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CONGRESS IN SESSION

H.AMDT. 230 (A008) An amendment to prohibit funds in the bill to approve for human consumption, meats from downed animals. Amends: H.R. 2673

Offered on July 14, 2003, by Gary L. Ackerman (D-New York) and failed by recorded vote: 199 - 202 (Roll no. 357). [Editor's note: See article **USDA Issues New Regulations To Address BSE** on page 32.]

H.CON.RES. 90 Expressing the sense of the Congress that hunting seasons for migratory mourning doves should be modified so that individuals have a fair and equitable opportunity to hunt such birds.

Introduced March 11, 2003, by C. L. (Butch) Otter (R-Idaho) and referred to the House Committee on Resources. On March 14, it was referred to the

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Development of an Environmental Enrichment Program Utilizing Simple Strategies

by
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The use of environmental enrichment to improve the well-being of animals held in captivity is now commonly accepted in both zoo and research settings. In general, the goal of enrichment is to increase species-specific behaviors, decrease maladaptive behaviors, and promote the general well-being of the animal. Enrichment is defined by the American Zoo and Aquarium Association-Behavioral Advisory Group as " ...a process for improving or enhancing animal environments and care within the context of the inhabitants' biology and natural history. It is a dynamic process in which changes to structures and husbandry practices are made with the goal of increasing behavioral choices available to animals and drawing out their species-appropriate behaviors and abilities, thus enhancing animal welfare."[1] Animal research facilities are mandated by regulations to provide suitable enrichment and social interaction for the animals.[2,3] Through the development of a comprehensive environmental enrichment program that uses simple techniques that are applicable to a wide variety of species, facilities are able to meet the needs of the animals and the requirements of the regulatory agencies. This article will focus on the development and implementation of an enrichment program that is centered on the six categories of enrichment that have been developed at the University of Notre Dame: social interaction, nesting opportunities, perches and ramps, foraging opportunities, gnawing opportunities, and the use of food treats.

Program Development

Development of an environmental enrichment program must be initiated at the administrative level of the facility. A key step is for management to promote a paradigm shift as to how enrichment is viewed. Enrichment should be regarded as an essential component of the overall animal care program, equivalent to nutrition and veterinary care, not as an extra duty that can be foregone on busy days. Establishment of Standard Operating Procedures (SOPs) that integrate environmental enrichment into the daily husbandry and care of the animals will facilitate acceptance of the program by the staff and the principle investigators (PIs).[4]

Establishment of a formal environmental enrichment committee by the administration has been shown to be an effective tool in the development of a comprehensive environmental enrichment program.[5,6] The committee members are charged with developing, implementing, and assessing a program that encompasses all species housed in their facility. The committee consists of volunteers from the animal facility, so it may use the expertise of all levels of employees while empowering the animal care staff by providing an opportunity

Figure 1: The standard operating procedure for housing rats includes the establishment of compatible pairs or groups at the beginning of a project. Disrupting established social groups should be avoided.

for them to have a voice in how the animals in their charge are treated.

Responsibilities of the committee include exploring new enrichment options, assessing the feasibility of developing each novel idea, developing prototypes or line drawings of the device to present to the administration, PI , and the attending veterinarian (AV), implementing viable options, assessing the success of the techniques, recording all data, and reporting the findings to the field.[5,6] Predetermined dates for monthly meetings will assist the members of the committee in arranging their schedules to meet the committee demands.

Before exploring enrichment options, the behavioral needs and capabilities of each species must be determined. This requires extensive research into the natural behaviors of each species. Because species perceive their surroundings differently, their response to auditory, olfactory, and visual stimuli can play a significant role in their overall well-being. For laboratory bred animals, sub-strain and gender differences will also be influential in the choice of enrichment strategies. It is essential that enrichment not be presented to the animals indiscriminately. The committee members must evaluate the needs and resources of the institution, appraise the specific needs of the animals, and determine the most appropriate combination of enrichment strategies that will produce the expression of the desired natural behaviors of the animals.

Once the committee has established guidelines for enrichment of each group of animals, the SOPs for daily care and husbandry should be revised to include the enrichment strategies to be used. The SOP should reflect what techniques are to be used with each group, how often the enrichment will be replaced with novel devices, and the procedure and frequency to sanitize nondisposable devices. To facilitate the committee's assessment of the enrichment program, some form of recordkeeping in the animal room should be implemented. Notations should include not only the techniques used and the dates, but also any observations made by the primary care givers.

Environmental Enrichment Strategies

Social Interaction

Group housing should be the initial enrichment strategy used for all social species. Animals that are not typically solitary in their natural habitats should at least be housed in compatible pairs. (fig. 1) Singly housed animals are deprived of the opportunity to express many species-typical social behaviors. However, in the laboratory animal setting, there may be obstacles to providing group housing. For example, it can be very challenging to find compatible cage mates for male mice. Various inbred strains and active breeder males may be impossible to pair or group house. However, studies have shown that use of nesting materials transferred from dirty cage to clean cage reduces aggression instigated by cage changing, allowing the males to establish stable groups.[7] It was also demonstrated that the subordinate animal still prefers the company of the dominant cage mate over isolation.[8]

When socialization fails or if the experimental design dictates individual housing, additional enrichment strategies should be used. Placing novel enrichment devices in the cage adds complexity for the animal. Caging for these individuals should be arranged to allow the animals to receive olfactory, visual, and auditory cues from con-specifics.

Nesting Opportunities

Nesting opportunities are provided in two forms, nesting materials and shelters. Commercial available nesting materials

Figure 2: Dried corn husks are used as nesting material in the guinea pigs runs.

Enrichment cont'd on p.5

Transgenesis, Welfare and Humane Technique

by
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Since it began in the 1980s, the production of transgenic laboratory animals, chiefly mice, has grown remarkably. By the end of the 1990s, there were thousands of publications on the subject, and hundreds of thousands of animals being used (1, 2, 3). This large increase in one kind of laboratory animal experiments, when all other kinds are declining, has caused some concern. It is worth considering the relations between this new development, animal welfare, and humane technique.

The two main techniques of transgenesis are: microinjection of DNA into fertilized oocytes, which are then transferred to a pseudopregnant foster-mother, and, alternatively, injection of genetically altered embryonic stem cells into blastocysts (4). Van der Meer has discussed the various contingent welfare problems that can arise from each stage of these elaborate procedures, quite apart from the effect of the transgenesis itself (5, 6). She and her colleagues carried out ingenious experiments to investigate this, by using all the procedures of microinjection and stem cell techniques, *with or without effective genetic alteration* as the end-product. They found that the microinjection procedures have no major effects on the welfare of mice that survive the perinatal period; however, the stem cell technique had some pathological effects on development, apparently because cells of different origin were contributing to development of these mice (even if no genetic alteration was being produced) (7).

In spite of all this, it is generally thought that most evident welfare problems occur as a direct or indirect result of the transgenes (8). In this respect the two techniques differ. Microinjection can add an extra gene randomly to the genotype whereas the stem cell technique "involves a small modification of an existing gene in a precise and predetermined way," sometimes 'knocking out' this gene by switching *off* its function (9). The stem cell technique can thus produce much more refined and controlled phenotypic effects than natural breeding from mutants, which often have pleiotropic effects. It is true that both transgenesis techniques result in a small percentage of unintended insertional mutations (10). The fact remains that the intended transgenetic effect remains the *chief* source of welfare problems.

Mertens and Rülicke found that "In practice, altering the genotype has no health consequences for about 90 percent of transgenic strains" (11). Many mutants with defined mutations (produced by stem cell transgenesis), do not show an obvious phenotype and are only recognizable by molecular analysis, because of redundancies in the genetic system (12). According to Broom, "When the transgenic animal is modified so that it can produce a novel protein in its blood or milk, there may be no effect on its welfare" (13). Serious problems arise when the transgenic animals are designed to model carcinological problems or specific human diseases. Mertens and Rülicke have designed questionnaire and score sheets to characterize particular transgenic strain phenotypes from the health and welfare point of view (14).

As I observed in my FRAME Lecture in 1999, "We should be equally concerned with all the methods of making animals ill–breeding, transgenesis, or deliberate infection. However produced, deliberate pathology is a priority candidate for application of the Three Rs." (15)

To begin with Refinement, where symptoms occur, the control of chronic pain and distress is very important, most obviously by the proper use of analgesics (16, 17). But the ideal solution is the establishment of humane endpoints (18). In transgenic mice with over-production of growth hormone, the resulting kidney and liver defects can be studied, and therapeutic strategies tested, at a stage before the mouse need suffer from them, a great improvement over surgical methods of producing these defects. (19, 20). There is urgent need for more such cases to be looked for.

