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Dear Drs. David and Beasley:

The AVMA appreciates the opportunity to provide comments on the following reports extracted from the March 2007 meeting of the Terrestrial Animal Health Standards Commission: a proposed Appendix to the Terrestrial Animal Health Code (TAHC), currently under development as **DRAFT GUIDELINES ON DOG POPULATION CONTROL**, and a discussion paper on **DEVELOPMENT OF ANIMAL WELFARE GUIDELINES FOR PRODUCTION SYSTEMS (TERRESTRIAL ANIMALS)**. As requested, our responses are formulated for each section of these reports as comments/rationale, followed by suggested revised language where appropriate. When language revision is suggested, recommended deletions are ~~struckthrough~~, recommended additions are underlined.

DRAFT GUIDELINES ON DOG POPULATION CONTROL

General Comments

The dog population in a given community comprises owned dogs (including those whose movements are controlled/restricted in some fashion and those that are free-roaming [either intentionally or accidentally]); previously owned dogs that have been relinquished to shelters/animal control facilities; and unowned dogs (feral and abandoned). The title of the proposed appendix seems to suggest that population control will be addressed for all dogs within a community; however, the definitions and a substantial part of the content of the various articles seem to be directed more toward control of owned and unowned free-roaming dogs. We believe clarification is needed regarding the target population(s) intended to be addressed. If the purpose of the document is to provide guidance on management of free-roaming dogs, then the scope of several of the articles is too broad.

Conversely, if the desire is to provide guidance on management of the dog population as a whole, then the scope of the document may be too narrow. With the exception of a focus on uncontrolled reproduction, there is almost no identification of factors contributing to owner abandonment or relinquishment to shelters (e.g., behavioral problems, owner lifestyle issues) and no guidance is provided for mitigating these factors. Given the absence of such comprehensive material, we have assumed during our review that the purpose of the document is to provide guidance in managing free-roaming dogs.

Preamble

Comments/rationale: Editorial suggestions provided. We recommend that specific references to “dogs” replace general references to “animals” where appropriate throughout the document.

Suggested revisions to language:

Stray and feral dogs pose serious human health, socio-economic, political and animal welfare problems in many countries of the world. ~~Many of these are~~ They are particularly a problem in developing and least-developed countries. and others fall in the least developed category Whilst acknowledging human health is a priority, including the prevention of zoonotic diseases (notably rabies), the OIE recognises the importance of controlling dog populations without causing the dogs to suffer unnecessarily or avoidable animal suffering. Veterinary Services should play a lead role in preventing zoonotic diseases and ensuring animal welfare, and should be involved in dog population control.

Guiding Principles

Comments/rationale: Editorial revisions. Specifically, in bullet 1, the act of responsible ownership, not its promotion, is what can impact the population of stray dogs.

Suggested revisions to language:

The following guidelines are based on ~~these~~ the principles laid down in Section 3.7 of the Terrestrial Animal Health Code. Some additional principles are relevant to these guidelines:

- ~~The promotion of~~ Responsible dog ownership can significantly reduce the numbers of stray dogs and the incidence of zoonotic diseases.
- Because dog ecology is linked with human activities, management of dog populations ~~has to~~ must be accompanied by changes in human behaviour to be effective.

Article 1: Definitions

a) Stray Dog

Comments/rationale: “Under direct control” needs to be more explicitly described. This could refer to physical restraints or attachments, such as kennels, cages, fences, or leashes, or could be construed to include voice commands. Although “direct” could be construed to imply the presence of an owner, confinement in kennels, cages, by fence, or by a tether system does not require this. Dogs responsive to voice commands may be considered by some to lack “direct control,” but also may not be free-roaming and, hence, not “stray.” The meaning of “wild state” in the bullet on “feral dogs” is also not clear, and the absence of a human role in reproduction (“no longer directly dependent upon humans for successful reproduction”) might better be described as “no longer purposely bred by humans.” Additional editorial revisions to the definition are suggested.

Suggested revisions to language (we have not suggested language where the intent was patently unclear):

Stray Dog: A dog that is not under direct control and that is not prevented from free-roaming.

Types of stray dogs

- ~~Free-roaming~~ owned dog not under direct control or restriction at a particular time
- ~~Free-roaming~~ dog with no owner
- ~~Feral dog: domestic dog reverted to the wild state and no longer directly dependent upon humans for successful reproduction~~ purposely bred by humans.

b) Owned Dog

Comments/rationale: Editorial suggestions provided.

Suggested revisions to language:

Owned Dog: ~~Means~~ A dog with for which a person that is responsible for this animal.

c) Person

Comments/rationale: Editorial suggestions provided.

