Rådet for dyreetikk
Oppnevnt av Landbruks- og matdepartementet

Council for Animal Ethics
Kristian Ellingsen-Dalskau, secretary
Norwegian Veterinary Institute
P.O. Box 64
NO-1431 Ås
Tel. (+47) 917 02 970/ (+47) 23 21 63 77 Fax: (+47) 23 21 63 01
Email: Kristian.Ellingsen@vetinst.no
Website: http://www.radetfordyreetikk.no
Facebook: https://www.facebook.com/radetfordyreetikk/

Ås, 11 October 2022

Statement on the trimming of flight feathers in birds

Background to the request

The Norwegian Council of Animal Ethics was first contacted by Kari Lutro, who is a veterinarian with special expertise in birds and exotic animals and a member of the Advisory Board of EAAV (European Association of Avian Veterinarians), in 2018. Because new council members were being appointed at the time, the enquiry was put on hold and not considered until 2022.

Veterinarian Lutro wrote that a course on behaviour aimed at parrot owners was held in Norway in 2017, and that a veterinarian from the Netherlands had been brought in for the occasion. In connection with a subsequent course organised by the Norwegian Association for Pet Behaviour (NAPB), several participants questioned the methods that had been presented and demonstrated by the above-mentioned veterinarian at the previous course, as they were very different from what was taught at the NAPB course. In particular, the topic of pinioning (or more precisely flight feather trimming) was mentioned.

During a lecture, the Dutch veterinarian stated that flight feather trimming should be a routine part of a veterinary appointment to achieve the following benefits:

- A more natural life under unnatural conditions
- Make it possible to leave the house every day for walks, bike rides or to spend time in the garden
- Suppress undesirable behaviour
- Improve a birds' confidence, lower its fear levels and reduce defensive behaviour
- Reduce the need to rehome parrots

Flight feather trimming is a frequently discussed topic among bird owners on social media, and veterinarians are constantly contacted by owners who want to have their birds' flight feathers trimmed or want advice on the matter.

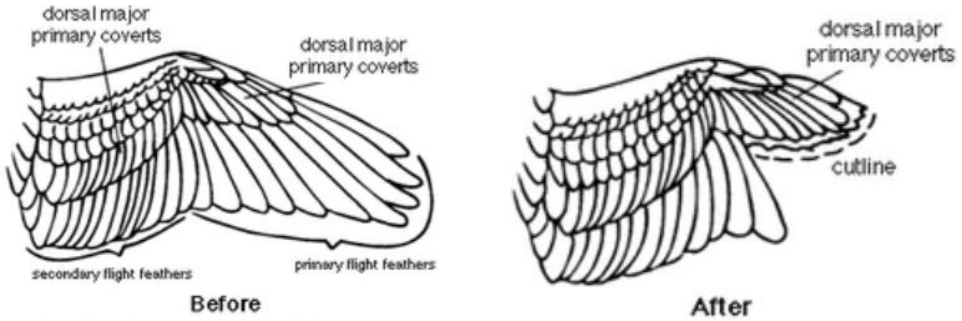
Lutro requests that The Norwegian Council of Animal Ethics evaluate flight feather trimming in large and small species of parrots in relation to Norwegian law, animal welfare and the ethical aspect of such treatment, in light of the Act on Animal Welfare (the Animal Welfare Act) and the Act relating to Veterinarians and Other Animal Health Personnel (the Animal Health Personnel Act).

She also requests an assessment of who, if anyone, should be allowed to carry out such flight feather trimming, for example the owners themselves, pet shop staff, veterinarians, or others, seen in conjunction with the purpose of the procedure.

Pinioning and flight feather trimming

It is important to point out that flight feather trimming is not the same as pinioning, even though the two terms are often used as if they were interchangeable.

Flight feather trimming involves clipping a bird's primary and secondary feathers (flight feathers). The bird's ability to fly will be limited to a greater or lesser extent depending on how this is done and how much is removed. The flight feathers grow back when the bird sheds (moults) the trimmed feathers, and trimming these feathers does not constitute a form of amputation. Flight feather trimming does not have to inflict any physical pain on a bird.



