

**VOLUME 18 NO. 1 APRIL 2017** 

### **Contents**

- Editorial
- 3 Paper: How non-identity problem thinking messes with reasoning regarding killing animals
- 6 Paper: Religious Slaughter
- 8 Paper: Should ritual slaughter be banned?
- 11 Paper: Stunning and killing of fish: from laboratory to a commercial setting
- 13 Book Review: T. Visak & R. Garner, *The Ethics of Killing Animals*
- 16 Obituary: Professor Frauke Ohl
- 17 Invitation to submit a paper to the new Journal Food Ethics
- 18 EurSafe Executive Committee Update
- 19 List of upcoming conferences and symposia
- 21 Books and publications

### **Editorial**



It is my pleasure to present to you the Spring 2016 edition of EurSafe News. Spring is the time of new life, rejuvenation, and new beginnings. Alas, the cycle of life dictates that with new lives beginning, others must come to an end. The one thing that is sure in life is that it will one day end. The end of life is the theme of this special issue. This is not only the case for the end of animal life, but also for human life. With pain in our hearts we report on the passing away of a cherished colleague, Frauke Ohl. You will find a short obituary that can only understate all the important work that she has done for animals, at the end of this newsletter. The rest of the newsletter focuses on moral questions surrounding the slaughter of animals. Hanneke Nijland reports on her PhD research into perceptions and behaviour people exhibit regarding husbandry, slaughter and consumption of farmed animals, both in the Netherlands and Turkey. What arguments do people use to construct the (non)acceptability of meat production and consumption and how do they cope with ambivalent attitudes they have regarding these issues? What relevant values do they embrace regarding animals and nature? Amongst other values, Nijland found two contrasting clusters of arguments/ values that she dubs 'live and let live' and 'live and let die'. Her contribution gets a

VOLUME 18 NO. 1

philosophical twist when she criticizes the 'live and let live' argument on the basis of the non-identity problem. This problem is also one of the issues that is dealt with in the book that is reviewed later in this newsletter, The Ethics of Killing Animals.

Mara Miele, whom many readers will remember from her fascinating lecture at the Uppsala conference, fills us in about the specifics of religious slaughter - the Jewish 'shehitah' and the Muslim 'halal' slaughter. What exactly are the rules - both religious and judicial - regarding rendering animals unconscious before slaughter? What is common practice in different EU countries regarding stunning before killing? Professor Miele ends her overview with a plea that I suspect many of our readers will support, for 'dedicated policies to improve transparency of the meat markets in Europe and for providing better information about practices of slaughter and their implications for animal suffering to Muslim, Jewish and non-religious consumers'. Her account is nicely supplemented by Menno Kamminga, who delves deeply into the arguments that can be given in favour or against religious slaughter, taking the proposal by the Dutch Party for the Animals to ban 'ritual slaughter' as a case study. His argument, which in effect aims to shift the burden of proof to those who want a legal exception from the prohibition on conscious slaughter, proceeds in five steps. At the risk of grossly oversimplifying this complex line of reasoning, these steps are as follows. Firstly, philosophical arguments denying that a ritual slaughter ban affects religious freedom fail. Secondly, while religious freedom is at stake and equal treatment by a neutral state means that believers may do certain things that others may not (such as unstunned slaughter), the state also has an obligation to prevent evil or harm and this can outweigh the right to religious freedom and equal treatment. Thirdly, not protecting animal welfare runs a greater risk of evil than not protecting religious freedom separately and, therefore, a strong(er) moral obligation is involved in protecting animal welfare. Fourthly, even though animal suffering entails an element of interpretation, available empirical evidence strongly suggests that (unstunned) ritual slaughter entails a significant extra risk of animal suffering. Finally, arguments put forward so far by the Jewish and Muslim communities for maintaining a legal exception fail.

In the final paper, Hans van de Vis, Marc Bracke and Marien Gerritzen focus on the slaughter of animals that have until recently not greatly concerned animal ethicists: fish. They pose that in order to protect the welfare of fish at the time of slaughter, like other farmed vertebrates, fish should be rendered unconscious by stunning without causing avoidable stress, pain and fear prior to killing or further processing, such as filleting. They warn that fish that do not respond behaviourally may still be conscious and may simply be unresponsive due to paralysis, exhaustion, chilling, or tonic immobility. The authors describe the parameters necessary to ensure this protection, namely registration of EEGs and ECGs in combination with behavioural observations, evaluation of product quality, additional measurements in the lab, followed by testing in a commercial setting, and implementation of a Quality Assurance system.

Finally, I would like to bring to your attention our EurSafe Vice President's update from the Executive Committee and an invitation by our EurSafe President to submit articles to the newly established and very promising journal Food Ethics. Despite the rather gloomy theme of this issue of EurSafe News, I hope you enjoy reading the contents and I wish you a pleasant and cheerful Spring.

Bernice Bovenkerk

Editor-in-chief EurSafe News

Assistant Professor

Philosophy Group

Wageningen University

### Paper #1

Hanneke J. Nijland, MSc.,
PhDc.
Wageningen University,
Chairgroup Strategic
Communication
Sub-department
Communication,
Philosophy and
Technology: Centre for
Integrative Development
hanneke.nijland@gmail.
com

This entry is based on Hanneke's PhD dissertation, which will be published later in 2016.



# How non-identity problem thinking messes with reasoning regarding killing animals

Perceptions and behaviours regarding the -often ambivalence-evoking- issue of husbandry, slaughter and consumption of farmed animals, diverge between cultures. The arguments with which people construct the (non-)acceptability of farming and slaughtering animals for food range from 'acceptable' with behaviours like eating meat and flexitarianism, to 'unacceptable' with behaviours like vegetarianism and veganism - and many shades of grey in between. To better distinguish and contextualize similarities and differences in arguments that people use to construct (non-)acceptability of keeping and killing animals for food, I initiated a research project. The project, titled 'Disentangling the domestic contract' entailed five years of indepth interpretive case-study research among consumers in various contexts in the Netherlands and Turkey, involving in-depth conversational analysis as well as document research.

During the interpretation of my research data, I have found -amongst other things- a number of values that clarify what is of importance to people with regards to the farming, slaughter and consumption of animals. In this article I will introduce these values, and describe how they are practically as well as logically connected to certain ideas and behaviours regarding the treatment of animals. I will then criticize my findings by showing how the philosophical notion of the non-identity problem messes with the intuitive logic of animal rights-oriented reasoning and behaviour regarding farm animals.