Suggested revisions to language:

Person: ~~This can include more than one~~ An individual, and could comprise multiple family/household members, or an organization.

d) Responsible Ownership

Comments/rationale: Some individuals may believe that “satisfaction of the psychological, environmental and physical needs of a dog” includes providing an opportunity to reproduce; such a perspective may have cultural roots. In this case, could sterilization be construed to be contrary to this definition of responsible ownership? We do not propose an answer, but suggest the issue be discussed by the *ad hoc* Group, specifically within the context of a broader look at dog population management and its impact on canine welfare. Additionally, because the document refers to dogs, we believe the reference to “or other pet” is beyond the scope of the document. Some editorial suggestions are also provided.

Suggested revisions to language:

Responsible Ownership: The situation whereby a person ~~(as defined above)~~ accepts and commits to perform various duties ~~focused on the to satisfaction~~ of the psychological, environmental and physical needs of a dog ~~(or other pet)~~ and to ~~the prevention of risks (e.g., aggression, disease transmission, or causing bite injuries)~~ that the ~~pet~~dog may ~~cause to pose for~~ the community or the environment.

f) Competent Authority

Comments/rationale: Editorial suggestion.

Suggested revision to language:

Competent Authority: Means the *Veterinary Services*, or other Authority of a Member Country, having the responsibility and competence ~~and~~ for ensuring or supervising the implementation of animal health measures or other standards in the Terrestrial Code.

g) Dog Population Control Programme

Comments/rationale: The definition, as written, does not encompass all the operational objectives described in Article 2, but simply references control of stray dogs. Is this because the intent of the document is really to address dogs that are free-roaming and the other population control objectives, as stated, are “optional”? Again, there seems to be inconsistency in the approach to the guideline. We also note that the document shifts between “programme” and “program.” Again, consistency in use of terms is desirable.

Suggested revisions to language:

Dog Population Control Programme: A programme with the objectives of reducing the number of stray dogs as described in Article 2.

h) Carrying Capacity

Comments/rationale: Editorial suggestions.

Suggested revisions to language:

Carrying capacity: ~~It~~The upper limit of the dog population density that ~~could~~can be supported by ~~the~~a particular habitat based on the availability of resources (e.g., food, water, shelter); and human acceptance.

Article 2: Dog population control programme optional objectives

Comments/rationale: Again, the consistency of this section with the intent of the document is of concern. Based on the definition of Dog Population Control Programme presented in the draft guideline, objectives focusing on reducing the number and risks associated with “stray dogs” seem to be integral to the guideline, rather than optional. Education, although not specifically addressed as an objective in Article 2, is an important part of dog population control, as it has the potential to reduce abandonment and relinquishment of animals to shelters (depending on the focus of the document, we recognize the latter may be beyond its scope). We have therefore added language regarding education to the listed objective on responsible

ownership. Editorial suggestions are also provided, including substitution of the numbered list with bullets to make it consistent with the remainder of the document.

Suggested revisions to language:

The objectives of a programme ~~to control~~ for dog population control may include the following:

- ~~i~~Improve the health and welfare of owned and stray dog populations;
- ~~r~~Reduce the number of stray dogs;
- ~~e~~Create a rabies-immune dog population, and thereby reduce the risk of transmission of rabies;
- Educate about and promote responsible ownership;
- ~~r~~Reduce the risk of transmission of other zoonotic diseases in addition to~~other than~~ rabies;
- ~~m~~Manage other dog-associated risks to human health;
- ~~p~~Prevent harm to the environment.

Article 3: Responsibilities and competencies

General comment

This article as currently written describes where responsibilities may lie (i.e., it serves as a scoping paper), but it provides little specific guidance. As such, it should either be deleted from the document or rewritten.

Because we believe the rewrite, if done, should be significant, we have opted to provide only substantive, and not editorial, comments on this section.

b) Other Government Agencies

Comments/rationale: We suggest the parenthetical reference “and other wild animals” be deleted from this description/related guidance. Other wild animals are beyond the scope of this document.

c) Private Sector Veterinarians

Comments/rationale: Although we recognize we are dealing with a continuum of cause and effect, some aspects of “dealing with cases of neglect” may be beyond the scope of this document, particularly when such neglect affects owned dogs that do not roam freely. The role of the private veterinarian with respect to “kenneling during the absence of the owner” is also not clear.

Article 4: Considerations in planning dog population control programme measures

Comments/rationale: Suggested revisions to the introductory paragraph are editorial.