Example of flight feather trimming. Source: http://cutelittleparrot.weebly.com/care.html

Pinioning is one way of rendering a bird permanently unable to fly. The most common pinioning procedure is to amputate the outer parts of the wing bones and their feathers (corresponding to the metacarpals and fingers of the human hand). Pinioning is a painful procedure that is illegal in Norway.

Pinioning. Source: https://vet360.vetlink.co.za/pinioning-wing-clipping/

This statement concerns flight feather trimming only.

Flight feather trimming in Norway

Flight feather trimming can be relevant for groups other than pet parrots kept in private homes, including zoological gardens, bird parks and for non-commercial poultry keepers. The Norwegian Council of Animal Ethics contacted Norwegian zoological gardens, bird parks and non-commercial poultry keepers to get an impression of how common flight feather trimming is among these groups.

Zoological gardens and bird parks

The Council contacted a total of seven institutions, of which three replied. One institution used to have a parrot. The parrot's flight feathers had been trimmed when they acquired her, and they continued trimming them during her first years in the park. The other two trimmed the flight feathers of some of their larger birds, such as flamingos and peacocks, to allow them to wander freely without any risk of them escaping.

Non-commercial poultry flocks

The Norwegian organisation for non-commercial poultry keepers, Norsk rasefjærfeforbund, was also contacted. The organisation responded, on behalf of itself and its subsidiary club Norsk Svømmefuglklubb, that most members who owned flighted ducks and geese kept them in aviaries. In exceptional cases, for example when letting the birds out for the first time in spring or purchasing new birds, some members trimmed their birds' flight feathers.

Why trim?

There are many different reasons why bird owners may want to trim their birds' flight feathers. Many think of trimming as temporary and harmless, like having a haircut or cutting your nails. However, birds depend on their feathers for normal movement and to move around and exercise. It also takes a long time for the feathers to grow back. How long it takes depends on the species, but it varies from several months to more than a year. During this period, birds will not be able to exercise their flight muscles properly.

This may increase the risk of falls and injuries, which could scare birds and cause them to avoid flight even when their ability to fly returns.

A common reason for trimming is that it allows owners to take their bird outside without the risk of escape. However, even birds with trimmed flight feathers can react instinctively and attempt to fly if they are frightened. Depending on how the trimming was carried out, there is a risk that a bird will remain where it lands without being able to fly any further. In windy weather, a bird may have covered a considerable distance, and, if not found, risks dying from thirst, starvation or exposure, or being killed by predators – a cat, for example.

There also seems to be a commonly held opinion that caged birds are poor flyers and that trimming their flight feathers protects them from injury in the house. There are situations where this is true, but they are few and far between. Birds that crash into things usually do so because they have never learnt to fly, because they are frightened or because their ability to fly has been impaired by flight feather trimming. When it comes to preventing escapes and injuries, adapting the home and undertaking obedience training are more reliable methods than flight feather trimming.

If flight feather trimming becomes more common, the procedure will probably become more generally accepted, but something being common does not necessarily mean that it is a good thing. There are numerous examples of procedures that were once common and generally accepted but that are no longer considered legitimate. Tail docking in dogs is one example. Flight feather trimming may also seem acceptable because birds seem to cope well with being deprived of their ability to fly. However, it is important to emphasise that the absence of any obvious behavioural signs of distress does not necessarily equate to good animal welfare.

The impact of flight feather trimming on animal welfare

There are many definitions of animal welfare, but no single definition that is universally accepted. It is therefore common to describe animal welfare as consisting of three factors: natural life, biological functioning and the animals' subjective state. A natural life means that animals should be kept in an environment that allows them to engage in behaviours specific to their species. Good biological functioning means that animals are in good health and, in the case of production animals, good production and reproduction. An animals' subjective state refers to animals coping well with the environment in which they live and predominantly experiencing positive emotions in life. All of these conditions must be satisfied in order for an animal to experience good animal welfare. It is natural to use this framework to evaluate the impact of flight feather trimming on bird welfare.

