too, is usually impractical. Nonetheless, plain meat is not satisfactory. The diet must contain proper levels of calcium, phosphorus and manganese, and these minerals must be in balanced proportions. A deficiency or imbalance of these minerals is the cause of perosis. Morrison's Feeds and Feeding recommends that the diet for growing chickens should contain 1.0% calcium, 0.6% phosphorus, 0.5% NaCl and 25 mg. of manganese per pound of feed. Whether or not this is suitable for growing hawks is unknown, but these recommendations are all we have. A multiple vitamin preparation should also be included in the diet. Hawks should never be fed anything but meat as a basis for the diet. I once heard of a veterinarian who recommended chick starter for the young hawks. This diet would undoubtedly prove rapidly fatal; a raptore's digestive tract is oriented completely toward digesting flesh, and they do not even have a gizzard. Growing hawks should never be fed plain horse meat, heart or liver. These meats are excessively high in phosphorus and can lead to skeletal diseases. Most other muscle meats are satisfactory if the minerals are correctly balanced.

Very young hawks should be fed all
they can eat every hour or two throughout the daylight hours. Periods of starvation will cause the formation of "hunger traces" in the growing feathers. This has been described as a thin line at right angles to the shaft, as though someone had rawn a razor blade across the feather. It is an area of improper development and the plume is likely to break at this point. The importance of preventing this will be discussed later.

If these recommendations are not followed, the young hawks will almost certainly die. If these recommendations are followed, the hawks will probably die anyway, or at least slip their tendons and be useless. I cannot overstress the importance of leaving the eyasses in the nest until they are almost fully feathered.

Once a hawk has been taken from the nest at the proper time and has been proven not to be a screamer, she may be handled in two ways. She may be coaxed to jump to the trainer's hand for food and thus coaxed to fly. Or she may be "flown at hack"; here the hawks are kept in a shed during the night and during the day they are released to roam at will. They will return in the afternoon to be fed, and then they can be returned to the shed. This provides abundant exercise and will produce a well-muscled and strong-flying hawk. However most falconers live in areas populated by other people and there is too much risk involved in turning young hawks loose. They are likely to get shot, eaten by dogs, or murdered by children.

Mature hawks, falcons and eagles are more hardy creatures; once a hawk is able to fly, almost any kind of meat will suffice for food. I would not recommend a high phosphorus food as the sole diet, but it probably would not harm the hawk to eat good quantities of these foods. A whole bird or animal once in while is good for a hawk. They can consume some hair and feathers, which will roll up in the crop and later be expelled. This will serve to clean any debris out of the upper digestive tract. When birds (especially pigeons) are fed, the head and crop should always be removed to eliminate the danger of the hawk catching oral trichomoniasis. This disease is a common killer of trained hawks and is difficult to treat.

I know one excellent falconer who says he would feed his hawks the finest beef if he could afford it. But since most of us can hardly afford beef for ourselves, beef heart is a good substitute for fully grown hawks. Chicken necks, backs and wings are also excellent hawk feeds. I have even fed hawks raw beef kidney for a week or so at a time. Hamburger is not satisfactory because of the high fat content and because hawks have difficulty eating ground meat. Pork is not recommended because of the danger of trichinosis. Spoiled meat is also unsatisfactory.

As a precautionary measure, it would be a good idea to include a vitamin supplement in the diet of grown hawks.

The amount of meat a hawk should be fed depends upon four factors:

a) the size of the hawk,

b) the nutritional quality of the meat,

c) the environmental temperature, and

d) the hunting status of the hawk.

The best way to regulate the food intake is to weigh the hawk daily. To accomplish this, get a spring scale that weighs in fractions of ounces, removing the pan from the top of the scale and replacing this with a crossbar that will serve as a perch.

When a hawk is moulting (a process which goes on a feather at a time throughout the spring and summer) she* should be fed a good full crop daily. This will insure good health in this stressful period and it will prevent hunger traces in the incoming feathers. The hawk will become heavy but her weight is insignificant at this time.

When the moult is completed and it is desired to bring the hawk into hunting trim, her ration should be cut down. When the hawk shows signs of being very hungry, yet does not show any signs of weakness or emaciation, she may be trained or retrained for hunting.

* Most falconers prefer female hawks because of their larger size and superior aggressiveness.
weight of the hawk should be recorded at this time. The hawk should then always be hunted at this “fighting weight.” A few ounces heavier than this and she probably will not hunt and she may even fly away. A few ounces lighter and she will probably be too weak.

When the weather is very cold the birds require an increase in their ration to maintain their condition. If hawks are kept on their summer rations and the weather turns cold, they may lose weight rapidly or even starve to death. They burn the energy to maintain their body temperature. This is especially true of the smaller hawks. It is very difficult to keep a sparrow hawk or other such small bird alive through a tough winter unless they are kept in a heated building and on a very high dietary intake.

A starving hawk loses condition quickly. The breast and legs become thin upon palpation. They will assume a resting position; stand with the feathers of the head and body ruffled out, get a far-out, day-dreamy look in their eyes, and cannot be stimulated to assume any other posture. They may make feeble attempts to eat. Eventually they will become prostrate and seem to be in a coma. They usually die before the next morning. Even the most careful falconer can be troubled by starvation in his birds and once the symptoms are noted the prognosis for survival is poor. A warm environment and parenteral fluids may help.