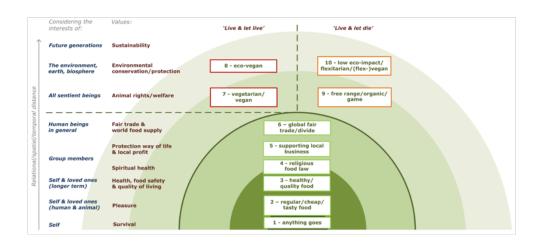
From my research, the following values emerged, touching in one way or the other on the topic of keeping and killing animals for food: survival, pleasure, health, profit, food safety, fair trade, world food supply, animal welfare/animal rights, environmental protection and sustainability. These values are a mixture of values that are of importance to consumers personally such as pleasure and health, corporate values such as profitability and legally determined food safety, and values that are important to respectively all human beings, animals (including farmed animals), the earth/environment, and future generations.

In addition, I found two other key values that were brought forward specifically related to animals. These two values represent two opposite standpoints that are taken towards the lives of animals and causing their death. On the one hand, there is a view which I dubbed 'live & let live' - defending life and valuing death as something negative, especially when causing it in others, as in the example: "I just don't think that we have the right to rob an animal of its life." On the other hand a 'live & let die' standpoint surfaced - still valuing life, but also accepting causing death for food as an inherent and natural part of life: "It's the circle of life: some things have to die in order for other things to live."

From my research data, a pattern of typically coinciding argumentation emerged related to these values, that led to the formulation of ten clusters of reasoning and behaviour (as depicted in figure 1). Of these, I will discuss clusters 7: vegetarian/vegan and 9: free range/organic/game here, because these deal with the topic of animal ethics in the most direct manner.

Firstly: combining a 'live & let live' standpoint with considering the interests of animals (i.e. cluster 7), means that causing animals' suffering is found unacceptable - including causing their death. The main value in this cluster is animal rights, which here translates into safeguarding both animal well-being as well as animals' right

FIGURE 1
The clusters of reasoning and behaviour



to live, as animals are assigned intrinsic value to. The initial norm for consumption behaviour that follows from this way of reasoning is vegetarianism: refraining from eating meat due to adopting a no-kill policy, but still consuming other animal products such as cheese and eggs. The logical ensuing norm in this cluster is veganism. This arguable more restrictive behaviour (that can also be observed in the eighth and twelfth cluster) also belongs in this cluster because it adheres to the same reasoning as the just mentioned vegetarianism, when combined with additional knowledge & convictions regarding the ways animals are treated -and killed- in the dairy and egg industry.

Then: in cluster 9, the interests of all living beings -including farmed animals- are taken into consideration, too. However, viewed from a 'live and let die' standpoint, though life is valued, death is seen as a natural part of life and causing it is not seen as unacceptable as such. The absence of a principal objection against death or causing it in this cluster, makes the core value the welfare of animals during life and slaughter. As farmed animals in this cluster are seen as possessing both instrumental value as well as intrinsic value, this makes the keeping and the killing of animals acceptable only when specific conditions for the animals are met. One associated norm for consumption behaviour is opting for meat from animals that have had quality of life: for example from free-range or organic farms, or hunting animals living in the wild, that are treated (fed, handled and transported) with care. Another important norm in this cluster is that the meat-providing animals must be slaughtered in a humane way: "A painful death is unacceptable." (though humane means different things to different people).

Now, one could criticize the name of the category 'live & let die' by problematizing its wording: for the issue of course is not letting animals die from natural causes, but having them slaughtered – which arguably is a different thing (at least if one regards human action as 'unnatural'). But semantics aside, the differences between arguments in the two clusters are pretty straightforward and no significant diversions from these paths of reasoning were encountered in any of the many in-depth conversations I had with consumers across the research. Also in animal rights/animal welfare literature, though the reasoning behind each stance is more complicated, the two clusters can be recognized fairly easily. My intention thus is not to discuss rights vs. welfare theories here, nor the aptness of the James Bond themed names I gave to the value categories. However, what I do want to problematize in this article, is a logical inconsistency that I encountered when looking at the reasoning in cluster 7 through a philosopher's lens (oh, the perks of having a philosopher as my boyfriend...): defending the standpoint 'live & let live' becomes rather problematic when applying the non-identity problem.

According to Harman (2009), a non-identity problem arises when an action (in our case: eating meat) appears wrong in virtue of harming certain parties (i.e. farmed animals), but those parties would not have existed if the actions had not been performed (if they were not bred, reared and slaughtered for said meat), and those parties have a life that is worth living (when farm animals are treated well and with respect during their lives). In other words: the abolishment that vegetarianism and veganism advocates, prevents animals that otherwise might have been farmed for food ways from living. Adding non-identity thinking to the 'live & let live' standpoint thus causes a dilemma, that does not at all fit the good intention of 'letting live' that this standpoint is based on: we feel we don't have the right to let animals die for us to eat them, as we feel that animals have the right to stay alive - but: do we have the right to not let them come into existence (especially if that farming would be done in an animal friendly way, so that these animals would have a life worth living)? And, in a similar line of thought: might it actually be in the interest of animals to be part of the food chain?

Admittedly, this way of arguing (that in animal ethics literature has been dubbed the 'logic of the larder') is counter-intuitive, and moreover: in over five years of researching consumers I did not encounter in practice even once. But I felt it needed to be stated. As such, I'm very open to hearing your thoughts about the matter.

#### References

Harman, E. (2009) Harming as causing harm. In: Roberts, M. and Wasserman, D. (eds.), Harming future persons: ethics, genetics, and the non-identity problem. Springer, Dordrecht

Salt, H.R. (1914) Logic of the larder. In: The Humanities of Diet. Manchester: The Vegetarian Society

### Paper #2

Prof. Mara Miele
Director of PGR Studies
School of Geography
and Planning
Cardiff University, UK
MieleM@Cardiff.ac.uk



### **Religious Slaughter**

Religious slaughter is the killing of animals via the cut of the throat for food production. The killing is performed according to the religious rules of either the Jewish or Muslim religious faith as interpreted by certifying bodies: the Jewish slaughter is called 'shehitah' and the rules for this practice are set out by the Shehita Boards in each country, the Muslim slaughter is called 'halal slaughter' and the rules are interpreted and laid down by a large number of certifying bodies in each country. There are no common standards for either shechita or halal slaughter, but, according to the Jewish rules, making animals unconscious with various methods of stunning prior to the cut of the throat is prohibited. This is because the animals need to be alive and in good health at the time of killing and stunning methods are considered to cause injuries and to render the carcass unfit to eat for people of Jewish faith. Halal slaughter can be performed with or without stunning, and certain certifying bodies accept certain stunning methods as long as the stunning is 'reversible' (Lever and Miele, 2012, HFA, 2014). In halal slaughter the main issue is that the animals should be alive at the time of killing, and the stunning should make the animals unconscious only for a limited period of time.