<u>Natural life</u>

Conditions for captive animals is a topic that has received increasing attention over the past decades. For example, zoological gardens have stopped using small cages and concrete enclosures in favour of more natural enclosures, where the animals have more

room to engage in natural behaviours, and environmental enrichment that provides cognitive and physical challenges by allowing them to exercise, swim, climb, scratch and dig. The focus on establishing a good relationship between animals and humans has also intensified.

A similar development can be observed in relation to our production animals. In many countries, procedures that physically alter animals to make them more suited to our forms of production, for example by trimming the beaks of chickens and docking the tails of pigs, are generally accepted and performed as a matter of routine. Such procedures are illegal in Norway. Instead, we focus on adapting the environment to the animals, for example through legislation and breeding. In recent years, there has also been a greater focus on the conditions under which pets are kept, for example more space and improved social conditions for rabbits and birds.

Birds are descendants of small predatory dinosaurs and are believed to have been capable of active flight by flapping their wings for at least 150 million years. Flying is one of the animal kingdom's most complex forms of movement. This behaviour forms a fundamental part of the biology of birds, regardless of whether they are born and live in the wild or in captivity. The whole bird, including its brain, bones, muscles, organs and body, is designed for flight. If a bird's ability to fly is restricted, for example through flight feather trimming, it will no longer be able to move naturally. As well as potentially having adverse physiological and psychological effects, the procedure also removes much of the function that defines a bird.

Biological functioning

In the same way as a child learns to walk, birds have a sensitive period in their development that is fundamental to learning to fly.[1] Trimming flight feathers during this stage, before a bird has learnt to fly, could have a detrimental effect on the development of its sight, motor skills, skeleton and behaviour, among other things. Trimming also deprives a bird of the possibility to train, exercise and explore, which could make it difficult for the bird to learn how to fly later, after this sensitive period. Birds that have their flight feathers trimmed before they have learnt to fly will probably never develop the balance and agility required for flight. Trimming the flight feathers before a bird has learnt to fly is therefore particularly detrimental.

Flight feather trimming also has a bearing on a bird's brain and mental development. Animals kept in enriched environments, which provide mental, physical and social stimulation, have more active, plastic brains with a greater number of and more complex neural connections.[2] Flying teaches young birds many complex skills, including taking off, flapping, gliding, ascending and descending, turning, avoiding obstacles, braking and landing. As birds' brains have developed to interpret visual data, with specific areas activated during flight, there is reason to believe that the inability to fly reduces stimulation of the brain and thus cognitive function.

Birds need to fly to strengthen their pectoral muscles. If the flight muscles are not allowed to develop normally through flight, they will not be able to put the proper stress on their

skeleton, which will have a negative effect on the size and strength of their bones. The mechanical stress on growing bone determines the strength of the bone, and bones that have not been subjected to sufficient stress will be weaker than normal. Exercise during growth also produces a skeleton with higher mass and density.[3] A strong skeleton is important to reduce the risk of fractures in the wings or chest (keel bone) in connection with flying.

Some birds have their flight feathers partially trimmed, allowing them to fly short distances. This type of trimming is not without its problems either. Trimming impairs a bird's flight control both inside and outside. Partial trimming also results in the birds benefiting less from optimal flight training because it is less effective. Moreover, partial trimming causes birds to fly in an unnatural, more vertical flight position, the consequences of which are unknown.

Flapping the wings without taking off requires half as much energy as flying, if that. This means that flapping is not an adequate replacement for flying, as it provides neither sufficient exercise, muscle training nor stress on the bones.[4]

Birds need regular exercise to maintain good cardiovascular health,[5] and no other form of exercise is as natural and effective for a bird as flying. Birds that are prevented from flying for long periods of time and thus do not get enough exercise, are at increased risk of obesity and diseases of the heart and liver.[6] Obesity and related illnesses are an increasing problem in large birds with limited opportunities for movement.

The animals' subjective situation

Parrots are prey birds, and their instinctive response to a threat is to take flight. If their flight feathers are trimmed, they have no possibility of escape, for example if they are surprised by a dog or a cat. This can make them more anxious and stressed.

Another consequence of not being able to fly away is that birds are forced into close contact with humans. A frightened bird forced to have close contact with humans will not necessarily become tame or attached to people. On the contrary, such contact may result in learned helplessness, a state where a bird learns, through repeated exposure, that it has no way of escaping a stressful situation. The bird reacts by remaining passive, and this strategy remains even if it later has the opportunity to escape. Learned helplessness makes a bird more insecure and anxious.