One serious contingent welfare problem (that may, as usual, impair experimental results) is that the mice are often kept under crowded conditions, or isolated singly in cages (21). Both conditions have harmful effects on welfare and on experimental results (22, 23, 24). Crowding should be avoided at all costs, and if isolation at some stages is an unavoidable accompaniment of the procedures used, it should be kept as brief as possible, permit sight and smell of companions, and perhaps be mitigated by human-mouse interaction, such as gentling (25).

As for Reduction, van der Meer has stated "the increased efficiency of research with transgenic animals may lead to a reduction in the use of animals in specific experiments." (26) For instance, "it has been suggested that transgenic mouse assays for carcinogenicity could have advantages over the chronic testing regimen by ...improving the accuracy of carcinogen identification and reducing the number of animals needed for each test from 400 to approximately 120 per compound." (27) Quality control and standardization of procedures, which of course reduce the number of animals needed, is a patently obvious *sine qua non* of transgenic techniques (28).

In 1961, William Lane-Petter produced his famous metaphor of the pipeline of animal experimentation. "For example,...in the days before the therapeutic use of vitamins, no animals were used for their assay: they had not entered the pipeline. Then came a period when the assays required the use of animals: they were in the pipeline... Finally, physical, chemical, or microbiological assays were developed and animals were no longer needed for this purpose: they had emerged from the pipeline" (29). Well, transgenic mice obviously only entered the pipeline when the new techniques were developed. Can we expect them gradually to emerge from the pipeline, in other words, to be Replaced?

There are some promising developments in this direction. Yeast cells transformed so that contained part of the human Huntington gene have been used to study the biochemistry of polyglutamine-related human diseases (30). Roditi, Vassella, and Salomone have used transgenic trypanosomes for the production of biologically-active recombinant proteins (31). They list nine technical advantages of this Replacement method. We have seen that when transgenic mammals are used for producing proteins, this in itself may not affect their welfare, but we have also seen that the transgenic procedures may have unintended contingent effects that are seriously harmful. So replacing them with protozoa is well worth while. The same authors have developed transgenic trypanosomes in vitro to be used in the testing of new drugs against sleeping sickness, which would otherwise only be possible using animal hosts. Here transgenesis itself serves Replacement.

The advantages listed by Roditi, Vassella and Salomone are examples of the general advantages of in vitro Replacement, which also eliminates all contingent sources of pain, distress, and disturbance of experimental results. Refinement can at least mitigate these disturbances.

In transgenesis, as in all kinds of biomedical experiments, science and humaneness go hand in hand. Here as always, "if we are to use a criterion for choosing experiments to perform, the criterion of humanity is the best we could possibly invent." (32)

References

1. Russell, W.M.S. (1999) . The progress of humane experimental technique. ATLA 27: 913-924, especially p. 919.
2. van den Meer, M. (2001). Transgenesis and animal welfare. Doctoral Thesis, University of Utrecht, p.12.
3. van der Meer, M. and L.F.M. van Zutphen (1997). Use of transgenic animals and welfare implications. In: van Zutphen, L.M. and M. van der Meer (eds.) Welfare Aspects of Transgenic Animals. Berlin: Springer, pp. 78-89, especially p. 82.
4. van der Meer, pp. 13-19.
5. Ibid., pp. 19-20.
6. van der Meer and van Zutphen, pp. 83-85.
7. van der Meer, pp. 117-118.
8. van der Meer and van Zutphen, p. 85.
9. van der Meer, p. 13.
10. Ibid., p. 22.
11. Mertens, C. and T. Rülicke (2002). Phenotype characterisation and welfare assessment of transgenic mice. 3R-Info-Bulletin No.19.
12. Muller, W. (1997). Introductions of defined mutations into the mouse germline. In: van Zutphen, L.F.M. and M. van der Meer (eds.), Welfare Aspects of Transgenic Animals. Berlin: Springer, pp. 18-25, especially 22.
13. Broom, D.M. (1997). Assessing the welfare of transgenic animals. In: van Zutphen, L.F.M. and M. van der Meer (eds.), Welfare Aspects of Transgenic Animals. Berlin: Springer, pp. 58-67, especially p. 61.
14. Mertens and Rülicke.
15. Russell, p. 919.
16. Flecknell, P. and A. Waterman-Pearson (2000). Pain management in animals. London: W.B. Saunders.
17. Lord Soulsby and D. Morton (2001). Pain: its nature and management in man and animals. London: Royal Society of Medicine Press.
18. Hendriksen, C.F.M. and D.B. Morton (1999). Humane endpoints in animal experiments for biomedical research. London: Royal Society of Medicine Press.
19. Wolf, E. and R. Wanke (1997). Growth hormone overproduction in transgenic micea: phenotypic alterations and deduced animal models. In: van Zutphen, L.F.M. and M. van der Meer (eds.), Welfare Aspects of Transgenic Animals, Berlin: Springer, pp. 26-47, especially p. 4l.
20. Russell, p. 919.
21. van der Meer, p. 21.
22. Russell, C. and W.M.S.Russell (1985). Conflict activities in monkeys. Social Biology and Human Affairs 50: 26-48.
23. Chance, M.R.A. and W.M.S.Russell (1997). The benefits of giving experimental animals the best possible environment. In: Reinhardt, V. (ed.), Comfortable quarters for laboratory animals, Washington, D.C.: Animal Welfare Institute, (8th ed.), pp. 2-14.
24. Russell, W.M.S. (2002). The ill-effects of uncomfortable quarters. In: Reinhardt, V. and A. Reinhardt (eds.), Comfortable quarters for laboratory animals. Washington, D.C.: Animal Welfare Institute, (9th ed.), pp. 18-26.
25. Gariepy JL, Rodriguiz RM, Jones BC. (2002). Handling, genetic and housing effects on the mouse stress system, dopamine function, and behavior. Pharmacology Biochemistry and Behavior 73(1):7-17.
26. van der Meer, p. 11.
27. Combes, R. (2001). Alternatives to the carcinogenetic bioassay. FRAME News 52: 5.
28. Costa, P. (1997). Production of transgenic animals: practical problems and welfare aspects. In: van Zutphen, L.F.M. and M. van der Meer (eds.), Welfare Aspects of Transgenic Animals, Berlin: Springer, pp. 68 - 77, especially p. 71.
29. Lane-Petter, W. (1961). Provision of laboratory animals for research. Amsterdam: Elsevier, p. 133.
30. Ellis, C. (2002). Model behaviour. Drug Discovery 1: 6-7.
31. Roditi, I., E. Vassella and J.-Y. Salomone (2000). Transgenic protozoa as an alternative to transgenic animals. 3R-Info-Bulletin No.14.
32. Russell, W.M.S. and R.L. Burch (1959). The principles of humane experimental technique. London: Methuen, p. 157.

Center For Veterinary Medicine

U. S. Food and Drug Administration

May 19, 2003

Reminder to Scientists Involved in Research With Genetically Engineered Animals

The Food and Drug Administration (FDA) has sent letters to all land-grant universities reminding those involved in research involving genetic engineering in animals that such research may need to be performed under the authority of an investigational new animal drug exemption (INAD) or a similar provision. The INAD regulations are published in the Code of Federal Regulations, Title 21, Part 511.1(b) [http://www.access.gpo.gov/nara/cfr/waisidx_02/21cfr511_02.html].

As part of the INAD submission, those conducting this type of research must document their plans regarding the disposition of all investigational animals after their participation in the study is completed. This is important in the case of animal species commonly used for food.

FDA sent these letters to help prevent another situation similiar to one that occurred recently at the University of Illinois at Urbana-Champaign. FDA has determined that pigs involved in certain genetic engineering studies at the university were possibly not properly disposed of, and instead entered the food supply. [http://www.fda.gov/bbs/topics/ANWERS/2003/ANS01197.html]

To date, FDA has not permitted genetically engineered animals to be placed into the human food supply. Likewise, only in certain circumstances has the FDA allowed animals from genetic engineering investigations to be rendered and incorporated into animal feed.

Researchers who have questions about their responsibilities may contact John Matheson at jmatheso@cvm.fda.gov or (301) 827-6649 for further information. They may also want to consult the FDA Center for Veterinary Medicine (CVM) Biotechnology home page at http://www.fda.gov/cvm/biotechnology/bio_drugs.html. A copy of the letter sent to land– grant universities is posted on this same page.

Enrichment cont'd from p.2

Figure 3: Ramps constructed of acrylic, PVC piping, and artificial turf provide the bullfrogs a terrestrial area in their flow-through tanks.

include Enviro-dri, Alpha Pad, Alpha-Nest (Shepherd Specialty Papers, Inc., Kalamazoo, Michigan), dried corn husks, and Nestlets (Ancare, Bellmore, New York). (Fig. 2) Common household items such as paper tubes, paper towels, and facial tissues have also been used successfully. Shelters come in a variety of forms, both disposable and reusable. Examples include Mouse Igloos, Mouse and Rat Tunnels, Rodent Crawl Ball (Bio-Serv, Frenchtown, New Jersey), PVC tubes, Shepherd Shacks (Shepherd Specialty Papers, Inc., Kalamazoo, Michigan) and old caging that is inverted with cut-out openings.

