**ANNEX A - Open questions on Chinchillas**

Biological Hazards, Animal Health and Welfare (BIOHAW) Unit

Annex A- open questions on the biology, farm practices, genetics, breeding and reproduction of **chinchilla**

This request is relevant to the welfare of Chinchilla (*Chinchilla lanigera)* kept for fur production. The call for evidence encompasses all categories of animals involved in fur production, including breeding animals, juveniles, and those (growing animals) being raised specifically for pelting purposes. It is important to note that killing for pelting falls outside the scope of this mandate.

*Please compile Table 1 by inserting your reply in the appropriate text box. If you would have any additional information/documents/data, you are welcome to submit them in Portalino following the instructions.*

# Table 1 – oPEN QUESTIONS ON CHINCHILLA

|  |  |
| --- | --- |
| **BIOLOGY OF CHINCHILLA** | |
|  | **Domestication evidence**: Please provide any evidence of domestication in the species of interest. Evidence should be provided by appropriate reference to scientific literature, technical study and/or data (e.g. indicators of a preceding domestication process whereby the current domestic population differs from the wild ancestors or relatives as shown in the morphological, physiological or behavioural traits).  *Domestication is defined in this question as the genetic process whereby animals change phenotypically and genetically as a response to living under human supervision. Animal domestication can lead to diverse behavioural, physiological, and neurocognitive changes in domesticated species compared to their wild relatives.* |
| *Answer:* |
|  | **Behaviour and biology in the wild:** Please provide references related to current domestic chinchilla genotypes' behaviours and other biology. |
| *Answer:* |
|  | **Group size:** Please provide evidence (references) describing the advantages or disadvantages of housing chinchillas individually and/or in groups across the different life stages. |
| *Answer:* |
|  | **Physical characteristics of farmed chinchillas:** Please provide evidence on the average morphological measures of farmed chinchillas (male and female) across different production and physiological phases. |
| *Answer:* |
|  | **Predatory and exploratory behaviours/traits:** Please provide evidence on these species' morphological, sensory, and behavioural adaptations and exploratory attitudes and how these traits may differ between wild and farmed genotypes. |
| *Answer:* |
|  | **Physiological stress indicators: Is there any evidence of physiological stress indicators in** wild and farmed chinchillas? Please provide any evidence in the form of scientific or grey literature. |
| *Answer:* |
|  | **Dust bathing behaviour:** Please provide evidence, demonstrated by scientific and grey literature or data, on observational studies, behavioural analyses, and other relevant Animal-Based Measures (ABMs) documenting dust bathing behaviours in chinchillas. Requested evidence encompasses the description of the behaviour, information on occurrence and time budget, and implications for the welfare of the chinchillas. Details on how the different environmental factors can contribute to the occurrence of this behaviour in farmed chinchillas are also welcome. |
| *Answer:* |
|  | **Species-Specific behaviours:** Please provide evidence from scientific and grey literature sources on species-specific behaviours in chinchillas, including social interaction, foraging, nesting, and other activities. Particular attention should be given to how captive conditions accommodate or affect these behaviours, emphasising identifying potential welfare impacts. |
| *Answer:* |
|  | **FARM PRACTICES - CHINCHILLA** |
|  | **Purpose and frequency of handling**: For which purpose is handling and restraint performed (e.g. vaccination, breeding, cage transfer), and what is the frequency of handling and restraint of chinchillas for each purpose?  *Handling is defined in this question as how people physically interact with animals in their care (e.g. moving or manipulating the animals).*  *Restraint is defined in this question as the application of any procedure designed to restrict an animal's movements. This restraint is typically achieved by manual, mechanical or chemical means to limit some or all of an animal's normal voluntary movement during, e.g., examination, collection of samples, drug administration, therapy, or manipulation.* |
| *Answer:* |
|  | **Handling and restraint for routine practices:** How is handling and restraint done for routine practices? Is any equipment used for the handling and restraint? Can you provide its specifications? What is the frequency of use of such tools?  *The same definition of handling and restraint in question C9 applies here.* |
| *Answer:* |
|  | Are there available **guidelines/good practices** that are applied in different countries? Does handling require any optional or mandatory training?  *The same definition of handling and restraint in question C9 applies here.* |
| *Answer:* |
|  | **Fear of humans**: What practices are followed on farms to decrease the fear of humans in chinchillas (in addition to any genetic selection)? Practices might include positive reinforcement strategies to foster positive experiences with humans, for example, through regular, gentle interaction and/or provision of environmental enrichment. |
| *Answer:* |
|  | **Handling**: Please provide evidence demonstrated by animal-based measures or other measures of negative welfare consequences (e.g. injuries, behaviours, vocalisation) or affective states (e.g. potential source of stress, fear and pain) associated with handling.  *The same definition of handling and restraint in question C9 applies here.* |