The killing of animals for food production without stunning in practices of religious slaughter has caused a debate between the advocates of animal welfare and the Jewish and Muslim religious minorities in Europe and in North America. In Europe stunning animals before slaughter is compulsory by law (EU Reg.b1099/2009), however the same regulation grants the religious minorities the right to practice their religion and it allows the killing of animals without stunning in the case of religious slaughter. This regulation has been recently contested for the rapid expansion of halal meat markets in Europe over the last 15 years and the concern about the possible increase in the number of animals killed without stunning. Recently Poland and Denmark forbade religious slaughter without stunning, while Norway, Iceland, Switzerland, Sweden already prohibited it in the 1930s (The Economist 2014). Denmark controversially prohibited religious slaughter in 2014 even though slaughter without stunning was not performed for more than ten years. These initiatives have been interpreted as driven by anti-semitic or islamophobic attitudes more than real concerns for the welfare of animals (Avasthy, 2014).

Religious slaughter without stunning is practiced in all other EU countries and it is also practiced for meeting a growing demand of the export market. Moreover, parts of carcasses of animals killed according to religious slaughter practices (both with and without stunning) are currently regularly sold un-labelled in the conventional market to consumers who are not informed about the method of slaughter and the origin of the meat they consume (Miele and Rucinska 2015). However the number of animals slaughtered without stunning is not known, according to a study in the UK 80% of all animals slaughtered according to the halal rules are pre-stunned (FSA, 2011) but there are no comparable data from the other European countries. The uncertainty of these practices and the lack of transparency of the market lead to anxieties and speculations, especially among Muslims and non religious consumers. It has been argued that Muslim consumers are not adequately informed about the practices of halal slaughter and are not aware that in many cases halal slaughter is performed with stunning; at the same time non religious consumers are not aware of the fact that part of the carcasses of animals killed without stunning are sold unlabelled on the conventional market (Doward 2014; Malnick 2014). In conclusion, there is a need for dedicated policies to improve transparency of the meat markets in Europe and for providing better information about practices of slaughter and their implications for animal suffering to Muslim, Jewish and non religious consumers.

#### References

- Avasthy, D. 2014. Denmark Bans Ritual 'Halal' and 'Kosher' Slaughter, Stirs up Animal vs Religious Rights Debate, International Business Times, 22 February <a href="http://www.ibtimes.co.uk/denmark-bans-ritual-halal-kosher-slaughter-stirs-animal-vs-religious-rights-debate-1437517">http://www.ibtimes.co.uk/denmark-bans-ritual-halal-kosher-slaughter-stirs-animal-vs-religious-rights-debate-1437517</a>
- Doward, Jamie 2014. EU labelling of meat stunned before slaughter rejected by Britain, The Guardian 11th May.
- The Economist. 2014. Religion and ritual slaughter: much ado about not much, February 18th, <a href="http://www.economist.com/blogs/erasmus/2014/02/religion-and-ritual-slaughter">http://www.economist.com/blogs/erasmus/2014/02/religion-and-ritual-slaughter</a>
- HFA (2014) Ethics in the Halal Industry: A discussion with HFA, HMC, Willowbrook Organic Farm and leat Foods, <a href="http://halalfoodauthority.com/blog-category/ethics-in-the-halal-industry-a-discussion-with-hfa-hmc-willowbrook-organic-farm-and-ieat-foods">http://halalfoodauthority.com/blog-category/ethics-in-the-halal-industry-a-discussion-with-hfa-hmc-willowbrook-organic-farm-and-ieat-foods</a>, Halal Food Authority
- Lever John and Miele, Mara. 2012. The growth of Halal meat markets in Europe: an exploration of the supply side theory of religion. Journal of Rural Studies 28 (4): 528-537.
- Malnick, Edward. 2014. Halal meat row: faith leaders call for clear food labelling, The Telegraph, 7th May 2014.
- Miele, Mara and Rucinska, Karolina. 2015. Producing halal meat: the case of halal slaughter practices in Wales, UK. in The Political Ecologies of Meat, eds. Emel, J. and Neo, H. 253-275. London: Earthscan.

### Paper #3

Menno R. Kamminga
Senior Lecturer
Department of
International Relations
and International
Organization
University of Groningen
m.r.kamminga@rug.nl



### Should ritual slaughter be banned?

In European countries, kosher (Jewish) and halal (Islamic) unstunned slaughter is controversial or even forbidden. The issue is whether 'ritual slaughter' should be legally possible as a free exercise of religion or that it should be banned for its (supposedly) negative impact on animal welfare. In the Netherlands, the Party for the Animals is planning to submit a new legislative proposal for banning ritual slaughter after a failed attempt in 2011-2012. The present paper - which draws on an earlier, more extensive article (Kamminga 2012) - offers a short ethical analysis of whether a moral basis exists for a government ban on ritual slaughter. It suggests that, ethically, a government should ban ritual slaughter for the sake of animal welfare, yet should respect religious freedom by showing preparedness to relieve the ban whenever slaughterers have succeeded in guaranteeing that their practice entails no added risk of animal suffering. A fivefold argument is sketched.

First, a ritual slaughter ban affects religious freedom, usually seen as a 'core right' (cf. Lerner and Rabello 2006/2007). Two philosophical arguments that deny this both fail. First, it has been argued that nobody, Jews and Muslims included, is forced to slaughter animals for (expensive) meat consumption; Judaism and Islam do not oblige their followers to eat meat (Singer 1975; Barry 2001). However, this argument overlooks that both religions have always granted adherents the essential right to eat (kosher or halal) meat; therefore, the Halacha (Jewish) and the Koran (Islamic) contain prescriptions that should minimize animal suffering during slaughter. A second counter-argument is that, since eating meat is no longer necessary for survival, religions should reposition themselves as 'harbingers of salvation' for humans and animals, interpreting their holy scriptures allegorically, rather than as fixed revelations, and thus making 'stunned ritual slaughter' discussable (Smedes 2011). However, this argument is problematic for prescribing Jews and Muslims what to believe in: a 'modernized' version of their age-old creed. Apart from generating 'endless' theological discussions about 'correct' interpretations of Judaism and Islam, this ignores that religious freedom includes the right for communities to establish the content and rituals of their religion themselves, without outside interference. Clearly, orthodox Jews and Muslims attach value to their slaughter methods.

