OCATRA

Animal Welfare Framework

Earth Animal

December 10, 2021

1. Context

Since 1979, Earth Animal has been dedicated to caring for animals, people and the Earth. We are committed to being the most earnest, mindful and trusted company in the pet industry by providing another way – a more humane, natural and effective way to change things for the better, one Earth Animal at a time.

Our wholesome plant and animal-sourced, veterinarian-formulated dog foods, pet treats, pet remedies, and supplements are made to improve the health and day-to-day quality of life for all animals.

2. Our commitment to animals

Earth Animal recognizes that we have a fundamental responsibility for the welfare of both the animals we currently use for our pet foods or other products and those we keep as companions and at all stages of their lives. We want to ensure that our actions are meaningful, so we look to animal welfare science to help us understand how our current practices align with our ethics and how we can continually strive to do better

We are committed to the fundamental aims of the Five Freedoms for animals, with its focus on preventing unnecessary suffering while maintaining physical health and enabling behavioural freedom.[1] But we also know that preventing pain, suffering or other negative experiences is not enough.

To build on this, we have in 2020 chosen to embrace 'The Five Domains model.' This framework provides us with a systematic and structured way to describe the welfare of an animal-based on its physical and psychological states. The model illustrates how compromises or enhancements in each of four physical domains (nutrition, environment, health and behavior) can impact the fifth domain, an animal's mental state. The model also describes how each of the domains overlaps and how their combined effects on an animal's mental or 'affective' state can be used to describe the animal's overall welfare status.

For Earth Animal, the emotional wellbeing of an animal is a key indicator of their welfare. We know that an animal will experience a mix of negative and positive emotional experiences over the course of its life. Where that balance is strongly positive, and the animal has been cared for according to best practice, we would say that animal has had a 'good life.'[2]

Earth Animal believes that all animals deserve a good life and that a good life requires:

1. Good nutrition – by providing animals with the right quantity and quality of fresh water and nutritious food to meet their physiological needs.
2. Good environment – by providing a suitable and comfortable environment designed to meet their physical and behavioral needs, including shelter and a comfortable resting area, and by ensuring conditions that avoid stress and other negative emotional experiences.

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[1] The Five Freedoms and their associated provisions are -
1. Freedom from hunger and thirst by providing ready access to fresh water and diet to maintain health and vigour
2. Freedom from discomfort by providing an appropriate environment, including shelter and a comfortable resting area
3. Freedom from pain injury or disease by prevention and rapid diagnosis and treatment
4. Freedom to express normal behaviour by providing sufficient space, proper facilities and company of the animal's own kind
5. Freedom from fear and distress by ensuring conditions and treatment which avoids mental suffering.

[2] A good life as described by Dr. David Mellor - "The balance of salient positive and negative experiences is strongly positive. Achieved by full compliance with best practice advice well above the minimum requirements of codes of practice or welfare."

3. Good health – by ensuring prevention and rapid diagnosis and treatment of pain, injury or disease and by avoiding unnecessary treatments that can cause stress and other negative emotional experiences.
4. Good behavior – by providing sufficient space, proper facilities, company of the animal's own kind, and opportunities for decision-making (or 'agency').
5. Good mental state – by eliminating, reducing or mitigating the severity, duration or frequency of negative emotional experiences and providing enhancement through positive emotional experiences.[3]

3. Our approach

At Earth Animal, our mission to change things for the better is at the core of all that we do. Sometimes it feels like moving mountains, but it's worth it when we see the results.

For the animals that we care for as our companions, we will continue to produce wholesome pet products made to improve their health and day-to-day quality of life. We will engage our employees, our customers and consumers, and industry peers and partners on our journey to ensure that our companion animals have good lives.

For the animals born, raised and slaughtered for our pet foods and other pet products, we will start by listening. We know that our farmers care about the welfare of animals and we have much to learn from them. Providing a good life requires good care, and we will not be successful without the support and wisdom of our partners.

Starting in January 2022, we will work with our farmers and other stakeholders to draft objectives and targets that describe how and when our commitments (see section 2.) will be implemented for each species in our supply chain. These objectives and targets will be species-specific and timebound. We first require a deeper understanding of current supplier practices, stakeholder expectations and other best practices than we have right now.

We also promise to use a minimum of 5% of our company profits annually to invest heavily in research and development in the areas of plant-based and cellular agriculture to reduce and eventually eliminate our dependency on animal-based industrial agriculture for our products.

We will also formalize and share our process for implementing this in our own company[4] and with our supply chain partners.[5] We will provide annual updates on how we are performing against our objectives and targets.

This document outlines our commitments to change things for the better and enhance and preserve quality of life for animals, people and the Earth. Implementation of this is the responsibility of our senior leadership team consisting of our founders, Dr. Bob, Susan and Merritt Goldstein, our CEO, Stewart Shanley, our CCO, Chris Moore, our CMO, Stephie Volo, our COO, Rafi Kahn, and our CFO, Jonathan Miller.

