Guidelines for the General Welfare of Falconry Raptors.

The International Association for Falconry and Protection of Birds of Prey (IAF) has strong views on the animal welfare of both the falconry bird and its prey. Therefore these guidelines have been approved by the Assembly of Delegates at the 45th AGM at Doha Qatar in January 2014. These guidelines are suitable for dealing with hunting birds that fly free in the hunting season and, also, in part for the rehabilitation of free ranging birds found injured or debilitated. They are not appropriate for birds that are kept in exhibitions, in a zoo or as pets that do not hunt.

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Introduction
Falconry, defined by the IAF as: ‘taking quarry in its natural state and habitat by means of trained birds of prey’ depends on two premises:
1. a completely healthy and stress-free bird that is physically and psychologically able to catch its prey sufficiently and
2. A bird that has no reservations towards humans about sharing both the hunting event and the prey with the falconer.

This premise implies a unique and mutually beneficial partnership between the raptor and the falconer. It must be recognized that the only way to achieve excellent performance from a falconry bird is to have it in peak fitness, optimal health and subject to a minimum of stress.

There is a considerable body of knowledge that has been developed for more than 3000 years on the management of Falconry raptors in a way that will optimize hunting performance, minimize stress and prevent disease.

To understand the behavior of the bird and the training provided by the falconer one has to take into consideration the reasons for animal behavior. Every behavior has, at least, the aim to preserve the life of the animal so that it can transmit its genes into the next generations. Birds of prey in the wild have a survival rate of approximately 20% for hatched chicks. This means that about 80% die in their first year and most of them starve in autumn/winter. For this reason raptors are “energy
efficient” predators that are largely sedentary when not hunting. Hunting itself needs a special motivation. This can be aligned with mating, brooding and rising offspring, or simply with the need of food, commonly called hunger. This hunger has nothing to do with starvation. If a bird were starving, it would lose the ability to hunt efficiently. After the successful hunt or the daily training the bird will be fed up to receive its required diet so the hunger will be satisfied.

Besides positive motivation, negative feelings can influence the behavior of animals in general. In social animal species like dogs or horses, negative reinforcement – especially if caused by an individual of higher social rank, e.g. the human – can lead to the desired learning experience. Falconry birds are not social in this sense; negative reinforcement caused by the falconer would just make them avoid the falconer. Falconry practice for this reason has to be based on training through positive reinforcement alone and on the avoidance of stress.

In addition to this ethological integrity, physical inviolacy is crucial. Of course, veterinarian health care is obligatory; this includes a laboratory check of the mutes twice a year, and immediate medical treatment by a specialized avian veterinarian if necessary. The maintenance of intact primary feathers has to be a priority. Damaged primaries prevent a raptor from being a successful hunter.

What does animal welfare mean?
The term “animal welfare” can be seen by a juridical, aesthetical, ethical and biological point of view. In the context of the IAF the biological aspect has to be discussed especially, because there are no biological differences between the hawking birds and their prey, irrespective of the cultural or legal background of the falconer. Two concepts out of a bundle shall be mentioned: the Meet Demands and Avoid Damage Concept and the Concept of the Five Freedoms.

Meet Demands and Avoid Damage Concept
This concept was elaborated by a group of Swiss and German ethologists (ethological working group of the German Veterinarian Society, Tschanz et. al., 1987) and first published in 1987. At present it is the most often used method in Germany to decide whether a certain phenomenon has animal welfare relevance or not.