Second, ethically, the modern, 'neutral' state's obligation to protect freedom of religion is relatively flexible, being grounded not in 'equality' but in 'beneficence'. In treating all citizens as equals and respecting their rights equally, the state cannot justifiably grant religion separate legal privileges (Smith 2009). Fundamental rights should be self-evident to everyone; general freedoms such as those to opinion, assembly and (presumably) education do meet this requirement. While equality does require extra attention to people in disadvantaged positions caused by handicaps or unchangeable characteristics (Frankena 1973), this can hardly apply to religion (even if identity-constitutive) as the result of one's own, changeable choice. Thus, equality precludes that believers may do certain things that others may not (such as unstunned slaughter). Yet, arguably the (neutral) state also has an obligation of beneficence, which entails, in descending order of importance: (i) prevent evil or harm; (ii) remove evil; (iii) do or promote good (Frankena 1973; 'non-maleficence' - do not inflict evil or harm – needs no consideration here). In cases of conflict between equality and beneficence the former takes precedence normally, but a minor inequality may be preferred if a great evil can be avoided or a great good realized thereby. Thus, within somewhat elastic boundaries of equality the state may grant special provisions to believers out of beneficence, if only because religion is identity-constitutive to them and thus a great good. Yet the state cannot simply permit all kinds of religious expression. Certain fundamentalist expressions (e.g., regarding woman-man relations)

will undermine equality. Moreover, the beneficent state may have to curtail religious freedom because of other considerations of good and evil. In the ritual slaughter case, the core beneficence issue is the extent to which religious freedom is worthy of protection compared with animal welfare.

Third, state protection of religious freedom is actually based on a weak obligation of beneficence and so susceptible to limitation due to animal welfare protection being based on a stronger beneficence obligation. Animal welfare is of universal moral interest. Yet, from the state's perspective, a distinction between man and animal should be maintained. Unlike citizens, animals have no equality-based right to protection, because the state assumes an agreement between humans only. Animal welfare, then, should be understood as a matter of beneficence, rooted in the capacity to suffer. If assuming that animal welfare requires preventing unnecessary suffering without commanding vegetarianism, we may settle the interrelationship between protection of religious freedom and of animal welfare by invoking our general beneficence hierarchy. Thus, it seems wrong to think that a state simply allows evil or harm to happen (i) or continue (ii) by not separately protecting religious freedom. Believers already find their religious freedom considerably protected by the (secular) state's obligation of equality (which supports freedom of opinion, assembly, and education), and they face little risk to be seriously harmed (with offenders remaining unpunished) because of their religion. Protecting religious freedom separately seems a matter of doing or promoting good (iii) and, as such, as only weakly obliged. However, if the state leaves animal welfare unprotected, one could argue more convincingly that it would allow evil or harm to emerge (i) or persist (ii). In contrast to believers as citizens, animals are not contract partners within the state and thus are ranked lower. But this also implies that they do not enjoy any initial protection and so are much more vulnerable to, and less resistant against, arbitrary and cruel, often deadly violence. Protecting animal welfare entails much more than doing or promoting good (iii) because of a much more basic risk of evil than in case of religious freedom not being protected separately; therefore, a strong(er) moral obligation is involved. The beneficent state, then, should consider empirical evidence in order to establish whether ritual slaughter as based on religious freedom entails no serious extra risk for animal welfare and thus is permissible.

Fourth, available empirical evidence strongly suggests that (unstunned) ritual slaughter entails a significant extra risk of animal suffering. Employing literature research and international veterinary observations, scientific researchers have reported that slaughter that applies neck cutting without pre-stunning entails a (relatively) high risk for animal welfare due to the high probability of stress and injury caused by fixation methods, serious pain and suffering during cutting and afterwards, possibly longer times of post-cut consciousness, feelings of suffocation due to blood in the trachea, and also the need for back-up stunning in case of prolonged consciousness. Especially cattle and, to a lesser extent, sheep experience much stress and pain, because they remain conscious longer due to physiological and anatomical features, with a real danger that this takes more than 45 seconds (Von Holleben et al. 2010; Kijlstra and Lambooij 2008; NVWA 2015). Yet it must also be acknowledged that there is no full scientific consensus about what is the most 'humane' way of slaughtering. Evidence provided is not scientifically conclusive. The issue is not purely scientific but also ethical. 'Animal suffering' is partially a matter of interpretation in terms of human levels of toleration (Bergeaud 2007).

Fifth, the beneficent government should request of Jewish and Islamic slaughters that they reassure that no added animal suffering occurs during ritual slaughter if they wish to maintain a legal exception. Basically, two arguments have been advanced

from Jewish and Islamic sides in defense of ritual slaughter: (1) ritual slaughter is rooted in divinely revealed scriptures; therefore, alternatives cannot be considered; (2) kosher and halal slaughter is more humane than factory-farming because of the emphatic attention for animal welfare during life and slaughter (Smedes 2011). Both these arguments fall short. In assuming a 'divine command theory', the first argument displays closedness towards 'unwelcome' evidence and thus cannot assure the responsible government. While it may convince those who already accept the religion involved, it fails to meet the criterion of public accessibility. The second argument has only limited force. Although animal care is embedded in Judaism and Islam, and modern industrial society could learn much good from religious respect for animals, this argument is too much an attempt to sidestep the issue. One may blame politics for focusing on animal suffering during the last minutes, while factory-farming causes more animal misery during a much longer period. But the wrongs of factory-farming cannot make ritual slaughter right. One could, and probably should, criticize both factory-farming and ritual slaughter.

In conclusion, for the beneficent government to avoid banning unstunned ritual slaughter altogether, it is up to Jews and Muslims to show, by presenting independently established evidence, that the government can safely permit this expression of religious freedom, without fearing to violate its own obligation to protect animal welfare. For slaughterers to appeal to religious freedom, criticize factory-farming, or invoke the animal friendliness of God-given practices cannot suffice. Lastly, a truly beneficent government tackles factory-farming seriously.

#### References

Barry, B. 2001. Culture and Equality. Cambridge: Polity.

Bergeaud-Blackler, F. 2007. New challenges for Islamic ritual slaughter: a European perspective. Journal of Ethnic and Migration Studies 33(6): 965-980.

Frankena, W.K. 1973. Ethics. Englewood Cliffs: Prentice-Hall.

Kamminga, M.R. 2012. De rituele slacht verbieden? Een ethische analyse. Filosofie & Praktijk 33(1): 6-20.

Kijlstra, A. and Lambooij, B. 2008. Ritueel Slachten en het Welzijn van Dieren. Lelystad: Animal Sciences Group Wageningen UR.

Lerner, P. and Rabello, A.M. 2006/2007. The prohibition of ritual slaughtering (kosher shechita and halal) and freedom of religion of minorities. Journal of Law & Religion 22(1): 1-62.

NVWA. 2015. Risicobeoordeling Roodvleesketen: Rund, Varken, Paard, Schaap en Geit. Den Haag: Ministerie van Economische Zaken.

Singer, P. 1975. Animal Liberation. New York: The New York Review.

Smedes, T. 2011. Gelovigen moeten geen vlees willen eten. Sargasso, 14 April.

Smith, S.D. 2009. Discourse in the dusk: the twilight of religious freedom? Harvard Law Review 122(7): 1869-1908.

Von Holleben, K. et al. 2010. Animal Welfare Concerns in Relation to Slaughter Practices from the Viewpoint of Veterinary Sciences. Schwarzenbeck: DIALREL.