For mice, it has been demonstrated that the addition of nesting materials satisfies a behavioral need in the animals by providing them the chance to structure or control their environment. It also provides hiding areas, which alleviates social tension among the cagemates. However, the shelters have been shown to increase the occurrences of aggressive behaviors when used with male mice.[7]

Perches and Ramps

Many species benefit from use of perches or ramps. Addition of these devices adds to the complexity of the cage and the overall lateral, or floor, space. When exploring housing options for wild-caught bullfrogs, scientists recognized that frogs have both terrestrial and aquatic needs.[9] Scientists tried to provide a naturalistic environment by placing large pieces of limestone in a shallow pool of water in the tanks. However, when the frogs were startled by someone entering the room, they would hop around and bump their heads, especially in the rostal area, on the stones, causing abrasions. Some frogs developed infections in the abraded areas. It was then decided to try an artificial perch constructed in-house with plexiglass and artificial turf[9] (fig. 3). These perches have been successfully used in tanks of green crabs, as well as bullfrogs. In addition, PVC pipes have been used as perches for tree frogs. Wooden dowels placed in the cages of laying hens facilitate display of natural roosting behavior.

Foraging Opportunities

In the wild, animals must use visual, auditory, and olfactory capabilities to locate and acquire their food. However, for captive animals, food is presented in

Figure 4: A variety of puzzle feeders are commercially available for non-human primates.

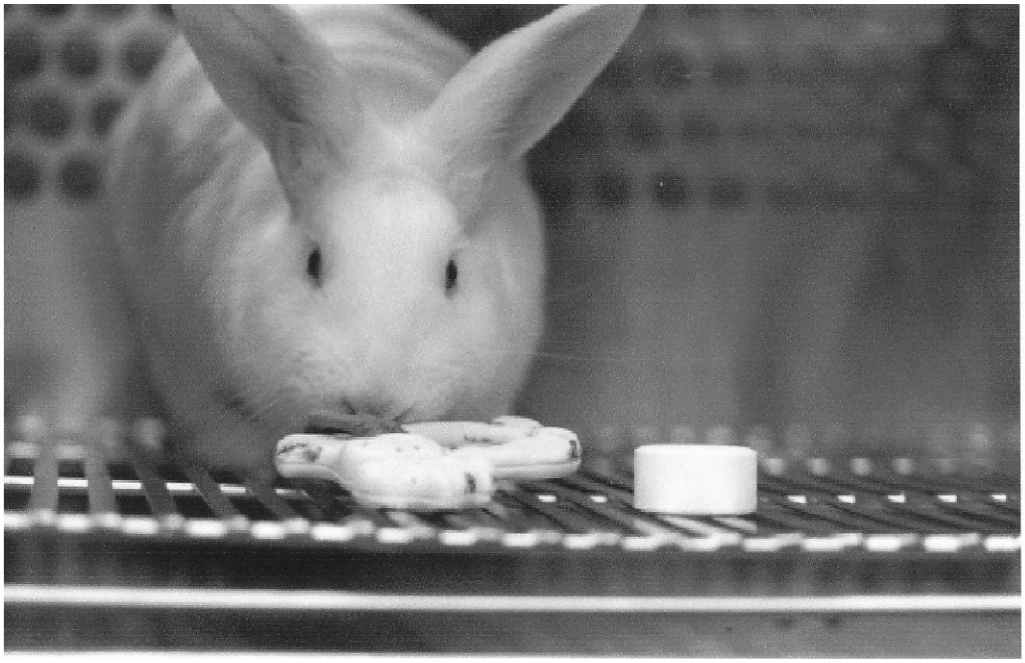

Figure 5: Baby rattles are provided to the rabbits to encourage play and exploration.

ways that are cost-effective and convenient for staffing. Animals prefer to search for their food, even when food is readily available.[10] Simple foraging techniques can enhance the overall well-being of the captive animals. The need to forage for food presumably increases mental stimulation and increases locomotion and extraction efforts, thus increasing the time captive animals spend on species-appropriate behaviors.

oraging opportunities can be offered by dispersing food within the enclosure, by increasing the difficulty in acquiring the food such as by placing it in puzzle feeders for primates (fig. 4), locating it in areas within the enclosure so the animal must climb or reach for it, and by increasing search time by placing food in substrates such as sawdust or wood chips. Changes in food preparations (e.g., for primates, leaving bananas in the peels, peanuts in the shell, and giving fruits whole rather than chopped) have been shown to increase the time spent on feeding, increase overall food intake, and increase dietary diversity as animals will eat some foods presented whole that they refuse to eat when presented chopped.[11]

Many commercial devices are available to enhance foraging opportunities for primates. For rodents and guinea pigs, simply scattering treats within the cage substrate provides foraging opportunities. The guinea pigs are provided foraging of scattered treats only on the day of complete bedding change to minimize the potential fecal contamination of the treats. The choice of corncob bedding for mice and rats easily provides a foraging opportunity. There are small bits of corn within the bedding, and the animals soon learn that at each cage changing, there is food to be found in the bedding. The placement of artificial turf in chick brooders provides a surface to scatter feed and allows the chicks to display their natural scratch-and-peck feeding behavior.

Gnawing Opportunities/Toys

The placement of novel items in the enclosure will stimulate investi-

Figure 6: Fresh parsley is the guinea pigs' favorite food treat.

gative and manipulative behaviors of most animals used in biomedical research. Novel items have been shown to increase activity and decrease maladaptive behaviors in captive mammals.[12] However, care must be taken in selecting items to be used. Items must be durable, nontoxic, sanitizable, and constructed with no sharp edges, no areas that can entrap limb or digit, and no small moveable parts that can be easily disassembled and swallowed by the animals. There are many products made specifically for the enrichment of primates and other laboratory species that meet these specifications.

In our facility we have used baby rattles in the rabbit cages for the past 10 years without any incidence of ingestion or injury (fig. 5). We also use Bunny Blocks (Bio-Serv, Frenchtown, New Jersey) for the rabbits. We provide mice that have been identified as food grinders with a Nylabone (Bio-Serv, Frenchtown, New Jersey) or a wooden block (Toy Box Wooden Treats for Exotic Birds, Otto Environmental, Milwaukee, Wisconsin) in the bottom of the food hopper, allowing them to satisfy their need to gnaw without wasting food.

Food Treats

Treats can be used as enrichment for many species. The key is not to provide them on a scheduled basis. Animals quickly learn routines and come to anticipate the treat. Once the treat is expected, it is no longer an enrichment, but an expectation. Also, the treats must not interfere with the nutritional balance of the diet. Many animals will prefer the treats over their regular diet. They will go off feed, waiting to get their treats. This has been seen often in rabbits that were provided treats to enhance their appetite.

Provision of treats should be included in the SOP. Caregivers easily become enchanted with the reaction they get from the animals when treats are given. They provide them more and more often until the animals come to expect treats every time someone enters the area. Again, this is no longer an enrichment, but an expectation.

In our facility, the guinea pigs receive greens on an unscheduled basis, their favorite appearing to be parsley (fig. 6). The local grocery store provides free parsley with the purchase of any produce. The dining hall at our institution also provides fruits and vegetables that we use for treats for the guinea pigs, rabbits, and primates.

Conclusion

The goal of this article was to provide ideas and strategies that are easy and cost-efficient to implement. Program development, although initiated from the administration, can be improved by the input of facility staff at all levels. It is a continual process as all enrichment strategies are assessed and re-evaluated. New options should be continually explored. As enrichment is integrated into the SOPs for the daily care and husbandry of laboratory animals, it will be viewed as an essential component of animal husbandry, provided as automatically as food, water, and veterinary care.

Acknowledgments

I wish to acknowledge the entire animal care staff at the Freimann Life Science Center for their dedication to the environmental enrichment program. I also want to express my appreciation to Mark Suckow, DVM, the facility director for his continual support of the Environmental Enrichment Committee and his editorial assistance on this article.