Birds that cannot escape an unwanted encounter with humans may bite. Instead of flying away, which is their preferred instinctive response, they have to resort to other strategies to avoid the threat. Flighted birds can also bite, but they do not experience the stress or insecurity of being physically disabled.

As mentioned above, birds have a fundamental motivation to fly. If prevented from exercising this behaviour due to anatomical impairment, they may become stressed, self-harm and develop stereotypical behaviour such as pacing, rocking and feather plucking. Feather plucking after feather trimming may also occur because the trimming causes

irritation. For example, a study on African grey parrots found that birds that were unable to fly were five times more likely to engage in feather plucking.[7] There is also anecdotal evidence that trimming has an effect on a bird's state of mind, and birds that have undergone the procedure are often described as depressed by their owners.

As mentioned above, there is no single definition of animal welfare. However, coping with the environment is a key concept in several definitions. The annotated edition of the Animal Welfare Act [8] states that 'the animal should be able to cope with the environment in which it lives and maintain normal functions of life'. It is impossible to know how much stress birds experience as a result of flight feather trimming. However, it is reasonable to assume that these highly intelligent creatures experience reduced ability to cope and therefore reduced welfare when deprived of the ability to fly and the opportunity to move in the way that is natural to them.

The Council's interpretation of the legislation

Very few countries have a statutory prohibition on flight feather trimming. One exception is Sweden, where flight feather trimming is prohibited for all birds under one year of age to allow them to learn how to fly. Trimming is only permitted in adult birds that cannot be trained to accept a harness. In such cases, flight feather trimming may be carried out once a year, for example to allow outdoor activities during the summer.

Despite the procedure generally being permitted, it is The Norwegian Council of Animal Ethics' understanding that, internationally, an increasing number of veterinarians will not perform flight feather trimming because flying is so fundamental to a bird. The British Small Animal Veterinary Association, for example, states that flight feather trimming should not be performed for the sake of the owner's convenience. Instead, they focus on teaching bird owners how to care for their birds.

Since flight feather trimming is not a form of amputation, the procedure is not prohibited under Norwegian law. This is also how the Norwegian Food Safety Authority interprets the regulatory framework (personal communication). There are nevertheless provisions in both the Animal Welfare Act and the Animal Health Personnel Act that can be interpreted to mean that flight feather trimming should be prohibited.

Section 1 of the Animal Welfare Act states that '*The intention of this Act is to promote good animal welfare and respect for animals.*' As discussed above, flight feather trimming has a significant negative impact on the welfare of birds. For this reason, The Council considers flight feather trimming to be in violation of the Animal Welfare Act's intention.

Section 3 of the Animal Welfare Act reads as follows: *'Animals have an intrinsic value which is irrespective of the usable value they may have for man. Animals shall be treated well and be protected from danger of unnecessary stress and strains.*' The second sentence contains a requirement to treat animals well and protect them from the danger of unnecessary stress and strains. The Act does not specify which norms are to be complied with, but makes reference to other norms outside the Act itself. According to

Stenevik and Mejdell (2011), these norms can be 'animal husbandry-related or of an ethical, emotional, financial or practical nature' (p. 35). They go on to claim that 'An animal keeper who knows the mental and physical needs of an animal, and who wants and is able to accommodate these needs to a large extent, treats the animal well' (s. 36). The preparatory works to the Animal Welfare Act specify that 'well' means that animals' physical and mental needs must be considered on the basis of their distinctive character and ability to have positive and negative experiences. Flight feather trimming has negative consequences for an animal's physical and mental needs and is thus in violation of the legal requirement to treat animals well. The Council therefore considers that flight feather trimming violates the Animal Welfare Act Section 3 second sentence.