### Paper #4

Hans van de Vis Marc Bracke and Marien Gerritzen

Wageningen UR Livestock Research PO Box 338 6700 AH Wageningen The Netherlands



# Stunning and killing of fish: from laboratory to a commercial setting

Predominantly in Europe, Canada, Australia and New Zealand there is a growing interest in the welfare of fish in aquaculture (Van de Vis et al, 2012). Welfare can be defined as the quality of the life as the animal is able to experience it (Torgersen et al., 2011).

Given the fact that other farmed vertebrates, i.c. mammals and birds, should not be subjected to unnecessary pain and fear at slaughter, the issue is whether this also applies to fish. For humans it is known that awareness of pain and fear depends on proper functioning of specific regions of the cerebral cortex. However, feelings in humans may not depend exclusively on structures of the cerebral cortex (Damasio and Damasio, 2016).

Given the fact that fish brains lack a cerebral cortex, it is debatable whether these animals can perceive mental states such as pain and fear. In their review Braithwaite and Ebbesson (2014) present evidence that teleost fish have a capacity for mental awareness. For teleost fish species relevant functional areas in the telencephalon have been identified. The number of teleost fish species that were studied is limited to a few. This indicates that teleost fish can perceive pain and fear when they are not properly stunned before slaughter. As a consequence, to protect the welfare of fish at the time of slaughter like other farmed vertebrates, fish should be rendered unconscious and insensible by stunning without causing avoidable stress, pain and fear prior to killing or further slaughter processing such as filleting.

To protect welfare of fish at slaughter in a commercial setting, we propose the following approach to establish which methods provide effective stunning or stunning/ killing of farmed and captured fish. In the first place, in a laboratory setting the conditions need to be established for an effective stun without avoidable stress, pain and fear. For this registration EEGs and ECGs in fish are needed in combination with behavioural observations. In addition, the product quality should be evaluated to determine whether carcass damage occurs. Carcass damage may have negative economic consequences and these should be prevented or minimized. When stunning or stunning/killing does not induce immediate loss of consciousness supplementary, stress-physiological measurements have to be performed to determine whether unconsciousness and insensibility are induced with minimal stress. These measurements comprise analysis of for instance cortisol, glucose, lactate and free fatty acids in blood plasma.

The next step comprises the testing of the stunning or stunning/killing method in a (semi-) commercial setting. Under these conditions, it is likely that stress-physiological and neurophysiological measurements are not feasible. Hence, mostly only behavioural observations and physical measurements of the stunning method itself can be carried out, for instance recording the strength of the electrical current, its waveform and voltage across the electrodes in the case of electrical stunning, and air pressure in the case of percussive stunning. Caution is, however, needed, regarding the interpretation of behavioural observations of fish. Fish that do not respond behaviourally may still be conscious. Fish can be unresponsive for a number of reasons, such as paralysis, exhaustion, chilling, or tonic immobility.

The last step of our approach focuses on the control of effective stunning or stunning/killing of fish in practice. To achieve this a process-oriented Quality Assurance system may be used (Van de Vis et al., 2012). Briefly, our QA system involves: 1) an analysis of the hazards that may be detrimental to the welfare of fish; 2) measures

to prevent these hazards; 3) critical steps at which control can be applied and, as a result, deterioration of fish welfare can be prevented, eliminated, or reduced to an acceptable level and 4) determination of critical limits for each critical step in the process of stunning and killing or stunning/killing. It is known that QA systems can be easily adapted, when deemed necessary. The implementation of a QA system to control fish welfare during stunning and killing or stunning/killing should be feasible in practice, as QA systems have already been incorporated in various industries.

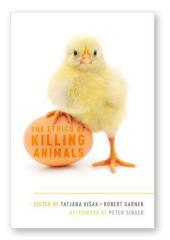
#### References

- Braitwaite, V. and Ebbesson, L.O (2014): Pain and stress responses in farmed fish. Rev. sci. tech. Off. int. Epiz., 33, 245-253.
- Damasio, A. and Damasio, H. (2016): Pain and other feelings in animals. Animal Sentience, 2016.059
- Torgersen, T., Bracke, M.B.M. and Kristiansen, T.S. (2011): Reply to Diggles et al. (2011): Ecology and welfare of aquatic animals in wild capture fisheries. Rev Fish Biol Fisheries, DOI 10.1007/s11160-011-9221-y.
- Van de Vis, J.W., Poelman, M., Lambooij, E., Bégout, M.-L. and Pilarczyk, M. (2012): Fish welfare assurance system: initial steps to set up an effective tool to safeguard and monitor farmed fish welfare at a company level. Fish Physiol. Biochem. 38, 243-257.

### **Book Review**

Bernice Bovenkerk Wageningen University





### The Ethics of Killing Animals

Tatjana Višak and Robert Garner (eds.), The Ethics of Killing Animals, Oxford University Press, 2016, 252 pp.

The start of this year has seen the publication of two edited volumes about the ethics of killing animals, the first one of which will be reviewed here and the other one in the next issue of EurSafe News. This upsurge in thinking about killing animals is good news both for those interested in deeply philosophical questions, such as 'when can one be harmed by death?', and 'can the values of existence and non-existence be compared?',

and for those interested in more mundane, practical questions, such as 'should I become a vegan?' and 'under what conditions is it acceptable to euthanize my pet?'. My first cautious conclusion is that the book under review here gives more guidance with the first set of questions, while the second book – The End of Animal Life – focuses more on the latter.

#### The authors

Tatjana Višak, who is postdoctoral fellow at the Philosophy Department of Mannheim University (Germany) is no stranger to this field of thinking. In fact, her thesis – later published as a monograph, titled Killing Happy Animals: Exploration in utilitarian ethics (Palgrave MacMillan) – deals with the question of whether utilitarians necessarily need to embrace Singer's controversial 'replaceability argument'. This argument states that the welfare loss that is the result of killing an animal can be compensated by bringing another animal with a similar expected welfare level into existence. Višak answers this question negatively: she proposes a person affecting utilitarianism which avoids the replaceability argument and which is based on the assumption that while killing an animal harms that animal, bringing into existence another animal does not benefit that animal. In other words, while potential welfare is lost when an already existing animal is killed, no potential welfare is necessarily gained by bringing an animal into existence, because at the moment of comparison, there is no animal who stands to gain welfare. Interestingly, both Nils Holtug in his chapter and Peter Singer himself in his afterword to this volume disagree with Višak's assumption that existence and non-existence cannot be compared. They in fact place a zero-value on non-existence, something which in Višak's view is impossible. Whether this is indeed possible or not in the end seems to come down to the type of intuition that utilitarians generally would rather avoid.