References:

1. ————(2002). The latest in definitions. The Shape of Enrichment 11(1): 17.
2. National Academy of Science (1996). Guide for the Care and Use of Laboratory Animals, National Academy Press: Washington, D.C.
3. 9 Code of Federal Regulations, Part 3 (2004), National Archives and Records Administration: Washington, D.C.
4. Johnson, A. (1998). Conceptions of enrichment lead to a new model of animal care. In Proceedings of the Third International Conference on Environmental Enrichment, Hare, V.J. and Worley, K.E. (eds.), The Shape of Enrichment, Inc.: San Diego, p. 49-60.
5. Stewart, K. and S. Raje (2001). Environmental enrichment committee: Its role in program development. Lab Animal 30(6): 50-52.
6. Stewart, K. (in press). The Environmental Enrichment Committee, In Proceedings from the Fourth World Congress on Alternatives and Animal Use in the Life Sciences, Aug 11-15, 2002. New Orleans, LA.
7. Van Loo, P.L.P, et al (2002). Influence of cage enrichment on aggressive behaviour and physiological parameters in male mice. Applied Animal Behaviour Science 76: 65-81.
8. Van Loo, P.L.P., et al (2001). Do male mice prefer or avoid each other's company? Influence of hierachy, kinship, and familiarity. Journal of Applied Animal Welfare Science 4(2): 91-103.
9. Bang, D. and V. Mack (1998). Enriching the environment of the laboratory bullfrog (Rana catesbeiana) Lab Animal 27(6): 41.
10. Mench, J.A. (1998). Environmental enrichment and the importance of exploratory behavior. In Second Nature: Environmental Enrichment for Captive Animals, Shepherdson, D.J., Mellen, J. D., and Hutchins, M (eds), Smithsonian Institute Press: Washington, D.C., p. 30-46
11. Lindburg, D.G. (1998). Enrichment of mammals through provisioning. In Second Nature: Environmental Enrichment for Captive Animals, Shepherdson, D.J., Mellen, J. D.,and Hutchins, M (eds), Smithsonian Institute Press: Washington, D.C., p. 262-276.
12. Baer, J.F. (1998). A veterinary perspective of potential risk factors in environmental enrichment. In Second Nature: Environmental Enrichment for Captive Animals, Shepherdson, D.J., Mellen, J. D.,and Hutchins, M (eds), Smithsonian Institute Press: Washington, D.C., p. 277-301.

Home Office Guidance Note - Water and Food Restriction for Scientific Purposes

Animals (Scientific Procedures) Division
Published:13 November 2003
http://www.homeoffice.gov.uk/docs2/waterfoodguidance.html

[Editor's note: This guidance is from the United Kingdom's Home Office for UK licence holders. US animal care and use committees may find it a useful resource.]

Summary

Where possible traditional food and water restriction paradigms should be replaced by reward paradigms and only if this is found, or is known, to be inappropriate should restriction paradigms be considered. As a general rule, when undertaken for a scientific purpose, all food restriction should be kept to the absolute minimum required to achieve the scientific objective. Project Licence authority which clearly justifies the work and the benefits that should result will be required for:

all work which restricts food intake to a point where weight loss, or reduced weight gain, of more than 15% of age and sex matched non-deprived animals might occur or
all work where animals are to be maintained below 85% of body weight for age and sex matched controls fed ad libitum.

This guidance does not apply to simple dietary studies in farm animals, which will be covered separately.

Water should be made available ad libitum at all times. Water withholding is not regulated when it is removed as part of recognised husbandry practices. Regulation under the Animals (Scientific Procedures) Act 1986 (ASPA) is necessary when the programme of work to be applied requires water withdrawal that may result in pain, suffering distress or lasting harm and is applied for a scientific purpose.

For Guidance

With respect to food restriction, current Home Office guidance, as applied to Schedule 2 listed species, and ruminants, recommends that as long as no additional factor other than food deprivation is applied exceeding the following food deprivation times for scientific purposes requires Project Licence authority:

16 hours mice, young hamsters and rats under 100gms
24 hours rabbits, rats, dogs, cats and non-human primates weighing over 100gms
See note 1 adult ruminants and other farm animals (including chickens and turkeys)

Note 1: The Home Office considers that any restriction of food and water for a scientific purpose which would breach other welfare legislation (e.g. The Welfare of Farmed Animals (England [SI 1870] or Northern Ireland [SI 270] Regulations) or current DEFRA Welfare Codes for that species will require regulation under ASPA.

Note 2: Food restriction should be avoided in guinea pigs, ferrets and shrews.

Note 3: The deprivation of food or water combined with one or more additional factor(s) (e.g. high protein diet, concurrent disease) may require a reduction in these times if additional suffering is considered likely.

Note 4: Authority is also required if animals are exposed to repeated daily periods of deprivation shorter than detailed in the table above.

Licensees using water restriction should keep the following records for each animal:

Daily water consumption, food consumption, body weight
Frequency of surgical intervention (if appropriate)
Frequency of infections/treatments (if appropriate)
Duration of study and future plans for the animal (if approprie)
A record of all treatments given

Unless there is a veterinary contraindication or a justified scientific reason for not doing so, animals should be returned to ad libitum water at least 24 hrs before a procedure that requires anaesthesia and should remain on ad libitum water for at least 48 hrs after the conclusion of the procedure. Water provision must also be increased when an animal:

is showing clinical signs of dehydration
is treated for disease
is exhibiting a weight loss
is young and is failing to gain a reasonable weight increase during the time when it should be growing
is considered, by a veterinary surgeon, to be compromised due to some other circumstance. ■

Veterinarians and Biomedical Researchers Agree Animals Feel Pain

Group Calls for Improved Research and Treatment of Pain Across Species

NEW YORK (March 1, 2004)— A diverse group of veterinarians and biomedical researchers in animal pain today published a consensus statement that asserts animals feel pain. The statement, appearing in the March 1 issue of Journal of the American Veterinary Medical Association, calls for an aggressive research agenda to learn how to better recognize and treat animal pain. The group anticipates that an important benefit of such an approach will be improved treatment of pain in humans.

Although the statement that animals feel pain may seem self-evident, recent advances in understanding the science of pain and its treatment are still limited to a few species of domestic and laboratory animals, and the consensus group wanted to broaden their statement to address all animals. The caveat, according to the group, is that scientists still lack the information to determine whether all species, including humans, feel pain with the same qualities and intensities.

"We hope this report will help to dispel any lingering notions that animals do not feel pain," said John W. Ludders, a veterinarian specializing in anesthesia and analgesia at Cornell University in Ithaca, New York. "Like infants and nonverbal adults, animals cannot express their pain through language, but that doesn't mean that they don't feel it," he said.

"Understanding pain as a continuum across species, that it doesn't occur only in humans, will enable us to treat pain more effectively in both," said Joanne Paul-Murphy, a veterinarian specializing in zoological medicine at the University of Wisconsin.

Ludders and Paul-Murphy are lead authors of the special report that summarizes the consensus reached by 29 international experts, including pediatricians, ethicists, scientists and veterinarians specializing in cats, birds, amphibians, horses, laboratory animals, and others. The consensus emerged from an international workshop sponsored by The Mayday Fund, a foundation dedicated to alleviating the incidence, degree and consequence of human physical pain.

Suffering or Reacting

The old notion of pain in animals holds that animals are unable to experience the emotional stress and suffering that accompanies human pain. Instead, it assumes that animals "react" to pain signals that reach the animal brain, "but only that level of the brain that mediates a reflex response, not the higher centers where there is awareness and suffering," Ludders explains.

However, increasingly specialized knowledge of brain physiology and anatomy has shown that vertebrate animals have many of the same basic brain structures and chemicals involved in responding to pain as do human beings. In addition, studies of behavior show that animals not only experience pain, but can remember those experiences, and try to avoid their repetition.

"Animals often communicate in ways that are unfamiliar to people," Ludders said. "When we recognize these behaviors, we can see that animals experience pain."

Need for Animal Pain Scales

The report points out that a main gap in the ability to treat animals for pain is the lack of agreed upon standards for assessing that pain.

"We are in the infancy of measuring or quantifying pain in animals," said Sheilah Robertson, a veterinarian who specializes in anesthesia at the University of Florida.

In contrast, pediatricians have more than 26 pain scales available to understand the pain felt by babies and young children.

To address this problem, the report presents guidelines for developing animal pain scales. It suggests taking into account patient characteristics such as species, breed, environment, rearing conditions, developmental stage, age, and sex, as well as the cause of the pain, and the body region affected.

"Until you can measure pain, you cannot know you are treating it," said report co-author Robertson.

As one small example of the need for accurate pain scales, she notes that there are more than 70 million cats in the United States, and nearly every one will have an elective surgery, such as being neutered or declawed. Yet there is no agreed upon approach to measuring and treating the pain that accompanies these procedures.

"Consider all the other species of animals in addition to our domestic animals – birds, reptiles, zoo animals – we don't understand the behavior of each of these species well enough to be able to recognize their expression of pain, so we give them the benefit of the doubt and assume they can feel pain when undergoing similar physical experiences that cause pain in humans, Paul-Murphy said. This allows us to try our best to alleviate and treat the pain."

Learning from Animals

Animals engaged in biomedical research in the United States and many other countries are routinely treated with pain relief medications because veterinary medical ethics and good science demands humane treatment and federal laws have been established to require it.

The report urges veterinary and human researchers to study pain that results from naturally occurring diseases in animals. These diseases, such as bone cancer in dogs, may serve as models of similar painful conditions in humans. Currently, however, medical researchers create animal models in the laboratory by injecting bone cancer cells into laboratory mice. Although such research is done using humane standards of animal care and treatment, these models may not fully duplicate all aspects of the naturally occurring disease.