We are committed to updating this document as we learn more and to being open, honest and transparent. We commit to publicly sharing the progress on our journey, including both our challenges and our successes.

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[3] For example, the pleasure of eating through novelty, palatability and taste, positive experience of meeting the animal's need for variety, predictability and comfort, promoting feelings of good health, high functional capacity and the vitality of fitness and through play, free movement, bonding and a varied, novel and engaging environment.

[4] Including assigning day-to-day responsibility for implementing this framework and information about employee training

[5] Including supporting our supply partners with training and other support as needed, formalizing commitments in supplier contractual obligations, and processes for measuring supplier progress (including third-party monitoring) and addressing non-compliance with this framework and its objectives.

Models, definitions, and concepts used in the Animal Welfare Framework (AWF)

Animal welfare is both a science and an ethical approach concerned with the lives of sentient animals (all mammals, fish, and some invertebrates), domesticated or wild-caught, that are under human care or control. That is animals that we keep as companions, animals that we use for labour, animals we raise on farms or capture for food or other products, animals used in research and animals kept for entertainment.

We keep animals for our benefit, and that benefit gives us an ethical responsibility to ensure their welfare. This responsibility is often called a "duty of care."

Animal welfare science can help us understand, explain, and predict how the care we provide will impact an animal's health and welfare. Ethics and our relationships to animals help us decide what we should do.

Sentience
A sentient being has some ability to evaluate the actions of others in relation to itself and third parties; to remember some of its own actions and their consequences; to assess risks and benefits; to have some feelings and have some degree of awareness.[6]

We care about the welfare of sentient animals because they can experience pain, stress, and suffering, where suffering is defined as one or more bad feelings continuing for more than a short time. We assess suffering using three measures - frequency, duration, and severity.

The Five Freedoms of Animal Welfare
The Five Freedoms were published in its current format in 1979 by the Farm Animal Welfare Advisory Committee [7]

1. Freedom from hunger or thirst by ready access to fresh water and a diet to maintain full health and vigour.
2. Freedom from discomfort by providing an appropriate environment including shelter and a comfortable resting area.
3. Freedom from pain, injury or disease by prevention or rapid diagnosis and treatment.
4. Freedom to express (most) normal behaviour by providing sufficient space, proper facilities, and the company of the animal's own kind.
5. Freedom from fear and distress by ensuring conditions and treatment which avoid mental suffering.

The Five Freedoms have been influential in shaping thinking about animal welfare over the past two decades. They have been codified in industry standards, legislation, regulation, and certification schemes globally. However, the Five Freedoms are not standards for good welfare. Instead, they describe provisions (what we call animal care practices) that can deliver "ideal states" by reducing (frequency, duration, or severity) or eliminating negative experiences (or suffering).

The World Organization for Animal Health (OIE) definition of Animal Welfare[8]

> *Animal welfare means how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well-nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear, and distress.*

> *Good animal welfare requires disease prevention and appropriate veterinary treatment, shelter, management and nutrition, humane handling and humane slaughter or killing. Animal welfare refers to the state of the animal; the*

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[6] Broom, D. M., & Fraser, A. F. (2015). Domestic animal behaviour and welfare. Cabi.
[7] https://www.gov.uk/government/groups/farm-animal-welfare-committee-fawc
[8] https://www.oie.int/en/what-we-do/standards/codes-and-manuals/terrestrial-code-online-access/?id=169&L=1&htmfile=chapitre_aw_introduction.htm

treatment that an animal receives is covered by other terms such as animal care, animal husbandry, and humane treatment.

The Five Domains

The Five Domains Model for assessing animal welfare was developed to provide a systematic and comprehensive means to evaluate negative welfare impacts in laboratory animals.[9]

The Five Domains is based on the premise that biological mechanisms underly the generation of affective states. An animal experiences stimuli (stressors) that result in a coping mechanism that counteracts the stimuli. For example, an animal that needs water experiences thirst (stimuli). Thirst motivates that animal to drink (coping mechanism), which is a response to the stimuli.

The Model incorporates four predominantly physical/functional domains of 'nutrition,' 'environment,' 'health,' and 'behavior,' and a fifth 'mental' domain for focusing attention on all the individual negative affects identified and their accumulated overall impact on welfare.[10] The net affective outcome in the 'mental' domain, therefore, represents the animal's overall welfare state

The Model is structured to evaluate physical/functional disruptions and imbalances, as well as restrictions on behavioral expression, and then to identify the specific negative affects associated with each disruption, imbalance, or restriction.