Robert Garner is Professor of Politics at the University of Leicester (UK), specialising in animal rights and the political representation of animals, with an impressive publication list in these fields, including A theory of Justice for Animals (Oxford University Press), and The Animal Rights Debate: Abolition or Regulation? (Columbia University Press, with Gary Francione). He brings a welcome political element to this volume, focusing on the question of how we should understand the value of animal life in the context of non-ideal theory. In his final chapter he puts the intriguing and complex discussions about the value of animal life and the moral harm of killing presented in this book into perspective, by stating that these discussions are not necessary in order to oppose the abhorrent ways in which animals are treated in modern society. While this is surely not meant to discredit the debates in this book, it does draw attention to the fact that these discussions are so deeply philosophical that the reader is sometimes left to wonder about their practical application.

The editors have managed to bring together an impressive group of philosophers with authority on the questions surrounding the ethics of killing animals. Well-known authors include Peter Sandøe, Jeff McMahan, Shelly Kagan, and Christine Korsgaard. If this were a philosophy festival, such a line-up alone would draw great crowds.

#### Their ambition

The underlying question of this volume is whether killing in itself is morally problematic, apart from indirect consequences on others or from the harm inflicted during the actual process of killing. The ambition of the editors is to present a wide range of answers to this question, drawn from a variety of philosophical traditions, ranging from utilitarianism and Kantianism to Nussbaum's capability approach. A large portion of the book is devoted to value theory and explores what makes life and death good, bad, or neutral for an animal. On what basis could we say that ceasing to exist is bad for animals? Can existence be better or worse for an animal than never existing? Does one need to have so-called 'categorical desires' in order to be harmed by death? The second part of the book is concerned with the moral evaluation of killing animals according to specific moral theories. Despite Kant's own rejection of animal rights, can a Kantian argument be construed that justifies moral duties to animals and if so, what does this imply about animals' right to life? Can a utilitarian argument be made against the killing of animals that have a good life? The third part of the book aims to draw political lessons from these normative debates.

#### The results

By demarcating the questions surrounding the ethics of killing animals very well and by mostly inviting authors that share a number of core assumptions about animals and our duties towards them, the editors have managed to avoid an overly generalised and shallow discussion. Instead, the contributions have a lot of philosophical depth and the authors genuinely engage in debate about complex questions such as whether existence and non-existence can be compared and what should be the basis of animal rights. An interesting contribution regarding the rights question is provided by Alasdair Cochrane, who argues that rights should be based on interests and that the rights discourse is inherently political.

Most authors in this volume hold that the 'deprivation view' is the most plausible account of the harm of death. One of the few 'dissenters', Christopher Belshaw defends the controversial view that painless death is not bad for most animals, and in fact is often good for them. As most animals – those that cannot be considered persons – lack so-called 'categorical desires' they have no reasons to go on living. According to Belshaw this means that from the point of view of the animals living doesn't matter, because it is not something they consciously want. This has the unsavoury implication that a painless death is not bad for many human beings (at least the so-called 'marginal cases') and in fact that death would be good for them. Belshaw's account serves the useful purpose of testing the views of the other authors and, in my view, ultimately strengthening them. At times though, his arguments are so counterintuitive and unconvincing that they border on sophistry.

#### Most striking

One of the discussions in this book that I enjoyed most was the one between Singer and Holtug on the one hand and Višak and Kagan on the other about the value of existence as opposed to non-existence. As Singer writes in his afterword, he has changed his mind on this issue between writing Animal Liberation and Practical Ethics. This discussion is quite relevant for the question of whether or not to become a vegetarian, because it deals with the commonly heard argument that it is in the interest of animals to be reared for human consumption, since otherwise the animals would not even come to exist (also dubbed 'the logic of the larder'). Whether this

is a plausible defence of meat eating turns on the question of whether existence as such can be considered valuable for an individual. According to Višak it cannot, as we cannot compare a state of affairs in which an individual exists with a state of affairs in which the same individual does not exist. However, as Singer points out, there is an asymmetry here: most people have the intuition that we have no obligation to bring a happy child into existence, but also that we do have an obligation not to bring a thoroughly miserable child into existence. If we hold that existence as such cannot be of value for an individual it seems that we do not have an argument against bringing a child into existence even though we know it will be miserable. On the other hand, if existence is valuable we have a reason to bring as many children into the world as possible, leading to the infamous utilitarian 'repugnant conclusion'. As Singer points out, philosophers on both sides of this dilemma will have to bit the bullet on something and it seems to come down to intuition which bullet one is willing to bite.

As part of this discussion on the comparability of existence and non-existence Holtug in fact claims to be able to deal with the intractable 'non-identity problem'. His argument is too complicated to be able to do justice here, but seems based on the idea that an action's rightness or wrongness does not depend on whether or not that action is actually performed. In his view, we can compare two outcomes, even if we know that if outcome A in reality obtains, outcome B cannot obtain, and vice versa. This leads him to say that 'it is wrong to bring a miserable individual into existence, because if we do so, this will be worse for her' (p. 111). Whether his account is convincing, I leave to the reader to decide.

#### Reasons not to read the book

With a few notable exceptions, such as Kasperbauer and Sandøe's contribution on killing as a welfare issue, most of the chapters remain solidly in the realm of philosophical theory, without much regard for real-world implications. In as far as it was the intention of the authors to contribute primarily to the philosophical debate this is of course no problem, but some contributions could have benefitted from closer interaction with empirical research. McMahan, for example, defends his famous Time-Relative Interest Account against objections, by arguing that the more psychologically connected animals are to their own future, the more they stand to lose from death and the more justified we are to rear them for human consumption. He admits that the degree of connectedness is an empirical matter, but does not seem to see the importance of actually drawing on empirical research. Instead he simply posits that pigs are more psychologically connected than cows, and cows more than chickens. This makes a mockery of those among us that actually do value interdisciplinary research.

#### Reasons to read the book

The contributions in the book are definitely thought-provoking and a must read for anyone who is interested in ethical questions surrounding the value of animal life and the harm of death. The chapters do not only form a nice illustration of the most important debates that have been held surrounding these issues to date, but actually lift these debates to a higher level. The book may be difficult to read for those who are not philosophically schooled, but if the reader manages to form her own point of view on the harm of death and the value of existence after reading this book, it is certain to be a very solid and considered one.

### **Orbituary**



We regret to inform you that Frauke Ohl, Professor of Animal Welfare and Laboratory Animal Science at the Department of Animals in Science and Society, Utrecht University, the Netherlands, passed away on January 28, 2016 at the age of 50.

Having been trained as a zoologist in Kiel [Germany], professor Ohl worked at different high-ranking research institutes, such as the Max-Planck-Institute for Psychiatry (Munich, Germany) and the German Primate Centre (Goettingen, Germany) before she came to Utrecht in 2004. Frauke Ohl was a member of the National

Committee for the protection of animals used for scientific purposes (NCad) and was Chair of the Dutch Council of Animal Affairs (RDA).