The concept of Meet Demands and Avoid Damage arises from the assumption that every organism is capable of self-creation and self-maintenance. Whether an animal can manage self-creation and self-maintenance sufficiently can be evaluated if the animal is able to fulfill its demands and preserve itself from damage. The animal uses for these aims its physiological, morphological and ethological equipment acquired by evolution and by individual ontogenesis. With this equipment animals use or avoid structures and conditions in their environment (if an animal is kept, the structures and conditions are ruled by men). If the adaptability of an animal is overstretched, physiological, morphological and/or ethological damage will occur. Physical damage can be seen easily with, mostly even without knowledge about that animal species, and there is no dispute about the relevance of the injury to the welfare of the animal. Ethological damage will be recognized as
disturbed behavior like stereotypes. It is most often not so easy to detect, and there is much more discussion, whether disturbed behavior does really indicate poor welfare. The concept of Meet Demands and Avoid Damage claims if there is a significant amount of injured or damaged individuals correlating to a certain keeping or managing system, this system will be recognized as not compatible with the approach of animal welfare. For this judgment the seriousness of the damage is to be taken in consideration as well.

The concept of the Five Freedoms was founded by the Farm Animal Welfare Council in 1979. It focusses on farm animals, which are all social animals, a behavioral pattern that birds of prey do not share. These live facultative, even mostly solitary lives. Because of this, companionship of the animal’s own kind is not crucial.

Freedom from hunger and thirst: by ready access to fresh water and a diet to maintain full health and vigor.
Freedom from discomfort: by providing an appropriate environment including shelter and a comfortable resting area.
Freedom from pain, injury or disease: by prevention through rapid diagnosis and treatment.
Freedom to express normal behavior: by providing sufficient space, proper facilities and company of the animal’s own kind.
Freedom from fear and distress: by ensuring conditions and treatment which avoid mental suffering.

Both concepts are covered for falconer’s birds completely – with the exception of companionship as mentioned above.

Handling of the bird
For a proper handling, a falconry bird has to be fitted with jesses on each of its legs. Like dogs with collars and leads or horses with bits and reins, the birds can be handled with jesses during training, in the field and be tethered in the breaks between hunting. There are different types of jesses in use depending of the species of bird and the cultural heritage of the falconer. Most often, in Western falconry, the so-called Aylmeri bracelets are fitted: these are leather anklets (or bracelets) which are fitted around each tarsometatarsus. Removable “jesses” made of either braided nylon cord or leather, are passed through the eyelets of the Aylmeri bracelets and connect together at a swivel. A leash is attached to the swivel and this is tied to the glove of the falconer or to the perch. This method allows for the jesses to be changed to un-slit ones or to be removed altogether when the bird is flown free, so resulting in a minimum of encumbrance or risk of entanglement on the bird. (There is a considerable amount of further detail which relates to the application and use of jesses and that is suitable to a practical manual and not a motivation such as this).
Birds of prey are almost solely visually orientated. To avoid stress in unfamiliar environments or to prevent them from bating at unhuntable prey, hoods are of immense value.

**Travelling with the bird**

While travelling, the negative influence of a different climate has to be avoided as well as stress through unknown stimuli. To protect the birds from stress, hoods can be used or, alternatively, travel boxes are suitable. These should be ventilated by small electric fans powered by means of the cigarette lighter socket of a car or a battery.

**Housing of the bird**

For all housing which is intended to last for more than a very short time or only in fine weather, shelter from rain, intense sun and especially from draughts has to be provided. Every day, if it is not frozen, a water bath has to be available for several hours. Attention has to be paid that the bird does not come into contact with its mutes (faeces). Security against free ranging predators has to be provided; domestic cats and even rats can actually kill smaller birds of prey especially in an urban surrounding.

For housing the bird, two different methods are in use:

- Essential for initial training, is the use of traditional falconry method with jesses as mentioned above and perches. There are different types of perches designed such as screen perches, block or bow perches and flight line arrangements. The falconer will choose the perch depending on the species of hawk, the state of training and the location. Falcons like to stand with outstretched talons as on a rock so “block perches” would be preferable. Goshawks or buzzards stand mostly with bent talons, as on a branch, so bow perches are suitable. In the very first few days of the training, it is important that the bird does not learn to jump away, so a screen perch can help. While travelling e.g. to a hunting ground or a falconers meet, a flight line arrangement cannot be transported, where-as, at home, it is a very useful tool, especially for Accipiters, like goshawks, giving them almost the same freedom as an aviary with much less danger of damage. Tethering is exclusively recommended for birds that are flying free, during training – or for the rehabilitation of free ranging birds found injured or debilitated. If birds are not flown during the molting period, they are best kept in aviaries, or tethered with flight line arrangements.