Suggested revisions to language:

In the development of dog population control programmes it is recommended that the Competent ~~A~~authorities establish an advisory group, which would include appropriate veterinarians, experts in dog population control, and other stakeholders. The main purpose of this advisory group would be to analyse the problem, identify ~~the~~its causes and propose the most effective approaches to resolution over~~use in~~ the short and long term.

a) Identifying the sources of stray dogs

Comments/rationale: The second bullet references “Animals that have been abandoned by their owner, including animals resulting from: uncontrolled breeding of owned dogs and unowned dogs that reproduce successfully.” The wording as provided may be confusing because offspring resulting from owned dogs that are allowed to breed uncontrollably are not necessarily abandoned and unowned dogs may not have been abandoned, but may simply have always been unowned. The confusion could be remedied by placing a qualifier of “unclaimed” on offspring resulting from uncontrolled breeding and by addressing unowned dogs separately. Additional editorial suggestions are provided.

Suggested revisions to language:

a) Identifying ~~the~~ sources of stray dogs

- Owned ~~animals~~dogs that roam freely;
- ~~Animals~~Dogs that have been abandoned by their owners, including unclaimed offspring~~animals~~ resulting from uncontrolled breeding of owned dogs;

- Unowned dogs that roam freely reproduce successfully;
- Unclaimed offspring of unowned dogs.

b) Estimating the existing number, distribution and ecology (to be completed)

Comments/rationale: Recognizing that this section is still to be completed, we draw the USDA’s attention to the work of the National Council on Pet Population Study and Policy, which was established (with the AVMA as one of its founding members) for the primary purpose of compiling such information and data. Detailed information about the NCPPSP, including a list of its member organizations and related scientific studies completed to date, is available at www.petpopulation.org. Of particular interest to the USDA and OIE is a multi-institutional study currently being undertaken by researchers supported by the NCPPSP with the purposes of: developing consistent and standardized reporting methods for animal shelters and facilitating their widespread use; establishing a valid and consistent estimate or index of shelter dog and cat populations; providing an indicator of pet population trends similar to the Dow Jones Industrial Average; and creating a tool that will be reflective of a community’s health and well-being with respect to dog and cat population control. We respectfully suggest the work of the *ad hoc* Group would benefit from inclusion of a representative from the NCPPSP on the committee.

c) ~~Legislation~~Regulatory Framework

Comments/rationale: We suggest the title be revised to “regulatory framework,” because although the legislative process is one path to establishing legal requirements, it is not the only approach. As USDA staff is well aware, regulatory processes authorized by statutory authority can also provide this kind of support. In reviewing the items identified as being key elements of that framework, we noted that:

- Bullet 1 refers to both registration of dogs and licensing of owners. If there is a distinction between these and a need for both, this should be clarified.
- Bullet 3 refers to “veterinary procedures” with an example of “surgical procedures” provided. Are veterinary procedures in addition to sterilization or contraception envisioned? If not, then perhaps it may be more appropriate to use these more specific terms?
- Bullet 4 refers to “control of dog movement (restrictions within the country).” We assume this would include confinement laws, including those addressing leashes, tethers, kennels/cages, and fences as indicated in paragraph h of this section? The phrase as presented is an unusual description and not in keeping with how local confinement laws are usually categorized in the United States.
- Bullet 7 references “commercial production,” the regulation of which seems indirectly and inconsistently related to stray dog control (i.e., this seems to substantially broaden the scope of the guideline).
- Bullet 10 should reference “transport” in addition to humane capture and killing.

Editorial suggestions are also provided.

Suggested revisions to language:

~~Legislation~~ The following are key elements of a regulatory framework that can that would help Competent Authorities to establishing a successful dog control programmes should includes the following key elements:

- ~~Registration and Identification and registration/licensing of dogs and licensing of owners~~
- Requirements for Rabies vaccination
- Provisions for canine sterilization and contraception ~~Veterinary procedures (e.g. surgical procedures)~~
- Control of dog movement (restrictions within the country)
- Control of dog movement (international movement)
- Control of dangerous dogs
- ~~Commercial dog production~~
- Environmental controls (e.g., abattoirs, rubbish dumps, dead stock facilities)
- Provisions for Dog shelters
- Provisions to ensure Animal welfare, including humane capture, transport and killing methods

d) Resources available to Competent Authorities

Comments/rationale: We are uncertain as to the purpose of the parenthetical reference to David Wilkins in bullet 5 of this section. Our interpretation of bullets 6 (“public-private-NGO”) and 7 (“central-state or province-local”) is that they are simply identifying sources of voluntary and regulatory support, respectively, but the meaning of these is not absolutely clear.

Article 5: Control measures

Comments/rationale: Editorial suggestions for introductory statement.

Suggested revisions to language:

The following control measures should be implemented ~~according to~~ as appropriate for the situation in Member Countries. They can be used in combination or singly.

a) Education and promotion of responsible ownership (to be completed)

Comments/rationale: We recognize this portion of the guideline is still under development, but we believe education regarding dog selection, care, and normal behavior is critical to reducing abandonment and relinquishment to shelters. Mention of this important contributor is lacking in the draft guideline and we believe it should be included. Editorial suggestions are also provided.