Professor Ohl's central research interest was to understand how varying cognitive-emotional processes result in adaptive strategies of individuals with their environment. To this aim, she has integrated classical ethological approaches with neurobehavioral methods in different animal species, resulting in complex behavioural phenotyping approaches and differential cognitive testing. She held that animal welfare is a concept that combines biological and moral norms and ensured that her group cooperated with the Ethics Institute Utrecht in order to generate societally accepted and, thus, sustainable approaches to animal welfare management. Professor Ohl was one of the founders of the Centre for Sustainable Animal Stewardship and worked tirelessly to improve the situation of laboratory and farm animals. Frauke Ohl will be greatly missed by the scientific and animal welfare communities. Our sympathy goes out to her family, friends and colleagues.

# Invitation to submit a paper to the new Journal Food Ethics

#### Submission deadlines for #2 and #3 in June and October 2016

Dear colleagues,

As editors-in-chief for the Journal Food Ethics – A journal of the Societies for Agricultural and Food Ethics – we invite you to contribute to the first issues of this new and international journal in 2016-17.



The journal is genuinely trans-, multi- and interdisciplinary, as well as non-partisan and cross-cultural. Thematically the journal spans the whole value chain from producer to consumer, including important agents such as processing industry and retailers. It covers all aspects related to the production and consumption of human food, and it has a focus on the utilization of seafood, crops and plants, and animals. Environmental issues such as the sustainable use of land areas and the natural resources, e.g. freshwater, are included in the thematic focus, and special attention is given to the development and use of modern technology, e.g. biotechnology, as a way to improve global food security. Attention is also paid to issues like animal welfare and fair

trade, as well as just and democratic governance of the value chains. Food security, food safety and sovereignty, rights and responsibilities, as well as cultural determinants and frameworks of understanding food are natural thematic focal points.

Contributions are encouraged from a wide range of fields of scholarly research such as natural science, health and medicine, veterinary science, social sciences, business administration, law, philosophy, economics, ecology, history, and ethics. However, all published contributions need to make the ethical issues and value aspects that are at stake in the work explicit. Working out the ethical dilemmas involved, describing the inherent value conflicts, analysing normative guidance for policy and management, and pointing to consequences of changing the range of significant moral objects to include various animals, are all possible ways to address ethical issues related to food. Critical, normative and descriptive analyses and contributions that relate to training and teaching of food ethics are welcome.

Submitted papers will be peer reviewed by at least two anonymous reviewers, and if successful be published soon thereafter. The journal is an open access journal the first two years of publication.

We invite you to submit an original paper through our Paper Submission System. See the website for further information:

http://www.springer.com/social+sciences/applied+ethics/journal/41055

If you have any further queries about this, you are most welcome to contact either of us, or both. Also, if you yourself cannot contribute this time, but know of others who potentially could, we would be very grateful if you could drop us a note informing us about this.

Yours sincerely,

Editor-in Chief Prof. Matthias Kaiser, University of Bergen, Norwa, (Matthias.Kaiser@uib.no) Editor-in-Chief Anne Algers, PhD Chalmers University, Gothenburg (annea@chalmers.se)

### **EurSafe Executive Committee Update**

Welcome to the Spring issue of the EurSafe Newsletter 2016. It is an exciting time of the year as farmers and gardeners alike look forward to the 'flourishing season' and we at EurSafe can see a few activities flourishing this year. Up and coming events for EurSafe include, (i) the 13th EurSafe Congress in September, (ii) a teaching workshop on 19 May 2016 being held alongside the "Ethics and the future Veterinary Professional" Conference in Utrecht and (iii) the next face-to-face EurSafe Board meeting taking place on 18 May 2016.

Planning for the 13th Congress of the European Society for Agricultural and Food Ethics, Food Futures: Ethics, Science and Culture, which will take place from 28 September to 1 October 2016 at the University of Porto, Portugal is progressing well. Full extended abstracts are now due and the Scientific Committee members are poised to review the final submissions. An updated programme will appear later this Spring, so please check the Congress website for further updates: http://www.ibmc.up.pt/eursafe2016/. The names of the prominent group of keynote speakers will shortly be announced. If you have any further ideas for specialist workshops and other activities again please contact the organisers, through our own EurSafe Board Member, Dr Anna Olsson at eursafe2016@ibmc.up.pt.

After the initial teaching events at Cluj and Uppsala, a workshop that will allow opportunities to exchange and discuss teaching approaches has been organised and will run in parallel with the "Ethics and the future Veterinary Professional" Conference taking place at Utrecht University, The Netherlands, 19-20 May 2016. This teaching event brings together two networks, specifically the 'European Working Group on Veterinary Ethics' and our 'EurSafe Teaching Network'. The special 'teaching ethics' workshop session takes place on 19 May 2016, from 9:30 to 13:00 with lunch included. For more information on the conference, visit: www.uu.nl/en/events/ ethics-and-the-future-veterinary-professional or contact vethics2016@uu.nl. Alternatively contact directly the EurSafe Teaching Network coordinators for this event, Kate Millar or Bernice Bovenkerk.

Finally, the EurSafe Board Meeting will take place on 18 May 2016 in Utrecht, therefore if any EurSafe Members wish to raise any issues, propose new activities, or ask any questions, etc, please do not hesitate to contact the Board via our Secretary, Frank Meijboom. Please may we ask you to do this at least one week in advance (by 11 May 2016), thank you.

We wish you a 'blossoming' start to Spring and for the poets amongst us a little Shelley, "And Spring arose on the garden fair, Like the Spirit of Love felt everywhere ...", is always good to remind us of the joys and loves of Spring. We hope to see a few EurSafe Members in Utrecht in May, if not then Porto awaits us all in September. Wishing you all a good Spring!