"The study of naturally occurring painful conditions in animals may prove more helpful to humans because these conditions may more closely resemble human conditions, and they have the added benefit of helping the animal species," Ludders said.

The report calls on others to join a collaborative, multidisciplinary effort to treat animal and human pain, beginning with the assumption that animals feel pain.

Joining Joanne Paul-Murphy, John W. Ludders and Sheilah A. Robertson as authors of the report are James S. Gaynor and Peter W. Hellyer at Colorado State University in Fort Collins; and Pauline L. Wong at the University of California, Davis. The special report is available to AVMA members at www.avma.org/publications. For more information, contact: Carol Schadelbauer or Emily Fishkin at (301) 652-1558

Traveling with animals?

Here are some resources to get you going and get you back

U.S. Centers for Disease Control and Prevention

Importation of Pets and Other Animals Into the United States

http://www.cdc.gov/ncidod/dq/animal.htm

CDC has regulations governing importation of the following pets: dogs, cats, turtles, and monkeys. Pets taken out of the United States are subject, upon return, to the same regulations as those entering for the first time. The U.S. Government does not require general certificates of health for pets. However, because airlines sometimes require health certificates for pets traveling with them, you should check with your airline before your travel date.

U.S. Department of Agriculture

Animal and Plant Health Inspection Service

Traveling With Your Pet

http://www.aphis.usda.gov/oa/pubs/petravel.html

Dogs, cats, and most other warm-blooded animals transported in commerce are protected by the Animal Welfare Act (AWA). The U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) enforces this law. APHIS's shipping regulations help ensure that people who transport and handle animals covered under the AWA treat them humanely. Airlines and other shippers are affected by regulations established to protect the well-being of animals in transit.

Includes information on–

- Trip preparation for air transportation
- Trips outside the continental United States
- Bird travel abroad
- Airline procedures
- Pet travel requirements (Note: Dogs and cats must be at least 8 weeks old and must have been weaned before traveling by air.)
- Feeding and watering while traveling
- Other helpful hints
- If your pet gets lost

Import Procedures for a Pet Bird (Non-U.S. Origin) Entering the United States

http://www.aphis.usda.gov/NCIE/pet-bird-non-us.html

USDA defines pet birds as those that are imported for personal pleasure of their individual owners and are not intended for resale.

This checklist includes–

- Requirements
- How to obtain a USDA import permit and reserve space at a quarantine center
- USDA quarantine centers and ports of entry
- Exporting country veterinary health certificate requirements
- Fish and Wildlife Service permit information

Importation of Pets and Other Animals Into the United States

http://www.aphis.usda.gov/NCIE/pet-info.html

The U.S. Department of Agriculture has certain restrictions on the importation of dogs.

International Animal Export Regulations

http://www.aphis.usda.gov/vs/ncie/iregs/animals/

The United States has minimal requirements for animals to be exported to other countries. Your area veterinarian-in-charge can provide you with current regulations, tests, and inspections that are required. Each country may have other specific health requirements for entry of animals. These requirements are established by the importing country, not the United States. Other countries may also have their own certificate format for export. Since export requirements frequently change, obtain the current export requirements from the Veterinary Service office in your area before each shipment.

Guidelines for the Return of U.S. Birds (Being Revised)

Please contact USDA, APHIS for permit information at 301-734-3277.

U.S. Department of Homeland Security

U.S. Customs and Border Protection

Pets and Wildlife Licensing and Health Requirements

http://www.cbp.gov/ImageCache/cgov/content/publications/pets_2epdf/v1/pets.pdf

Travelers frequently inquire about taking their pets with them to the United States. All such importations are subject to health, quarantine, agriculture, wildlife, and customs requirements and prohibitions. Pets, except for pet birds, taken out of the United States and returned are subject to the same requirements as those entering for the first time. Returning U.S.-origin pet birds are subject to different import restrictions than pet birds of non-U.S. origin entering the United States for the first time. For more information on importing pet birds into the United States, see the section on Birds or USDA's website at www.aphis.usda.gov/NCIE.

Pets excluded from entry into the United States must either be exported or destroyed. While awaiting disposition, pets will be detained at the owner's expense at the port of arrival. The U.S. Public Health Service requires that pet dogs and cats brought into this country be examined at the first port of entry for evidence of diseases that can be transmitted to humans. Dogs coming from areas not free of rabies must be accompanied

by a valid rabies vaccination certificate. Turtles are subject to certain restrictions, and monkeys may not be imported as pets under any circumstances.

The U.S. Fish and Wildlife Service (USFWS) is concerned with the importation, trade, sale, and taking of wildlife and with protecting endangered plant and animal species. Some wildlife species of dogs, cats, turtles, reptiles, and birds, although imported as pets, may be listed as endangered. Endangered and threatened animal and plant wildlife, migratory birds, marine mammals, and certain dangerous wildlife may not be imported without special Federal permits. Sportsmen will find the section on wildlife of particular interest, since game birds and animals are subject to special entry requirements.

We suggest that you also check with State, county, and municipal authorities for local restrictions on importing pets. Some airlines require health certificates for pets traveling with them. You should check with your airline prior to your travel date.

If you are taking a pet to another country, contact that country's embassy in Washington, D.C., or its nearest consular office for information on any requirements that you must meet.

Transportation Security Administration

Security Screening–Pets

http://www.tsa.gov/public/interapp/editorial/editorial_1036.xml

Security procedures do not prohibit you from bringing a pet on your flight. You should contact your airline or travel agent, however, before arriving at the airport to determine your airline's policy on traveling with pets.

If you are planning to bring an animal onboard the plane with you, you will need to present the animal to the security checkpoint screeners for screening. You may walk your animal through the metal detector with you. If this is not possible, your animal will have to undergo a secondary screening, including a visual and physical inspection.

Your animal will NEVER be placed through an x-ray machine. However, you may be asked to remove your animal from its carrier so that the carrier can be placed on the x-ray machine.

Service Animals

http://www.tsa.gov/public/interapp/editorial/editorial_1056.xml

If you have a service animal, you are encouraged to inform the screener that the animal accompanying you is a service animal and not a pet. This will provide you with an opportunity to move to the front of the screening line since the screener may need to spend more time with you.

U.S. Department of the Interior

U.S. Fish and Wildlife Service

Facts About Federal Wildlife Laws

http://training.fws.gov/library/Pubs9/wildlife_laws.pdf

This booklet is a guide to Federal laws that apply to the importation, exportation, trade, and sale of wildlife, including live and dead animals and animal parts and products. If you're a tourist traveling in foreign countries, a hunter planning a trip abroad, an importer or exporter, a scientist or an educator, the information in this booklet will help you comply with wildlife protection laws and make your trip the positive experience you want it to be. By observing the laws, you'll help preserve the world's wildlife resources and avoid delays in clearing Customs.

National Park Service

Visiting Parks With Your Pets

http://www.nps.gov/pub_aff/e-mail/pets.htm

In general, pets are permitted but must be restrained either on a leash not exceeding 6 feet in length, caged, or crated at all times. Park superintendents and managers have the discretion to further restrict areas open to pets (trails, buildings, campgrounds may be off limits). You can access information on the parks you plan to visit by going to the "Visit Your National Parks" website at http://www.nps.gov/parks.html. It is always best to check with the park(s) you are planning to visit for specific information and restrictions for pets.

U.S. Department of Transportation

New Horizons—Information for the Air Traveler With a Disability

Service Animals

http://airconsumer.ost.dot.gov/publications/horizons.htm#ServiceAnimals

Carriers must permit dog guides or other service animals with appropriate identification to accompany an individual with a disability on a flight. Identification may include cards or other documentation, presence of a harness or markings on a harness, tags, or the credible verbal assurance of the passenger using the animal.

If carriers provide special information to passengers concerning the transportation of animals outside the continental United States, they must provide such information to all passengers with animals on such flights, not simply to passengers with disabilities who are traveling with service animals.

Carriers must permit a service animal to accompany a traveler with a disability to any seat in which the person sits, unless the animal obstructs an aisle or other area that must remain clear in order to facilitate an emergency evacuation, in which case the passenger will be assigned another seat.

Service Animal Guidance

http://airconsumer.ost.dot.gov/rules/20030509.pdf

This document refines DOT's previous definition of service animal by making it clear that animals that assist persons with disabilities by providing emotional support qualify as service animals and ensuring that, in situations concerning emotional support animals, the authority of airline personnel to require documentation of the individual's disability and the medical necessity of the passenger traveling with the animal is understood.