| *Answer:* |
|  | Please provide information on the **nutritional content and diet composition of feed** for fur-farmed chinchillas according to the different ages and physiological states. |
| *Answer:* |
|  | Please provide information on **feeding practices** (type of feed, administration, etc).  *Type of feed: e.g. pellets, wet food, formulated for species and age, supplemented with fresh water.*  *Administration: e.g. Once daily feeding, rationed with adjustments based on age, health status, and physiological state.* |
| *Answer:* |
|  | Are there any **routine medical treatments associated with common diseases (e.g., parasites**, diarrhoea, etc)? Treatments may include but are not limited to vaccination practices and prophylactic agents. |
| *Answer:* |
|  | **Surgical procedures:** Are any routine surgical procedures carried out in chinchillas, and why? |
| *Answer:* |
|  | **Animal identification**: How are individual chinchillas identified? |
| *Answer:* |
| **GENETIC SELECTION, BREEDING AND REPRODUCTION OF CHINCHILLA** | |
|  | **Genetic selection:** Please provide an overview of the specific traits prioritised in the breeding of chinchillas for fur production, including but not limited to temperament, physical characteristics (body size, etc.), and any other relevant traits (e.g. litter size, litter size at weaning). Additionally, we seek information on the objectives behind these breeding choices, the weight associated with each trait, the breeding value, and the typical generation interval observed. |
| *Answer:* |
|  | **Fearfulness**: We are interested in learning about the advancements in genetic selection for reduced fearfulness towards humans within farmed populations of chinchillas. Please include methodologies employed for assessment and any documented outcomes. |
| *Answer:* |
|  | **Indirect effect of selection for desirable traits:** Please report any unintended consequences (positive or negative) arising from selecting specific traits (e.g., selecting a particular fur colour, inbreeding) supported by relevant literature. |
| *Answer:* |
|  | **Breeding season:** What is the season when breeding is carried out for chinchillas? And on average, how long is the oestrous cycle and gestation period? |
| *Answer:* |
|  | Is there evidence of **aggressive behaviours** among kits, and how they can be prevented or mitigated? |
| *Answer:* |
|  | **Mating and reproduction:** What reproduction methods are used (artificial or natural)? If both approaches can be used, please estimate the % of methods used. |
| *Answer:* |
|  | **Mating and reproduction:** When natural mating is used, how long is the male kept with the female? |
| *Answer:* |
|  | **Mating and reproduction:** Are any practices used to facilitate reproduction? Examples include nutritional practices (e.g. slimming female, flushing), use of hormones, light cycle, etc.  Please describe how these practices are applied. |
| *Answer:* |
|  | **Artificial insemination:** How is oestrus detection performed, and how often? |
| *Answer:* |
|  | **Artificial insemination:** If artificial insemination is used, how is it performed in females? |
| *Answer:* |
|  | **Artificial insemination:** How is semen collection carried out in males used for artificial insemination? |
| *Answer:* |
|  | **Reproductive performance:** How is reproductive performance measured? Please provide evidence concerning benchmarks for mating success, litter size, kit mortality, weaning weight, etc. |
| *Answer:* |
|  | **Parenting:** Is parenting done by females or by both parents? Please elucidate whether parental care is typically provided by single mothers or by both parents, including the duration of the pair (if applicable). |
| *Answer:* |
|  | **Weaning:** How is weaning carried out? What is the weaning age (please provide common practice and ranges)? What practices are followed during weaning? |
| *Answer:* |
|  | **Breeders:** Information on the length of time breeding chinchillas are farmed within the production cycle, specifying if they partake in multiple breeding cycles and any factors influencing this decision. |
| *Answer:* |
|  | **Kit fostering:** Please explain whether kit fostering is utilised within the industry, especially in scenarios of excessive offspring or maternal neglect, and outline how these situations are managed. |
| *Answer:* |
|  | **Mortality:** Could you estimate neonatal mortality, the timing, and the reasons for that? |
| *Answer:* |
|  | **Other chinchilla spp. and hybrids:** Please provide detailed information on whether multiple species of chinchillas, such as *Chinchilla lanigera* and *Chinchilla brevicaudata,* are used and if there are practices of interbreeding these species to create hybrids. If yes, please specify the % of *Chinchilla brevicaudata* and the % of hybrid chinchilla out of the total farmed chinchilla intended for fur production. Please specify the reasoning for interbreeding. |
| *Answer:* |
|  | **Use of female collars:** Are female collars used in run-style breeding?  If yes, on what % of the females?  Please provide information on the materials used, the duration for which collars are worn, their size, and any other relevant specifications. |
| *Answer:* |
|  | **Use of female collars:** Is there any evidence (literature or technical document) demonstrating the presence of relevant animal-based measures indicating the welfare consequences of using chinchilla collars?  In particular, EFSA is interested in animal-based measures, including behavioural, physiological, clinical or health-related aspects. |
| *Answer:* |