Suggested revisions to language:

The health and welfare of domestic dogs ~~may be~~ improved through ~~the promotion of~~ responsible human ownership. Education regarding dog selection, care, and normal behavior may help mitigate factors associated with abandonment and relinquishment of dogs to shelters. In addition, minimizing stray dog populations and in combination with educating humans, people (particularly children) about specific canine behaviours, can reduce dog bite injuries and prevent ~~some major~~ zoonotic diseases.

Responsible dog ownership includes ~~the controlling the~~ reproduction of dogs that are under direct human supervision such that offspring of owned dogs are not abandoned.

b) ~~Identification and Registration and Identification~~ (licensing)

Comments/rationale: Logically, identification should precede registration/licensing so we have reversed the order of these in the title of this section. Editorial suggestions are also provided.

Suggested revisions to language:

A core component of dog population management by Competent Authorities is the identification and registration/licensing ~~and identification~~ of owned dogs. ~~and granting licenses to owners.~~ This may be emphasized as part of responsible dog ownership and is often linked to animal health programs, ~~for example (e.g., mandatory rabies vaccination).~~

Identification and Registration and identification of animals dogs may be used as a tool to encourage control of dog reproduction control of owned dogs through a reduced fee ~~schedule~~ to register/license neutered dogs.

c) Reproductive control

Comments/rationale: When reproductive control is discussed, we believe guidance regarding both the positive (e.g., population control, reductions in breast cancer incidence) and negative (e.g., diseases/conditions, such as female incontinence, that are sex hormone-related) impacts of sterilization on animal welfare should be included, and we request that the *ad hoc* Group consider this. In addition, although provisions for control of reproduction were included as necessary components of a regulatory framework (Article 4, part c), the verbiage in this section, “The control of reproduction is essentially the responsibility of owners...,” seems to suggest that decisions regarding control of reproduction rest with owners (i.e., mandatory programs and programs that encourage sterilization through reduced registration/licensing fees would appear to not be supported by this comment). This apparent conflict in recommendations needs to be resolved. Editorial suggestions are also provided, including substitute of the lettered list with bullets for internal document consistency.

Suggested revisions to language:

Controlling reproduction in dogs prevents the birth of unwanted litters of puppies and can help address the balance between demand for dogs and the size of the population. It is advisable to focus efforts to control reproduction on ~~those~~ individuals or groups in the dog population identified as having the most ~~productive fecundity~~ and being the most likely ~~to be~~ sources of unwanted and stray dogs, as this will ensure best use of resources. Methods of controlling reproduction will require direct veterinary input ~~to~~ regarding individual animals; involvement of both private and public veterinary sectors may be required to meet demand for services. The control of reproduction is essentially the responsibility of owners and can be incorporated into education on responsible ownership (section 5a). Methods for controlling reproduction in dogs include:

- Surgical sterilisation
- Chemical sterilization
- Chemical contraception
- Separation of female dogs during oestrus from ~~entire~~ intact males.

Any chemicals or drugs used in controlling reproduction should be shown to have appropriate safety, quality and efficacy for the function required and be used according to the manufacturers' and Competent Authorities' regulations. In the case of chemical sterilants and contraceptives, this may require further research and trials to be completed before use.

d) Removal and handling

Comments/rationale: No guidance is provide regarding what constitutes “humane” capture, transport, and holding of dogs. Also, as indicated previously, there may be approaches other than legislation to introduce a suitable regulatory framework. We recommend that “animals” be replaced with “dogs” as elsewhere in the document.

Suggested revisions to language:

The Competent Authority should collect dogs that are not under direct supervision and verify their ownership. Capture, transport, and holding of animals should be done humanely. The Competent Authority should develop and implement an appropriate legislation framework to for regulateing these activities.

e) Management of dogs that are captured removed from communities

Comments/rationale: We do not believe effective control of dog populations is limited to removal of dogs from the community (i.e., killing/euthanasia). Suitable captured dogs may be offered for adoption, as suggested in bullet 2 of this section. Therefore, we are recommending the title of this section and related phrases be revised as indicated. The guideline recommends a 7- to 10-day holding period for rabies, whereas in the United States usually a 10-day holding period is recommended. We believe costs for reduced-rate neutering programs should be borne by the community and not solely by veterinarians and, for this reason, request that this be specifically stated in the guideline. Bullets 3 and 5 propose a capture-evaluation-vaccination-neuter-release and monitoring program. Culturally this may be acceptable/desirable, but scientifically we believe this may present challenges for disease and injury control in contrast to what is suggested by the guideline. The effects of this practice on animal welfare, dog population management, and disease have not been sufficiently studied and, consequently, are not well understood. We also believe that, because they present similar information, if retained, bullets 3 and 5 should be combined. What comprises a “door-to-door reuniting program” is not clear and requires further explanation. Several points have been rewritten for clarity and to provide appropriate examples.