Transporting Live Animals

http://airconsumer.ost.dot.gov/publications/animals.htm

Over 2 million pets and other live animals are transported by air every year in the United States. Federal and State governments impose restrictions on transporting live animals. In

Federal Aviation Administration

Traveling With Pets in the Passenger Cabin
http://www.faa.gov/avr/afs/cabinsafety/pets/pets.htm

The Federal Aviation Administration (FAA) allows each airline to decide whether it will allow you to travel with your pet in the passenger cabin. If an airline does allow you to bring your pet into the cabin, FAA considers your pet container to be carry-on baggage and you must follow all carry-on baggage rules.

Canadian Food Inspection Agency

Pet Imports
http://www.inspection.gc.ca/english/anima/heasan/import/petse.shtml

The National Animal Health Program is responsible for establishing import requirements for animals and animal products coming into Canada, including pets. The Canadian Food Inspection Agency has prepared basic guidelines for frequently imported pets. The pet import requirements outlined in these pages are current as of March 1, 2004.

Mexico

U.S. Department of State Tips for Travelers to Mexico
http://travel.state.gov/tips_mexico.html

U.S. visitors to Mexico may bring a dog, cat, or up to four canaries by presenting the following certificates at the border: (1) a pet health certificate signed by a registered veterinarian in the United States and issued not more than 72 hours before the animal enters Mexico and (2) a pet vaccination certificate showing that the animal has been treated for rabies, hepatitis, pip, and leptospirosis.

Certification by Mexican consular authorities is not required for the health or vaccination certificate. A permit fee is charged at the time of entry into Mexico.

Air Transport Association

Air Travel for Your Dog or Cat
http://www.airlines.org/public/publications/display1.asp?nid=926

Includes information on–
How to ship by air
Questions to consider when your animal travels
- Is your pet old enough?
- Is your pet healthy?
- Use of tranquilizers

Prepare in advance
- Do you have the right kennel?
- Is your animal comfortable in the travel kennel?
- When your pet travels, the kennel should: [Labeling, size, food/water dishes, etc.]
- Have you made advance arrangements for your pet?
- Traveling outside the United States?

Ready for flight
- Acceptance of animals
- Food and water
- Arrival and check-in

Interline transfer of animals
Helpful tips

International Air Transport Association

Welcome to the Travelers' Pets Corner
http://www.iata.org/cargo/operations/liveanimals/pets.htm

This site provides a valuable checklist of things you must do to ensure a smooth and safe trip for your dog or cat on your international journey. Also provides information on pets traveling alone.

Includes additional information on
Tips for shipping your pet
Shipping your pet as cargo?
Traveling with pets: simplified EU system approved
Websites containing information on traveling with your pet in the following countries:
- Australia
- Canada
- Germany
- Hong Kong
- Japan
- New Zealand
- Sweden
- Switzerland
- United Kingdom
- USA

AIRLINES

For a list of resources from airlines around the world go to the AWIC website at:

http://www.nal.usda.gov/awic/companimals/travelpets.htm#airlines

Available from Universities Federation for Animal Welfare

Environmental Enrichment for Captive Animals

Robert J. Young

Environmental enrichment is a simple and effective means of improving animal welfare in any species–companion, farm, laboratory and zoo. For many years, it has been a popular area of research, and has attracted the attention and concerns of animal keepers and carers, animal industry professionals, academics, students, and pet owners all over the world.

This book is the first to integrate scientific knowledge and principles to show how environmental enrichment can be used on different types of animal. Filling a major gap, it considers the history of animal keeping, legal issues, and ethics, right through to a detailed exploration of whether environmental enrichment actually works, the methods involved, and how to design and manage enrichment program.

Key Features:

- Draws together a large amount of research on different animals
- Provides detailed examples and case studies
- An invaluable reference tool for all those who work with or study animals in captivity
- Provides scientific evidence that environmental enrichment does improve animal welfare and also importantly describes practical ways to implement environmental enrichment
- The first time that the science and practice have been integrated together
- Written in such a way as to appeal to both academics and practitioners

Contents:

- Environmental Enrichment: an Historical Perspective
- Why Bother with Environmental Enrichment?
- Does Environmental Enrichment Work?
- Proactive versus Reactive use of Environmental Enrichment
- Designing an Enrichment Device
- The Enrichment Programme
- Enrichment for Different Categories of Animals
- Food and Foraging Enrichment
- Social Environmental Enrichment
- Housing
- Furniture, Toys and Other Foibles
- Designing and Analysing Enrichment Studies
- Information Sources about Environmental Enrichment
- References

228 pages, paperback. ISBN 0 632 06407 2. Published September 2003. Normal price £27.50 Special UFAW members price £21.00. See www.ufaw.org.uk

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Animal Welfare. The 2003 Special Issue

Proceedings of the 2nd International Workshop on the Assessment of Animal Welfare at Farm and Group Level

This publication includes more than 40 papers covering topics such as effects of stockmanship on animal welfare, indices for assessing pain and distress in farm animals, sections on general principles and methods, cattle, pigs, poultry, and miscellaneous topics.

Abstracts may be viewed at: http://www.ufaw.org.uk/journal/Volume%2012%20Titles.htm#aw124

Individual copies of the special issue can be obtained from UFAW, priced at £20 or US$40.

To order a special issue, or for further details of the journal, please contact UFAW, The Old School, Brewhouse Hill, Wheathampstead, Hertfordshire, AL4 8AN, UK; phone: +44 (0)1582 831818, fax: 831414 or e-mail ufaw@ufaw.org.uk.

Animal Welfare has established itself as an objective international forum for publication of peer-reviewed papers on all aspects of laboratory, farm, wild, zoo and companion animal welfare. The journal is covered by the Science Citation Index, Current Contents/Agriculture, Biology and Environmental Sciences, SciSearch, Zoological Record, and numerous abstracting services. ■

CAAT Offers Web-Based "Enhancing Humane Science" Course

The Johns Hopkins Center for Alternatives to Animal Testing (CAAT) is offering a free online course on "Enhancing Humane Science/Improving Animal Research."

Developed by CAAT director Alan Goldberg and James Owiny, training and compliance administrator of the Johns Hopkins animal care and use committee, along with Christian Newcomer, associate provost for animal research and resources at Hopkins, the course provides a broad overview of diverse topics in the practice of and approaches to humane animal experimentation. Topics covered include postsurgical care, pain management, humane endpoints, enrichment, noninvasive techniques, and the impact of stress on the quality of data. The course also addresses in vitro and other replacement approaches, as well as proper experimental design, statistical concepts, and the role of pilot studies in minimizing animal use and refining experiments.

This self-paced course consists of 12 audio lectures with accompanying slides, resource lists, and study questions. To register, please see the CAAT website at http://caat.jhsph.edu

Legislation cont'd from p.1

Subcommittee on Fisheries Conservation, Wildlife and Oceans.

Expresses the sense of Congress that: (1) the Migratory Bird Treaty Act of 1918 should be modified to allow for mourning dove hunting during the last week in August in areas north of 37 degrees north latitude; (2) the United States should begin discussions with the appropriate parties to ensure that all Americans have an opportunity to harvest migratory mourning doves in an equitable manner; and (3) hunters and wildlife management agencies in States north of 37 degrees north latitude should support an earlier opening date for the mourning dove hunting season. [Editor's note: According to the resolution, "the vast majority of mourning doves that hatch, fledge, and nest in States north of 37 degrees north latitude migrate south beyond the boundaries of those States before the national hunting season opening date of September 1, thus denying hunters in those States an equitable opportunity to harvest this species."]

H.R. 852 To authorize the National Institute of Environmental Health Sciences to develop multidisciplinary research centers regarding women's health and disease prevention and conduct and coordinate a research program on hormone disruption, and for other purposes.

Introduced on February 13, 2003, by Louise McIntosh Slaughter (D-New York) and referred to the Committee on Energy and Commerce, and in addition to the Committees on Resources and Science. This Act may be cited as the "Environmental Health Research Act of 2003." Related Bill: S.1588.

SEC. 3. AMENDMENT TO THE PUBLIC HEALTH SERVICE ACT TO PROVIDE FOR RESEARCH ON HORMONE DISRUPTION.

(a) FINDINGS- The Congress finds as follows:

(1) Many compounds found or introduced into the environment by human activity are capable of disrupting the hormone system of humans and animals. The consequences of such disruption can be profound because of the crucial role hormones play in controlling development. No standardized and validated screens or tests have been developed to routinely and systematically assess chemicals for disruptive effects on hormone systems...

(4) Many wildlife populations have been affected by hormone-disrupting substances, including birds, fish, reptiles, and mammals. The effects vary among species and compounds.

(5) The effects in wildlife include thyroid dysfunction, decreased fertility, decreased hatching success, gross birth deformities, metabolic and behavioral abnormalities, demasculinization and feminization of male organisms, deformation and masculinization of female organisms, and compromised immune systems. These effects may signal hazards to human health.

(6) Laboratory studies have corroborated studies of effects in wildlife and have identified biological mechanisms to explain the effects shown.