Eliminating negative experiences provides neutral welfare at best. Positive welfare requires animals to have positive experiences.
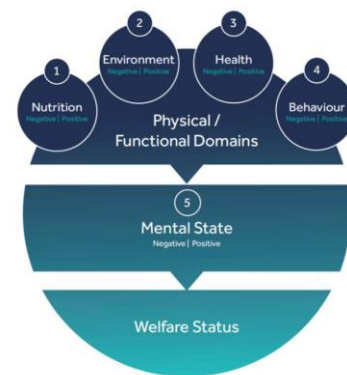
The mental states of animals are subjective, meaning they cannot be directly observed or measured. Unlike humans, animals cannot tell us about their mental states, so we must infer an animal's mental experiences based on available evidence. Experiences are assessed as positive or negative through proxy measures such as play or other behavior thought to indicate stress, pain or pleasure. Both positive (13 measures) and negative (15 measures) proxy measures (or indicators) are included in the Five Domains model.

We expect that providing positive experiences in Domains 1 to 4 (Nutrition, Environment, Health and Behavior) will lead to good mental (affective) state and good welfare.

A Good Life

We use the Quality of Life (QoL) assessment model because it is intuitively simple and focuses our attention on the needs and experience of the animal. QoL focuses on the animal's feelings and, indirectly, the causes thereof. An animal's QoL can be described as "a life not worth living," "a life worth living," and/or "a good life."[11]

Where the nutrition, environment, health and behavioral inputs of a production system do not provide the Five Freedoms (that is, the production system, home, zoo etc., allows suffering), we would say those animals are likely to have "lives not worth living." Where animals have access to the provisions of the Five Freedoms,[12] we expect that they have "lives worth living."

[9] https://www.wellbeingintlstudiesrepository.org/cgi/viewcontent.cgi?article=1006&context=exprawel

[10] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5575572/

[11] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/319292/Farm_Animal_Welfare_in_Great_Britain_-_Past__Present_and_Future.pdf

[12] Ready access to fresh water and a diet to maintain full health and vigor, an appropriate environment including shelter and a comfortable resting area, prevention or rapid diagnosis and treatment of pain, injury and disease, sufficient space, proper facilities, and the company of the animal's own kind and conditions and treatment which avoid mental suffering.

While there is a clear threshold between a life not worth living and a life worth living, there is no broad agreement about the correct balance of positive and negative experiences that constitutes a "good life."[13]

A good life as described by Dr. David Mellor –

> *The balance of salient positive and negative experiences is strongly positive. Achieved by full compliance with best practice advice well above the minimum requirements of codes of practice or welfare.[14]*

Following Mellor, we have chosen to use "good life" as an outcome of the type of care described by the Five Domains in the Animal Welfare Framework. That is

1. Good nutrition – by providing animals with the right quantity and quality of fresh water and nutritious food to meet their physiological needs.
2. Good environment – by providing a suitable and comfortable environment designed to meet their physical and behavioral needs, including shelter and a comfortable resting area, and by ensuring conditions which avoid stress and other negative emotional experiences.
3. Good health – by ensuring prevention and rapid diagnosis and treatment of pain, injury or disease and by avoiding unnecessary treatments that can cause stress and other negative emotional experiences.
4. Good behavior – by providing sufficient space, proper facilities, company of the animal's own kind, and opportunities for decision-making (or 'agency').
5. Good mental state – by eliminating, reducing or mitigating the severity, duration or frequency of negative emotional experiences and providing enhancement through positive emotional experiences.[15]

The Three Rs[16]

The principles of the 3Rs were developed to provide a framework for performing more humane animal research. The National Centre for the Replacement Refinement & Reduction of Animals in Research defines the 3Rs as following

1) Replacement – Methods that avoid or replace the use of animals
2) Reduction – Methods that minimise the number of animals used per experiment
3) Refinement Methods that minimise animal suffering and improve welfare.

The 3Rs model could be used as part of a Responsible Sourcing Strategy. The 3Rs model can serve as a decision-making tool and communication tool for most sustainability issues. For animal proteins and welfare, that could potentially mean -

1) Replacement – by sourcing plant-based, cellular-based or other alternatives to animal proteins or using animals that, according to current scientific thinking, are not considered to experience suffering, such as insects.
2) Reduction – by using less and fewer animal proteins, by reducing the number of species, the amount of animal proteins that the company sources for products.
3) Refinement – by eliminating or mitigating animal care practices that cause pain, suffering and distress and production systems that do not allow animals to have good lives.

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[13] Note that positive experiences cannot necessarily balance out the impacts of a negative welfare. For example, chronic pain caused by lameness cannot be mitigated through social interaction with other cows.

[14] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5575572/

[15] For example, the pleasure of eating through novelty, palatability and taste, positive experience of meeting the animal's need for variety, predictability and comfort, promoting feelings of good health, high functional capacity and the vitality of fitness and through play, free movement, bonding and a varied, novel and engaging environment.

[16] https://nc3rs.org.uk/the-3rs#The%203Rs%20definitions