Kate Millar on behalf of the Executive Board

March 2016



### **Conferences and Symposia**

#### APRIL 18

**International Symposium: Evidence of Animal Minds** 

Durham, UK

www.dur.ac.uk/mlac/news/displayevents/?eventno=24879

#### APRIL 20

#### IFST Spring Confernce 2016: Food Sustainability. Waste Not. Want Not

West Midlands, UK

www.ifst.org/events/ifst-spring-conference-2016-%E2%80%93-food-sustainability-waste-not-want-not

#### **APRIL 27 - 29**

#### 8th European Conference on Sustainable Cities & Towns

Bilbao, Spain

www.iclei-europe.org/events/?cmd=view&uid=289c3ef5

#### MAY 1 - 31

#### **Human/Animal Interaction**

Bristol, UK

www.dur.ac.uk/mlac/news/displayevents/?eventno=24879

#### MAY 8 - 10

# 7th International Conference on Localized Agri-food Systems: Challenges for the new rurality in a changing world

Stockholm, Sweden

www.sh.se/SYALStockholm2016#!/p3/ext/content.nsf/aget?openagent&key=sh\_konferens\_1\_en\_1433253046259

#### MAY 11 - 13

## 2nd International Conference on Food and Agricultural Engineering (ICFAE 2016)

Copenhagen, Denmark www.icfae.org

#### MAY 19-20

#### 'Ethics and the future Veterinary Professional' Conference

Utrecht University, The Netherlands

www.uu.nl/en/events/ethics-and-the-future-veterinary-professional

#### **MAY 25**

#### Animals under Capitalism: Art and Politics

Bristol, UK

www.bristol.ac.uk/ias/diary/conferences/animals-under-capitalism

#### MAY 25 - 27

#### Value(s) for whom? The Changing Role of Business in Society

Hamburg, Germany

www.wiso.uni-hamburg.de/fileadmin/sozialoekonomie/bwl/energie/GRONEN/GRONEN\_CfP.pdf

#### **JULY 6 - 7**

Persons as Animals: Understanding the Animal Bases of Agency, Perceptual Knowledge and Thought

Leeds, UK

www.leeds.ac.uk/arts/persons\_as\_animals

#### JUNE 16 - 17

People, Partnerships and Power. Building Alliances for Urban Sustainability transitions

Dresden, Germany

informed-cities.iclei-europe.org

#### JULY 11 - 14

The Animal. 34th Standing Conference on Organizational Symbolism (SCOS)

Uppsala, Sweden

scos2016.wordpress.com

#### **JULY 12 - 15**

Social and technological transformation of farming systems: Diverging and converging pathways

Harper Adams University, UK

www.harper-adams.ac.uk/events/ifsa-conference/#.VlomonveTBN

#### **JULY 24 - 27**

The Ethics of Eating Animals: Third Annual Oxford Animal Ethics Summer School

Oxford, UK

www.oxfordanimalethics.com/2015/10/call-for-papers-for-summer-school-2016

#### SEPTEMBER 28 - OCTOBER 1

13th Congress of the European Society for Agricultural and Food Ethics, Food Futures: Ethics, Science and Culture

University of Porto, Portugal www.ibmc.up.pt/eursafe2016

#### NOVEMBER 9 - 12

9th European Public Health Conference

Vienna, Austria

www.ephconference.org/future-conferences-128



#### **Books and Publications**

#### Ethik in der amtstierärztlichen Praxis. Ein Wegweiser

Authors: Dürnberger, Christian; Grimm Herwig; Weich, Kerstin

Paperback: 119 pages

Publisher: Self-published, Messerli Research Institute (2015)

Language: German

ISBN-13: 978-3-200-04267-4

Online Available: www.vetmeduni.ac.at/fileadmin/v/messerli/ethik/Wegweiser.pdf

## Veterinary & Animal Ethics : Proceedings of the First International Conference on Veterinary and Animal Ethics

Author: Wathes, Christopher; Corr, Sandra; May, Stephen; McCulloch, Steven; Whit-

ing, Martin (eds.) Hardcover: 318 pages

Publisher: Wiley-Blackwell (2012)

Language: English ISBN-10: 1118314808 ISBN-13: 978-1118314807

#### An Introduction to Veterinary Medical Ethics. Theory and Cases

Author: Rollin, Bernard Paperback: 332 pages

Publisher: Wiley-Blackwell (2006)

Language: English ISBN-10: 0813803993 ISBN-13: 978-0813803999

#### **Veterinary Ethics. An introduction**

Author: Legood, Gilles (eds.)

Paperback: 244 pages

Publisher: Continuum (2000)

Language: English ISBN-10: 0304705233 ISBN-13: 978-0304705238

#### Veterinary ethics: animal welfare, client relations, competition and collegiality

Author: Tannenbaum, Jerrold

Paperback: 650 pages Publisher: Mosby (1995) Language: English ISBN-10: 0815188404 ISBN-13: 978-0815188407

# The end of animal life: a start for ethical debate. Ethical and societal considerations on killing animals

Editors: Franck L.B. Meijboom and Elsbeth N. Stassen

Hardback: 272 pages

Publisher: Wageningen Academic Publishers

Language: English ISBN: 978-90-8686-260-3

### Contact

#### EurSafe Membership

#### **Administration**

#### Verenigingenbeheer Nederland

Spinozalaan 33 NL-2273 XC Voorburg the Netherlands tel. (+31) (0)70 4162940 fax (+31) (0)70 4162959 info@eursafe.ledenadmin.nl

#### President

#### **Matthias Kaiser**

Centre for the Study of the Sciences and the Humanities, University of Bergen, Norway

matthias.kaiser@svt.uib.no

#### Secretary

#### Franck L.B. Meijboom

Utrecht University, the Netherlands F.L.B.Meijboom@uu.nl

#### Treasurer

#### Anne-Marie Neeteson

Aviagen, the Netherlands aneeteson@aviagen.com

#### Vice-president

#### Kate Millar

Centre for Applied Bioethics, University of Nottingham, United Kingdom

kate.millar@nottingham.ac.uk

#### **Members**

#### **Thomas Potthast**

University of Tuebingen, Germany potthast@uni-tuebingen.de

#### Helena Röcklinsberg

Swedish University of Agricultural Science, Sweden helena.rocklinsberg@hmh.slu.se

#### Leire Escajedo

University of the Basque Country, Spain leire.escajedo@ehu.es

### Anna Olsson

Institute for Molecular and Cell Biology (BMC), Portugal olsson@ibmc.up.pt

#### **Herwig Grimm**

Messerli Research Institute University of Veterinary Medicine Vienna

herwig.grimm@vetmeduni.ac.at

#### **Diana Dumitras**

University of Agricultural Science and Veterinary Medicine Cluj-Napoca ddumitras@usamvcluj.ro

#### Stefan Aerts

Odisee University College / KU Leuven stef.aerts@odisee.be

#### Website

www.eursafe.org

#### EurSafe News Chief-editor

#### **Bernice Bovenkerk**

Wageningen University bernice.bovenkerk@wur.nl

#### **Editorial Board**

#### Mark Stein

Salford University, Manchester, UK markstein2010@live.co.uk

#### Samuel Camenzind

Messerli Research Institute Vienna, Austria samuel.camenzind@vetmeduni. ac.at

#### Jes Harfeld

Aalborg University, Denmark jlh@learning.aau.dk

#### **Raymond Anthony**

University of Alaska Anchorage, US ranthon1@uaa.alaska.edu

#### Kate Millar

University of Nottingham, United Kingdom kate.millar@nottingham.ac.uk

#### Layout

#### Luc Dinnissen

Nijmegen, the Netherlands www.studiods.nl