Suggested revisions to language:

- Competent ~~a~~ Authorities have the responsibility to develop minimum standards for the housing (physical facilities) and care of these dogs. There should be a provision for holding the dogs for a reasonable period of time to allow for reunion with the owner and, as appropriate, for rabies observation. A period of 7-10 days is ~~often used~~ recommended for this purpose.
- Dogs that are ~~removed from a community~~ captured may be reunited with their owners or offered to new owners for adoption. This provides an opportunity to promote responsible ownership (e.g., including animal health care through regular examination by a veterinarian, vaccination against common diseases

of dogs [zoonotic and non-zoonotic], control of ecto- and endo-parasites, attention to appropriate dog care and behavior and vaccination against major zoonotic diseases such as rabies. Incentives for Control of dog reproduction control may be provided may be facilitated through the provision of neutering services at a reduced rate (with incremental costs to be borne by the community) or the release for adoption of only neutered animals. ~~The effectiveness of this strategy i.e. The ability to effectively manage dog populations by offering dogs to new owners may be limited due to the suitability and number of dogs.~~

- ~~Dogs that are removed from a community may in some cases be provided health care (rabies vaccination), neutered, and released to their local community at or near the place of capture. The beneficial effect of this practice for dog welfare and population management is unknown. With regard to disease control, such as for rabies and possibly others, some beneficial effect may be realized. This may be short or long time.~~
- ~~Dogs that are removed from a community captured for which existing owners cannot be identified or whose owners may no longer want them may, in some cases, be too numerous to place with new responsible ownership. If elimination of the excess animals/dogs is the only option, killing should be conducted humanely (see Article 5, section k) and be under regulated ion by a Competent Authority, and conducted humanely.~~
- ~~Dogs that are removed from a community captured may, in some cases, be examined (both physically and behaviorally), evaluated and treated for zoonotic diseases of concern (e.g., Leishmaniasis, echinococcosis), provided with appropriate vaccinations (e.g., against rabies, leptospirosis, and other common canine diseases), provided health care (rabies vaccination), neutered/sterilised, and released/returned to their local community at or near the place of capture, if local attitudes and resources permit. The beneficial The effects of this practice for on dog welfare, and population management, and disease control (e.g., rabies) are notis unknown well understood. With regard to disease control, such as for rabies and possibly others, some beneficial effect may be realized. This may be short or long time. A number of selected animals, could be released if “environmental compatible,” meaning that, once again, the feasibility of this strategy is very much related to the local people attitude/resources availability. Consideration should be given to:~~

- ~~A Risk-benefit evaluation of Catch/Capture-Evaluation-Vaccination-Neuter-Release & and Monitoring, (CNR&M) in terms of considering both public safety and animal welfare/AW~~
- ~~Ensuring Pproper behavioural evaluation of dogs when removed for problems related to public nuisance~~
- ~~Careful evaluation, treatment, vaccination, and Mmonitoring needed to evaluate/ensure individual dog health and welfare~~
- ~~Ensuring a Ssufficient level of public tolerance exists, and that food and assistance can be provided by responsible people/the community~~
- ~~Permanently identifying included animals, using identification methods that are clearly visible at a distance (e.g., painted collar).eation (i.e. surgical sterilization, rabies vaccination, echinococcosis treatment, Leishmaniasis negative test). These actions clearly recon duct the animal to an “owner,” both intended as public (local municipality, regional government) or private~~
- ~~Possibly clearly visible at distance (i.e. painted collars).~~

Advantages: ~~Has been suggested as a viable Possible strategy in an early for initial efforts at control/stage, when seareelimited resources are available.in place, if adopted in very specific In some situations it may also promote the societal value of animals and accrue some the benefits of a positive human-animal relationships (e.g., Rome’s cat colony, “community” dogs).~~

Disadvantages: ~~Anticipated to be ineffective overas a long-term strategy, because it does since not promoting responsible ownership concept, may not be tolerated possible AW concerns due to persistent intolerance by the community, and poses possible some risk to for human safety and property damage, of the private property due to improper selection of animals.~~

~~Preferably to be~~ This strategy is best used as a “spot” solution in specific situations and ~~only~~ in addition to other measures (e.g., humane education, door-to-door reuniting programs, adoption programs). ~~possibly not to be used as the sole method of stray dog population control as a long term strategy.~~

f) Environmental controls

Comments/rationale: We believe it would be appropriate to clarify that the primary welfare concern with restricting food sources is starvation.