(7) Since the chemicals found in wildlife are also found in humans, humans are exposed to the same chemicals as wildlife...

(13) While recognizing the many contributions of animal testing to understanding toxic hazards, the Congress also recognizes the desirability of speeding the use of validated nonanimal screens and tests (to reduce animal suffering and to reduce costs) and expediting judgments about hazards from toxic chemicals.

(b) AMENDMENT- Subpart 12 of part C of title IV of the Public Health Service Act (42 U.S.C. 2851 et seq.), as amended by section 2, is further amended by adding at the end the following:

'DIRECTED NATIONAL PROGRAM OF RESEARCH ON HORMONE DISRUPTION' SEC. 463C. (a) RESEARCH-'(2) ISSUES- The program established under paragraph (1) shall provide for the following: '(A) Collection, compilation, publication, and dissemination of scientifically valid information on–'(i) possible human health effects of hormone-disrupting chemicals, with emphasis on exposures to low doses of individual chemicals and chemical mixtures during critical life stages of development, particularly effects of prenatal exposures on children's health; '(ii) the extent of human exposure to hormone-disrupting chemicals, with particular emphasis on exposures during critical life stages of development and in residential and occupational settings; and '(iii) exposure of wildlife species to hormone-disrupting chemicals and possible health effects associated with such exposures. '(B) Research on mechanisms by which hormone-disrupting substances interact with biological systems. '(C) Research on improved in vitro and in vivo methods to screen and test hormone disruption. '(D) Research on the identity, levels, transport, and fate of hormone-disrupting chemicals in the environment.

H.R. 857 To prevent the slaughter of horses in and from the United States for human consumption by prohibiting the slaughter of horses for human consumption and by prohibiting the trade and transport of horseflesh and live horses intended for human consumption, and for other purposes.

Introduced February 13, 2003, by John E. Sweeney (R-New York) and referred to the House Committees on Agriculture, International Relations, and Ways and Means. On March 3, it was referred to the Agriculture Subcommittee on Livestock and Horticulture and the Ways and Means Subcommittee on Trade. This Act may be cited as the "American Horse Slaughter Prevention Act."

The American Horse Slaughter Prevention Act - Prohibits a person from: (1) slaughtering a horse for human consumption; (2) importing to, or exporting from, the United States horseflesh or horses for human consumption; (3) selling, bartering, transferring, receiving, or distributing horseflesh or horses for human consumption; or (4) soliciting or knowingly causing any such actions.

Sets forth provisions respecting: (1) criminal and civil penalties; (2) enforcement authority of the Secretary of Agriculture; (3) placement of confiscated horses; (4) euthanasia of unplaceable or severely injured or diseased horses; (4) funding of animal rescue facilities; and (5) exemptions.

H.R. 1006 To amend the Lacey Act Amendments of 1981 to further the conservation of certain wildlife species.

Introduced February 27, 2003, by Howard P. (Buck) McKeon (R-California) and referred to the House Committee on Resources. It was passed by the House on November 19 and passed, with an amendment, by the Senate on November 24. On December 19, 2003, it was signed by the President and became Public Law No: 108-191. This Act may be cited as the "Captive Wildlife Safety Act." Related Bill: S.269

Amends the Lacey Act Amendments of 1981 to define "prohibited wildlife species" as any live lion, tiger, leopard, cheetah, jaguar, or cougar. Declares it a prohibited act for any person to import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce any prohibited wildlife species. Exempts from this prohibition licensed zoos, circuses, accredited sanctuaries, federally licensed breeders, State

entities (universities, wildlife rehabilitators or veterinarians), any incorporated humane society, animal shelter, or society for the prevention of cruelty to animals, persons transporting prohibited wildlife species to any such facility, and specified related organizations.

H.R. 1024 To establish in the National Marine Fisheries Service a pelagic longline highly migratory species bycatch and mortality reduction research program, and for other purposes.

Introduced February 27, 2003, by Jim Saxton (R-New Jersey) and referred to the House Committee on Resources. On March 6, it was referred to the Subcommittee on Fisheries Conservation, Wildlife and Oceans and executive comment was requested from [the Department of] Commerce.

Creates within the National Marine Fisheries Service (NMFS) a pelagic longline highly migratory species bycatch and mortality reduction research program, to be developed by a design team established by the Secretary of Commerce.

Requires the program to determine the impact of existing time and area closures designed to reduce bycatch of longline vessels. Authorizes the NMFS to grant permits for vessels with NMFS-provided observers to fish in closed areas of the Atlantic Ocean in furtherance of the research program.

Amends the Magnuson-Stevens Fishery Conservation and Management Act to close to pelagic longline fishing the lower mid-Atlantic Conservation Zone between August 15 and October 1 and the upper mid-Atlantic Conservation Zone between July 15 and October 1 of each year.

H.R. 1367 To authorize the Secretary of Agriculture to conduct a loan repayment program regarding the provision of veterinary services in shortage situations, and for other purposes.

Introduced March 19, 2003, by Charles (Chip) W. Pickering (R-Mississippi). On December 6, 2003, it was signed by the President and became Public Law No. 108-161. Related bill: S.1858

National Veterinary Medical Service Act - Amends the National Agricultural Research, Extension, and Teaching Policy Act of 1977 to direct the Secretary of Agriculture to provide veterinary school educational loan repayment assistance (for tuition and educational and living expenses) to veterinarians who agree to practice in veterinary shortage situations.

Authorizes the Secretary to enter into agreements (60-day maximum working days during a one-year period) with such veterinarians to provide services to the Federal Government in emergency situations. Provides additional loan repayment and a salary for such service.

Authorizes the Secretary, in determining veterinarian shortage situations, to consider the needs of urban or rural areas, the Federal Government, and areas of practice such as public health, epidemiology, and food safety.

Provides for breach remedies and related waiver authority.

Directs the Secretary to make related tax liability payments to participants.

Authorizes appropriations.

H.R. 1472 To require the adoption and enforcement of regulations to prohibit the intentional feeding of bears on Federal public lands in order to end the hunting practice known as "bear baiting" and reduce the number of dangerous interactions between people and bears.

Introduced March 27, 2003, by Elton Gallegly (R-California) and referred to the House Committee on Resources. On March 31, executive comment was requested from the U.S. Departments of Agriculture and Interior. It was also referred to the Subcommittees on National Parks, Recreation, and Public Lands, Fisheries Conservation, Wildlife and Oceans, and Forests and Forest Health. On June 12, Fisheries Conservation, Wildlife and Oceans subcommittee hearings were held. This Act may be cited as the "Don't Feed the Bears Act of 2003."

Requires the Secretary of the Interior to enforce the National Parks System regulatory prohibitions against the feeding and baiting of wildlife on National Park System lands and in wildlife refuge areas, in particular the intentional feeding of bears for the purpose of enticing them to a particular area to be hunted (bear baiting).

Requires the Secretary of the Interior with respect to lands administered by the Bureau of Land Management, and the Secretary of Agriculture with respect to National Forest System lands, to adopt and enforce a regulation to prohibit individuals from intentionally feeding bears, including feeding for the purpose of bear baiting.

H.R. 1532 To amend the Animal Welfare Act to strengthen enforcement of provisions relating to animal fighting, and for other purposes.

Introduced April 1, 2003, by Roscoe Bartlett (R-Maryland) and referred to the Committee on Agriculture. On April 7, it was referred to the Subcommittee on Livestock and Horticulture. This Act may be cited as the "Animal Fighting Prohibition Enforcement Act." Related bill: S. 736

Animal Fighting Prohibition Enforcement Act - Amends the Animal Welfare Act to increase the imprisonment penalty for animal fighting violations from one year to two years. Makes it unlawful to sell, buy, transport, or deliver in interstate or foreign commerce a knife, gaff, or other sharp instrument used in a bird-fighting venture.

Revises enforcement provisions. Permits euthanasia for an animal in extreme pain.

Includes the Internet or any technology as interstate instrumentality

H.R. 1563 To require engine coolant and antifreeze to contain a bittering agent so as to render it unpalatable.

Introduced on April 10, 2003, by Gary L. Ackerman (D-New York) and referred to the House Committee on Energy and Commerce and the Subcommittee on Commerce, Trade and Consumer Protection.

Requires engine coolant or antifreeze sold after January 1, 2004, that is manufactured after July 1, 2003, and that contains more than ten percent ethylene glycol, to include denatonium benzoate at a minimum of 30 parts per million (or other equally effective aversive agent) as a bittering agent so as to render it unpalatable.

Requires a manufacturer or packager of such product to maintain records of compliance with this Act.

Declares that any manufacturer, distributor, recycler, or seller of an automotive product required by this Act to contain an aversive agent shall not be liable (except for willful or wanton misconduct) for personal injury, death, or property damage that results from compliance with this Act.