The Animal Welfare Act Section 9 first paragraph reads as follows: *'Medical and surgical treatment shall be carried out taking into account the animal's welfare, and protect the animal's ability to function and its quality of life.'* According to Stenevik and Mejdell (2011), the 'ability to function' should be assessed in comparison with normal function and 'an animal should be physically and mentally able to have its needs met, for example its nutritional needs and need for activity'. Although trimming can hardly be defined as 'medical and surgical treatment', there is no doubt that the procedure alters an animal's ability to function. The concept of 'quality of life' largely overlaps with 'welfare'. Stenevik and Mejdell (2011) writes: 'If the treatment results in an animal having to live for much of or the rest of its life with pain or severe limitations on its natural activities, the treatment will be in breach of the consideration for quality of life'. Flying is a fundamental characteristic of most birds, a behaviour that millions of years of evolution has adapted them for both mentally and physically. Therefore, taking away a bird's ability to fly will undoubtedly reduce its quality of life.

The Animal Welfare Act Section 9 second paragraph reads as follows: '*Surgical procedures or removal of body parts must not be carried out unless there is a justifiable reason to do so out of consideration for the animal's health.*' Although flight feather trimming is not a surgical procedure and feathers cannot be defined as a body part, the treatment is rarely justifiable 'out of consideration for the animal's health'. The Council therefore considers flight feather trimming to constitute a violation of the Animal Welfare Act Section 9 first and second paragraphs.

Section 23 of the Animal Welfare Act states that *'The animal keeper shall ensure that animals are kept in an environment which is consistent with good welfare, and which meets the animals' needs which are specific for both the species and the individual. The environment shall give the animals opportunity to carry out stimulating activities, movement, rest and other natural behaviour. The animals' living environment shall stimulate good health and condition, and contribute to safety and well being.*' In the Council's opinion, this section emphasises the importance of facilitating stimulating activities, movement, and other natural behaviours by adapting the indoor and outdoor environment rather than actively obstructing such behaviours through flight feather trimming.

Section 12 of the Animal Health Personnel Act states that '*The duties of animal health personnel within their professional field are:*

1. *to promote the welfare and health of animals, including stocks of animals living in the wild,*
2. *to contribute to ethical and environmentally sound animal husbandry*'.

The Council considers that flight feather trimming violates the Animal Health Personnel Act Section 12, as trimming has a negative impact on 'the welfare and health of animals' and contributes to unethical keeping of animals by removing the ability to fly.

Section 22 of the Animal Health Personnel Act reads as follows: *'Animal health personnel shall as a matter of course give the animal owner or the latter's representative information concerning methods of examination, diagnoses and relevant alternative treatments and the prognosis. The owner shall also be informed of possible risks and side-effects of the examination or treatment. If injury or complications arise in connection with the examination or treatment, the animal owner shall be informed thereof. Information shall be provided in a form that is understandable and appropriate to the needs of the animal owner.'*

The Council is of the opinion that this section highlights the responsibility that animal health personnel have in relation to animal owners when it comes to informing them about the welfare implications of flight feather trimming, including the consequences for a bird's mental and physical health, and about alternatives to trimming.

Alternatives to flight feather trimming

As mentioned initially, many bird owners justify flight feather trimming by saying that it allows their birds to spend time outside without the risk of them escaping. There are other ways to prevent escapes, however. Firstly, it is possible to train birds to return when called. This is not always easy, however, as birds are easily frightened and distracted and may not return as desired. That is why bird harnesses in different sizes are available that will allow birds to fly relatively freely, once they have become accustomed to them. Birds must be harness-trained from a young age to ensure that they do not hurt themselves, for example by panicking.

Flight harness. Source: https://en.wikipedia.org/wiki/Parrot_harness

A bird's need for space can be addressed by making an aviary, a large cage that protects birds while unsupervised. An aviary should be big enough to allow the birds to fly.

Aviary. Source: https://www.facebook.com/zoohjornet/photos/a.475394762537089/2190610951015453/

If you think that your bird should have its flight feathers trimmed to protect it from hurting itself indoors, you should also consider alternative solutions. For example, mirrors and windows can be covered until the bird becomes accustomed to them and learns to avoid them. Ceiling fans with exposed blades should be avoided. Hotplates must be turned off, and toilet and front doors should be closed, as well as the doors to any rooms you do not want the bird to enter.

Who can perform flight feather trimming?