Suggested revisions to language:

Steps should be taken to reduce ~~the~~ carrying capacity, by excluding dogs from sources of food (e.g., restricting access to rubbish dumps and abattoirs, and installing animal-proof rubbish containers).

This should be linked to a reduction in the animal dog population by using other methods, to avoid so that starvation and consequent animal suffering is avoided. ~~welfare problems.~~

g) Control of dog movement—international (export/import)

Comments/rationale: Suggestions are editorial—dogs can be infected, countries technically cannot.

Suggested revisions to language:

Chapter 2.2.5 of the Terrestrial Animal Health Code provides recommendation on the international movement of dogs between rabies-free countries and countries where rabies is endemic. ~~considered to be infected with rabies.~~

h) Control of dog movement—within country (e.g., leash laws, roaming restrictions)

Comments/rationale: Consideration might be given to providing more detail on what approaches to identification of dogs would be acceptable. We disagree with how “muzzle” is included in the description of “absolute control.” Muzzles are generally only required if there is concern regarding whether a dog may bite; therefore, it doesn’t seem appropriate to make this part of an overarching definition. It is also not the case that “absolute control,” as described, is only appropriately applied in the event of an emergency. Likewise, periods identified as being appropriate for various methods of control appear to be arbitrarily assigned and may be unnecessarily restrictive. The remaining suggestions for revision are largely editorial.

Suggested revisions to language:

Measures for the control of dog movement within a country are generally invoked for ~~two~~ three reasons:

- ~~for~~ For rabies control when the disease is endemic ~~present in a country~~
- ~~for~~ To protect public safety ~~reasons~~
- ~~for~~ To protect the safety of “owned dogs” in an area or locality ~~where~~ an a stray dog control program is in place.

~~In both cases:~~ It is essential that dogs are permanently identified and registered and permanently identified to properly control them or confine these dogs, to reunite dogs and owners them if dogs are collected/captured, and to keep the facilitate retention of relevant sanitary health information. ~~recorded.~~

~~Legislation to give the necessary power is necessary~~ Statutory authority must be provided, and a national or local infrastructure ~~of encompassing an~~ organization, administration, staff and resources is essential, to encourage those who find ~~the finders of a~~ stray dogs to report to the Competent a Authority.

The following ~~3~~ three grades of movement control can be applied:

- Absolute control (e.g., confinement via kennel/crate or fence, use of a leash and with or without a muzzle), ~~feasible during a limited periods for emergency~~
- Partial control (e.g., voice command/obedience) ~~if not on leash during daylight, confinement between the relevant information 5 pm and 8 am~~
- Control ~~during~~ at specific times for specific purposes (e.g., rabies vaccination campaign, stray dog roundup).

i) Regulation of commercial animal dealers

Comments/rationale: This section appears to go beyond the scope of the guidelines. It attempts to set animal welfare standards for commercial breeders and retailers, and does not place controls on the number

of animals that can be provided and sold. The latter, while probably difficult to justify and not appropriate, would be more in keeping with the focus of these guidelines. We therefore recommend that this section be deleted, in its entirety, from the document.

j) Reduction in dog bite incidence

Comments/rationale: The information and recommendations contained within this section pertain to prevention of dog bite injuries and are not specific to dog population control. Although we recognize the seriousness of this problem and are highly supportive of effective solutions, we also believe the subject matter extends beyond the intended scope of the guideline. We therefore recommend that this section be deleted, in its entirety, from the document.

k) Euthanasia

Comments/rationale: We understand this section is still in development, but believe the chart in section k) provides insufficient guidance for euthanasia and recommend that consideration be given to including a more descriptive chart and accompanying text similar to that titled “Summary of killing methods” in Article 3.7.6.4 from the TAHC’s Appendix on the “Guidelines for the killing of animals for disease control purposes” or a chart analogous to those included as Appendices 2 and 3 of the *AVMA Guidelines on Euthanasia*. The chart provided in Article 5 of these guidelines appears to be loosely modeled on the latter, but it does not include enough information regarding the various methods for it to be useful. We are also not convinced that the acceptability of euthanasia for dog population control should be classified primarily on the basis of whether the location of the animal is “urban” or “rural” as is suggested by the chart provided. Euthanasia decisions should be made with attention to the needs of each animal, as well as the environmental conditions under which euthanasia must be conducted. We recommend the guidelines concentrate on describing the characteristics of the various methods; any special environmental concerns can then be addressed in descriptions of the advantages or disadvantages of each method.