The first rule of keeping falcons is commonly broken by beginners who have too much enthusiasm and too little knowledge of falconry. Hunting birds must never be kept in cages. This may be satisfactory for hawks and eagles in a zoo because these birds usually have their spirits broken, but an active hunting hawk will ruin herself in a cage. They will almost invariably develop a sore over the top of the beak where the waxy cere joins the horny portion. These wounds are unsightly and are very slow to heal. Also the wing and tail feathers will become bent, broken and badly frazzled. This has the same effect as trimming the ends off the wings of an airplane. Without good plumage a hunting hawk is temporarily useless. These feathers can be repaired by a process called “imping.” This resembles intermediullary pinning but on a smaller scale. Imping needles are made from wire which is triangular in cross section. Straightened suture needles should also work. The broken stub of the feather is trimmed with a razor blade and the distal portion of the broken feather or of another feather should be trimmed to the size of the broken portion. The imping needle is inserted into the distal part of the feather and glued in with a good contact cement. The proximal stub is also glued and the two segments are then fitted together.

Hawks are restrained by means of leather straps attached to their legs. These straps are called jesses, and they are about one-half inch wide and approximately 12 inches long (depending upon the size of the hawk). The jesses are attached by a special procedure which will prevent them from tightening down on the bird’s legs. The distal end of each of the jesses has a longitudinal slit and a leash is attached to the jesses by means of a swivel device. The swivel is a very important measure to prevent the hawk from twisting her legs in the jesses. If this should happen in cold weather the resulting decrease in circulation can cause the bird’s feet to freeze. The leash is used to secure the falcon to the perch.

Hawks are continually jumping off the perch in an effort to fly. This is called “bating” by falconers. One should remember this when constructing a perch for a falcon. If there is any way a hawk could possibly become entangled, the hawk will find it. This could lead to serious traumatic injury or it could cause the hawk to hang upside down for several hours and die. The following housing arrangements are intended to eliminate this danger.

The high perch is most commonly used in the falcon sheds and shelters. It is a long horizontal pole fixed at about eye level and at least 3 or 4 feet from any wall. Some sort of durable cloth drape should be suspended from this pole to the ground. The hawk is then tied to the pole.
by her jesses. A good arrangement is to have a swivel snap attached permanently to the pole, and snap this through the holes in the ends of the jesses. The purpose of the drape hanging down from the pole is to give the hawk something to cling to so that she may climb back onto the pole after she bates.

The weathering block is a low type of perch used to give the hawk an exposure to sunlight, wind and exercise. A good one can be made from a large flower pot filled with cement, with a spike imbedded so that it protrudes about nine inches out of the hole in the bottom of the pot. This can be driven into the ground through a 2 or 3 inch ring and the falcon’s leash may be tied to the ring. With this arrangement the hawk can bate in any direction or even go around the perch several times without becoming entangled.

Some falconers keep their birds on what are termed flight lines. This arrangement consists of two perches imbedded in the ground at a distance from each other with a light cable or heavy wire stretched between the two perches. The falcon’s ring can be suspended on this wire and she can be allowed to fly from perch to perch. This turns the bating into useful exercise and helps keep the birds in shape for the hunting season.

When the weather is favorable the birds should be kept on weathering blocks or flight lines during the day. They can absorb sunlight and work their wings in the wind. However if it is exceptionally hot they should be placed in the shade. When night falls the hawks should be put in a shed to protect them from predators. Great horned owls, raccoons or any other large predators can kill a hawk.

In very cold weather, especially when the wind is blowing, Hawks should be kept in sheds upon the high perch. The shelter may be open on the south side if the weather is not extremely severe. When there is little wind the larger hawks can remain comfortable in relatively cold weather as long as they are kept well fed.

If a hawk must be taken inside in the winter due to illness, she should not be taken out again until it is fairly warm. Too sudden a temperature change can cause respiratory disease.

One should remember to treat a hawk with kindness. A hawk cannot be disciplined by striking her. This will probably hurt the bird and it usually causes her disposition to become completely refractory. She may even grow to hate the falconer and everyone else and she may fly away. A hawk with a nasty disposition may be a very good hunter, and if the trainer can control his temper he will usually get along fine. A falconer can control a frightened or ill-mannered hawk by superior intelligence, and without using force. Occasionally a falconer will get “nailed” in the hand by a hawk. This is always the man’s fault, not the bird’s. A hawk that is eating will use her talons to protect her food, and a hawk that is distrustful of man will use her talons to protect herself. Anyone who extends a hand to a hawk under these circumstances can expect it to receive several sharp talons. The average hawk will allow herself to be petted on the chin, breast, legs and feet, but not on the top of the head or back. All hawks resist very violently when they are picked up bodily. When restrained they should be wrapped in a large blanket and handled as gently as possible. It is best if the falconer can do most of the handling. One need not worry about the hawk “going for the eyes.” This is a very rare occurrence. For such a terrible-looking creature the average falcon is very gentle; some even become “half-way” affectionate.

For additional information on falconry I would recommend texts by Wood and Fyfe, Harring, Latham, and White.

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**BIBLIOGRAPHY**

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