It is difficult for persons without the necessary expertise to distinguish between a new, fully developed feather and a feather that is still growing, known as a 'blood feather'. Severe bleeding can occur if the sensitive blood feathers are cut. Injuries to blood feathers

can also be painful, stressful and potentially fatal for birds. Only veterinarians have the skills, training and equipment required to deal with an unforeseen incident of this type. Birds will also find the handling and procedure stressful. Experience of handling and restraining stressed birds is therefore a prerequisite for avoiding unnecessary stress, incorrect cutting and injury.

If flight feathers are not trimmed correctly, problems may arise when the feathers grow back in connection with moulting. It is important to trim the same number of feathers on each wing, and to trim them to the same length, to allow the best possible balance and control during flight in order to avoid collisions and injuries to the sternum/keel bone, beak and wings. The species of parrot must also be taken into consideration, along with the bird's natural flight ability and individual physiological and medical status.

Based on the above, the Council is of the opinion that flight feather trimming should only be performed by veterinarians who possess the requisite expertise.

The Council's assessment

The Norwegian Council of Animal Ethics can find no scientific support for the arguments presented in the introduction to the present statement - in fact, quite the reverse. Taking away a bird's ability to fly deprives it of its most fundamental and defining characteristic. Millions of years of evolution and biological adaptation will not simply go away just because it is easier to remove the possibility of flight than to accommodate this behaviour. While it is true that birds that have had their flight feathers trimmed can be kept outdoors, so too can birds that have been trained to wear a flying harness or are kept in aviaries. Allowing birds to spend time outside is not in itself an argument for trimming. In this statement, we have demonstrated that trimming has a significant negative impact on all three aspects of the concept of animal welfare. The Norwegian Council of Animal Ethics also considers flight feather trimming to violate several provisions of the Animal Welfare Act and the Animal Health Personnel Act, which can thus be interpreted to mean that the procedure ought to be illegal.

Based on the above, it is the opinion of The Norwegian Council of Animal Ethics that flight feather trimming should not be routinely performed on parrots.

General advice

- Flight feather trimming should not be performed as a matter of routine.
- Flight feather trimming can only be performed on birds older than one year of age, in exceptional cases and in consultation with a veterinarian, if, when all factors are taken into account, it is concluded that trimming will clearly be beneficial to the bird.
- Due to the risk of injury and incorrect trimming, the Council is of the opinion that flight feather trimming should only be performed by veterinarians who possess the requisite expertise.

On behalf of The Norwegian Council of Animal Ethics

Knut Bøe	Kristian Ellingsen-Dalskau
Chair	Secretary

References (selected)

1. Ruaux, G., S. Lumineau, and E. de Margerie, *The development of flight behaviours in birds.* Proc Biol Sci, 2020. **287**(1929): p. 20200668.
2. Bengoetxea, H., et al., *Enriched and deprived sensory experience induces structural changes and rewires connectivity during the postnatal development of the brain.* Neural Plast, 2012. **2012**: p. 305693.
3. Regmi, P., et al., *Effect of rearing environment on bone growth of pullets.* Poult Sci, 2015. **94**(3): p. 502-11.
4. Jackson, B.E., B.W. Tobalske, and K.P. Dial, *The broad range of contractile behaviour of the avian pectoralis: functional and evolutionary implications.* J Exp Biol, 2011. **214**(Pt 14): p. 2354-61.
5. Pees, M., M.-E. Krautwald-Junghanns, and J. Straub, *Evaluating and Treating the Cardiovascular System*, in *Clinical Avian Medicine*, G.J. Harrison and T. Lightfoot, Editors. 2005, Spix Publishing. p. 393.
6. Pollock, C. *Nutritional Management of Obesity in Birds*. 2012; Available from: https://lafeber.com/vet/obesity/.
7. Schmid, R., M.G. Doherr, and A. Steiger, *The influence of the breeding method on the behaviour of adult African grey parrots (Psittacus erithacus).* Applied Animal Behaviour Science, 2006. **98**(3): p. 293-307.
8. Stenevik, I.H. and C.M. Mejdell, *Dyrevelferdsloven, kommentarutgave*. 2011, Oslo: Universitetsforlaget.