Electrocution—Although the AVMA considers electrocution to be a conditionally acceptable method of euthanasia for dogs, these guidelines do not indicate that animals do not lose consciousness for 10 to 30 seconds or more after onset of cardiac fibrillation (death is not, as the guidelines suggest, instantaneous) and that it is imperative that animals be unconscious before being electrocuted. This can be accomplished by any acceptable means, including electrical stunning. The guidelines also do not indicate that electrocution is generally not appropriate to use on dangerous, intractable animals; that it can be hazardous for personnel; nor do they indicate that techniques that apply electric current from head to tail, head to foot, or head to moistened metal plates on which the animal is standing are unacceptable.

Carbon monoxide—This method is considered by the AVMA to be acceptable for dogs. The draft guidelines reference a need for appropriate premises, but do not indicate that the only reliable and therefore appropriate source for CO is compressed gas in cylinders. The guidelines also do not indicate that carbon monoxide induces loss of consciousness without pain and minimal discernible discomfort, and that death occurs rapidly if concentrations of 4 to 6% are used. There is also no caution provided that CO presents an explosion hazard when concentrations exceed 10%, which is an important consideration.

Carbon dioxide—The AVMA considers this to be an acceptable euthanasia agent for dogs. Although cautions are provided regarding stratification of CO₂ and air, this problem is highly dependent on chamber design, how animals are placed into chambers, and whether appropriate concentrations of CO₂ are maintained. Carbon dioxide is inexpensive, nonflammable, nonexplosive, and poses minimal hazards to personnel when used with properly designed equipment. Euthanasia by exposure to CO₂ may take longer than euthanasia by other means and high concentrations of CO₂ can be distressful to animals. There also is no indication in the draft guidelines that the only recommended source of CO₂ is compressed gas in cylinders; this is because the inflow to the chamber can be regulated precisely.

Barbiturates—The AVMA considers administration of barbiturates to be an acceptable method of euthanasia for dogs. All barbituric acid derivatives used for anesthesia are acceptable for euthanasia when administered intravenously. Sodium pentobarbital is most widely used. Although the OIE draft guideline indicates that death is slow, this is not consistent with comments in the *AVMA Guidelines*. Speed of action depends on the dose, concentration, route, and rate of injection. Barbiturates induce euthanasia smoothly,

with minimal discomfort to the animal and are less expensive than many other euthanasia agents. The OIE draft guideline also indicates that a pre-anesthetic is required; however, we are not able to identify a basis for this recommendation. Barbiturates will persist in the carcass and can cause sedation or even death of animals that consume the carcass and notice to that effect should be provided in the document. The draft guideline also indicates that intracardial and intraperitoneal injection are acceptable means of administration. In the opinion of the AVMA, intracardial injection can only be used if the animal is heavily sedated, unconscious, or anesthetized. Intraperitoneal injection may be used in situations when an intravenous injection would be distressful or dangerous.

T-61—This mixture of drugs used for euthanasia is no longer manufactured or commercially available in the United States. It is available in Canada and other countries. The AVMA recommends that T-61 only be administered intravenously and at carefully monitored rates of injection, because there is some question as to differential absorption and onset of action of the active ingredients when administered by other routes. This is contrary to information indicating the acceptability of intracardial and intrapulmonary administration in the draft guidelines.

Gunshot—This approach to euthanasia is addressed in the *AVMA Guidelines on Euthanasia*, but not in the context of its use for dogs. Death is rapid, but an understanding of appropriate bullet placement, skill in execution, and an appropriate firearm are required. As indicated in the OIE draft guidelines, the method may be hazardous to personnel because of the risk of accidents.

Our recommended revisions to the introductory paragraph reflect the concerns as indicated above as well as editorial suggestions.

Suggested revisions to language of introductory paragraph:

When euthanasia is practised, the procedures used should comply with the General Principles presented ~~and laid down~~ in the Terrestrial Animal Health Code—2006 (Article 3.7.6.1).

~~For reasons of convenience, different~~ The welfare of individual animals, the safety of involved personnel, public health considerations, effective allocation of resources, and local needs may all influence the selection of a particular euthanasia method or procedure, ~~s could be used in rural and in urban areas.~~ Dogs should only be euthanized after they have been held ~~holding~~ for a period of time to allow for the owner to locate his/her dog.

~~Several euthanasia procedures are available. They fall into two major categories based on whether it is necessary to handle or restrain the dog or not in order to euthanize it.~~

~~Where capture or restraint procedures give rise to a risk or potential risk of human exposure to rabies,~~ procedures that do not require restraint of dogs are preferable.

The methods are not described in any particular order.

We will be happy to provide comments on Articles 6 through 8 of the report when these are available for review.

DEVELOPMENT OF ANIMAL WELFARE GUIDELINES FOR PRODUCTION SYSTEMS (TERRESTRIAL ANIMALS)

General Comments:

Overall we find the discussion paper to be well-prepared and that it presents important considerations for the development of animal welfare guidelines for production systems for terrestrial animals.