- Aviaries are a perfect housing system for most of the species in the molting period and are crucial for breeding pairs. The absolute size of the aviary is not the crux of the matter, but attention has to be paid so that no damage can occur due to the construction of the pen, especially to the primary feathers. Some very tame and calm individual birds, especially Buzzards, Eagles and Harris Hawks, can be kept in aviaries made completely from mesh wire, but for most raptors, wire-mesh must be shielded by “shade-cloth” or silage-protecting net to avoid damage to the beak or cere and the primaries. Most of the birds will do better if up
to three walls of the aviary are built with non-transparent material. For most breeding pairs and for some particularly anxious individuals, such as Goshawks, sunlight and seclusion pens work best. Ventilation is important in open roofed pens and ample ventilation needs to be installed above floor level in the form of a ventilation point or slot. This will create a chimney effect drawing clean cool air in and expelling warm air out the top and will also aid in drying the floor surface after rain. To avoid stressing the hawk by entering the chamber, a flap type system to accommodate removal of bath to change the water is recommended. A food chute for the same reasons, are also advisable. Every solid wall should have a smooth surface. Mesh wire, if used, shall be covered with plastic; in many cases wooden vertical bars would be better as a wall than mesh. Very fine but strong nylon nets, such as those used by farmers to protect their silage from crows (shade cloth), can also be used. The roof should be partly closed to protect from bad weather, and partly open to give access to sun and rain. The mesh wire on the roof should be double laid and/or small meshed to protect the inhabitant from wild raptors and other predators. Every aviary must have a double door system to avoid unintended exit of the hawk.

**Training of the hawk**

The aim of training is to shape the bird into perfect physical performance and to teach them how to catch prey successfully.

Raptors are supreme athletes, and as with human athletes, their body fat has to be reduced, but not depleted totally, and the muscles have to be built up. Although the body weight is not the main indicator for hunting motivation; experienced falconers will monitor the behavior of the bird. It is very useful to monitor the weight daily with proper scales and to document it in written form. Weight will give a good indication of the bird’s appetite and general health.

Different exercises have been invented to improve fitness depending on the species of the hawk, if it is not possible to fly it on wild game at least every second day. The principle is that the food is given as reward just after the bird has put some effort for flying. For longwings like falcons lure, kite or balloon training works well. Shortwings like goshawks or Harris Hawk do best with flying from fist to fist of two falconers or with vertical jumping.

The use of bagged game (if allowed by the local laws and depending on national or regional norms and standards) may be acceptable but is not promoted by the IAF. Live animals, used in this way, must be handled carefully and killed quickly after they have been caught, as with wild prey.

**Hunting with the bird**

While hunting, the safety of the bird and preventing unnecessary suffering of the prey have the highest priority. The falconer must pay attention to the dangers that may occur in the hunting
ground such as traffic, uninformed people, wild, feral or pet predators or other human or 
environmental risks.

The size of the hawk and the size of the quarry have to match one-another.

Captured quarry, if not already killed by the bird, has to be killed by the falconer as soon as possible 
in a most humane way.

**Recommendations**
To ensure that falconers have the knowledge to fulfill all the requirements mentioned above, the IAF 
recommends that all people, who would like to become falconers, should undertake an 
apprenticeship with an experienced falconer for at least one hunting season. The IAF also 
recommends that aspirant falconers join a falconers club to make contact with other falconers. In 
addition, a good falconry course should be taken, even if it is not required by law in the country.

To Administrations, we suggest that provision of a “Falconers License” be based on completion of an 
apprenticeship and a falconer’s exam and this may be included within Hunting legislation.