Animal-based and resource-based criteria

Comments/rationale: In reviewing the examples provided for resource-based criteria, we thought it important for readers of the document to understand that existing animal welfare guidelines address a multitude of special attributes of housing systems, which include but are not limited to the condition of any litter provided. We also recommend that the modifier “battery” be removed as a descriptor of cages for laying hens. This term does not convey additional information and has negative semantic implications that may alienate some of the target population for the discussion paper. Additional suggested revisions are editorial.

Suggested revisions to language:

Paragraph 1, sentence 3: These often specify space allowances and dimensions; special housing attributes, such as type and qualities of flooring, bedding, and litter; ambient temperature range; humidity; ~~condition of the litter~~; air quality; availability of feed and water; frequency of inspection; and biosecurity and sanitation measures.

Paragraph 2, bullet 1, sentence 2: For example, a space allowance that minimizes crowding-related problems in light hybrid hens in ~~battery~~cages may not apply to other breeds or to other housing systems.

Paragraph 3, sentence 2: In fact, animal-based criteria may provide a better measure of the animal welfare outcomes because they reflect the influence of variables (e.g., experience and attitude of handlers, presence of emerging diseases) that may be missed by resource-based criteria.

Paragraph 4, sentence 2: ~~Thus,~~For example, animal welfare guidelines for chickens might specify certain levels of survival and freedom from disease and injury (animal-based criteria) and would also recommend requirements for ambient temperature, humidity, air quality and litter quality (resource-based criteria) for birds that are kept indoors.

Clarifying the objectives of animal welfare guidelines

Comments/rationale: We are concerned that the text in this section incorporates value judgments relating the degree of concern for animal welfare in various countries with which of the three approaches/objectives (as described in paragraph 1 of this section) those countries focus on in their development of animal welfare guidelines. Ironically, one of the primary take-home messages of the discussion paper seems to be that such value judgments are inappropriate. As mentioned in the discussion paper, a chosen approach to animal welfare standards can reflect many variables including, but not limited to, philosophical differences as to which measures of animal welfare are most important, reliance on different bodies of scientific research, and the availability of resources. The first two of the three variables just referenced may be substantively independent of an individual's or nation's degree of concern for animal welfare; the third requires prioritization, and degree of concern for animal welfare may be expected to play a role. We therefore recommend that these value judgments be removed from the paper. Additional suggested revisions are editorial.

Suggested revisions to language:

Paragraph 4, sentences 2 and 3: The cost/benefit ratio is often favourable because implementation often leads to measurable improvements in productivity (e.g., improved survival or reduced mortality due to stress and disease). Hence, these standards are likely to be the most acceptable to animal producers; ~~and in cultures where concern for the welfare of animals is relatively low.~~

Paragraph 5, sentence 5: ~~In countries which accord a high priority to animals welfare,~~ Standards based on objective 2 tend to be strongly supported by the ~~concerned~~ public who generally see the alleviation of pain and distress as a key element of animal welfare.

Paragraph 7, sentences 2 and 3: If this approach is used, however, it should be made clear that the guidelines are ~~intended as basic guidelines~~ designed mainly to promote the health and functioning of animals. When possible, ~~In cultures that place a high priority on animal welfare,~~ the development and implementation of guidelines that more closely address animal welfare objectives 2 and 3 would be appropriate to meet societal expectations.

Clarifying the underlying science

Comments/rationale: We agree with the authors of the discussion paper that a critical and transparent review of the relevant animal welfare science is an important first step in developing quality animal welfare guidelines. It is also our experience, however, that information on key elements of animal welfare in various production systems is often limited or lacking. We therefore suggest that a comment regarding the

importance of supporting and conducting related research would be appropriately placed in this paper and have recommended language to be included. Additional suggested revisions are editorial.

Suggested revisions to language:

Paragraph 1, sentence 1: In the past, the development of animal welfare guidelines for production systems has sometimes been hampered by ~~a lack of clarity over~~failures to critically review the scientific literature.

Sentence to be appended to paragraph 1: In addition, scientific information on key elements of animal welfare in various production systems is often limited or lacking.

Sentences to be appended to paragraph 2: When science is lacking, laboratory and field studies can contribute important information. Results of short-term, targeted applied research can be used to develop and support resource-based criteria in animal welfare guidelines. However, longer-term, fundamental research will be necessary to build an expertise base that will allow for continued development of animal-based criteria.

As always, we very much appreciate the opportunity to provide input. Should you have questions or require additional information, please do not hesitate to contact me. I may be reached at the phone number as provided in the letterhead (ext. 6618), or you may contact me on my direct line at 847-285-6618 or via e-mail at ggolab@avma.org.

Sincerely,

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Gail C. Golab, PhD, DVM
Associate Director, Animal Welfare