Declares this Act inapplicable to: (1) the sale of a motor vehicle that contains engine coolant or antifreeze; or (2) wholesale containers of engine coolant or antifreeze containing 55 gallons or more of engine coolant or antifreeze.

H.R. 1585 To establish an office to oversee research compliance and assurance within the Veterans Health Administration of the Department of Veterans Affairs.

Introduced April 3, 2003, by Steve Buyer (R-Indiana) and referred to the House Committee on Veterans' Affairs. On April 24, it was referred to the Subcommittee on Health. On October 8, it was forwarded by the Subcommittee to the Full Committee on Veterans Affairs.

Establishes within the Veterans Health Administration an independent office to oversee Department of Veterans Affairs research compliance and assurance, promote responsible research, and ensure the ethical treatment and safety of research subjects. Establishes a Director of such office, whose duties shall include the conduct of periodic inspections and evaluations of research integrity at research facilities, the observation of external accreditation site visits for human subjects and animal welfare, and investigations of allegations of research improprieties, misconduct, and non-compliance with policies and regulations.

H.R. 1647 To assist in the conservation of cranes by supporting and providing, through projects of persons and organizations with expertise in crane conservation, financial resources for the conservation programs of countries the activities of which directly or indirectly affect cranes.

Introduced April 7, 2003, by Tammy Baldwin (D-Wisconsin) and referred to the House Committee on Resources' Subcommittee on Fisheries Conservation, Wildlife and Oceans.

This Act may be cited as the "Crane Conservation Act of 2003."

Crane Conservation Act of 2003 - Requires the Secretary of the Interior to provide financial assistance for approved projects relating to the conservation of cranes, using amounts in the Crane Conservation Fund established by this Act.

Allows a project proposal to be submitted by: (1) any wildlife management authority of a country that is located in the African, Asian, European, or North American range of a species of crane and carries out at least one activity that affects crane populations; (2) the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora; and (3) any person or organization with demonstrated expertise in the conservation of cranes.

Establishes the Crane Conservation Fund in the Multinational Species Conservation Fund.

Authorizes the Secretary to convene an advisory group representing public and private organizations actively involved in the conservation of cranes to assist in carrying out this Act.

H.R. 1720 To authorize the Secretary of Veterans Affairs to carry out construction projects for the purpose of improving, renovating, establishing, and updating patient care facilities at Department of Veterans Affairs medical centers, and for other purposes.

Introduced on April 10, 2003, by Rob Simmons (R-Connecticut) and passed by the House of Representatives on October 29. On October 30, it was received in the Senate and referred to the Committee on Veterans' Affairs. This act may be cited as the "Veterans Health Care Facilities Capital Improvement Act."

(Sec. 11) Establishes in the VHA [Veterans Health Administration] an Office of Research Oversight to advise the Under Secretary for Health on matters of compliance and assurance in human subjects protections, animal welfare, research safety, and research impropriety and misconduct. Requires the Office to function independently of VHA offices responsible for the conduct of medical research programs. Establishes an Office Director to conduct investigations and report to the Under Secretary with respect to the above matters, including appropriate recommendations for the termination, suspension, or limitation of Department research activities. Requires the Director to report: (1) to the Under Secretary, Secretary, and veterans' committees on any suspected lapse of protecting the safety of human subjects and others, including employees, in medical research programs; and (2) annually to the veterans' committees on prior-year activities.

Directs the Comptroller General to study and report to the veterans' committees on the effects of the establishment of the Office, the actions taken, and improvements in the conduct of ethical medical research in the VHA. Requires the Secretary to report to the veterans' committees on the implementation of this section.

H.R. 1800 To end the use of conventional steel-jawed leghold traps on animals in the United States.

Introduced April 11, 2003, by Nita M. Lowey (D-New York) and referred to the Committee on Energy and Commerce, and in addition to the Committees on Ways and Means, International Relations, and the Judiciary. On May 5, it was referred to the Subcommittee on Crime, Terrorism, and Homeland Security.

Makes it unlawful to: (1) import, export, or transport in interstate commerce conventional steel jawed leghold traps and articles of fur derived from animals trapped in such traps; or (2) sell or acquire such a trap transported in violation of such provision. Prescribes criminal penalties for violations.

Directs the Secretary of the Interior to reward persons (other than Government employees performing official duties) for information leading to a conviction under this Act.

Empowers enforcement officials to detain, search, and seize suspected containers or merchandise and any accompanying documents, to make arrests without warrants with probable cause, and to execute warrants. Subjects seized merchandise to forfeiture.

H.R. 2057 To provide for a multi-agency cooperative effort to encourage further research regarding the causes of chronic wasting disease and methods to control the further spread of the disease in deer and elk herds, to monitor the incidence of the disease, to support State efforts to control the disease, and for other purposes.

Introduced on May 9, 2003, by Scott McInnis (R-Colorado) and referred to the Committee on Resources' Subcommittee on Fisheries Conservation, Wildlife and Oceans, and in addition to the Committee on Agriculture. On June 19, subcommittee hearings were held. This Act may be cited as the "Chronic Wasting Disease Support for States Act of 2003." Related bill: H.R.2636.

Defines "chronic wasting disease" as a transmissible disease of the nervous system afflicting deer and elk.

Directs the Secretary of the Interior to establish and maintain the official national database for surveillance and monitoring data regarding chronic wasting disease. Makes the database available to Federal and State agencies, Indian tribes, foreign governments, institutions of higher education, and international wildlife authorities.

Directs the Secretary of the Interior (through the U.S. Geological Survey) and the Secretary of Agriculture (through the Animal and Plant Health Inspection Service) to develop surveillance and monitoring programs to iden-

tify: (1) the rate of infection; (2) the cause and extent of the spread of the disease; and (3) areas promoting spread of the disease.

Directs the Secretary of the Interior to allocate funds to State and tribal agencies for developing and implementing disease management strategies based upon: (1) the relative scope of incidence of the disease; (2) expenditures on disease management; (3) comprehensive and integrated programs for disease management between wildlife and agricultural agencies; and (4) rapid response to outbreaks.

Directs the Secretary of the Interior (through the U.S. Geological Survey) to expand and accelerate research on the disease.

Directs the Secretary of Agriculture: (1) to provide for the upgrading of Federal laboratories approved to process samples from the surveillance and monitoring programs; and (2) expand and accelerate research on the disease through the Agricultural Research Service and Cooperative State Research grant programs.

H.R. 2079 To amend the Federal Food, Drug, and Cosmetic Act with regard to new animal drugs, and for other purposes.

Introduced May 13, 2003, by Charles W. (Chip) Pickering (R-Mississippi) and referred to the House Committee on Energy and Commerce. On May 20, it was referred to the Subcommittee on Health. This Act may be cited as the "Minor Use and Minor Species Animal Health Act of 2003." Related bill: S. 741

Minor Use and Minor Species Animal Health Act of 2003 - Amends the Federal Food, Drug, and Cosmetic Act to define: "minor species" as animals other than cattle, horses, swine, chickens, turkeys, dogs, and cats; and (2) "minor use" as use on minor species or on other species for a disease or condition that occurs infrequently or in limited geographic areas. Provides for: (1) designation of new animal drugs for minor use; and (2) three-year approval exclusivity.

Provides for establishment of an index of unapproved new animal drugs for minor species, and allows marketing of such drugs that evidence no human food safety concern.

Authorizes: (1) designation of new animal drugs for minor use or minor species; and (2) grants or contracts for development (and exclusivity) of designated new animal drugs. Modifies new animal drug approval requirements.

H.R. 2142 To amend the Marine Mammal Protection Act of 1972 to repeal the long-term goal for reducing to zero the incidental mortality and serious injury of marine mammals in commercial fishing operations, and to modify the goal of take reduction plans for reducing such takings.

Introduced on May 15, 2003, by Don Young (R-Alaska) and referred to the House Committee on Resources' Subcommittee on Fisheries Conservation, Wildlife and Oceans.

Amends the Marine Mammal Protection Act of 1972 to repeal the long-term goal of reducing to zero the incidental mortality and serious injury of marine mammals in commercial fishing operations. Modifies the long-term goal to reducing such incidental mortality and serious injury (but not to any specified percentage).

H.R. 2519 To amend the Farm Security and Rural Investment Act of 2002 to ensure the humane slaughter of nonambulatory livestock, and for other purposes.

Introduced on June 19, 2003, by Gary L. Ackerman (D-New York) and referred to the House Committee on Agriculture. This Act may be cited as the "Downed Animal Protection Act." Related bills: S. 1298, S.AMDT. 2088 to H.R.2673

Directs the Secretary of Agriculture to promulgate regulations to provide for the humane treatment, handling, and disposition of nonambulatory livestock by a covered entity, including a requirement that nonambulatory livestock be humanely euthanized.

Provides that an entity shall: (1) not move nonambulatory livestock while such livestock is conscious; and (2) humanely euthanize such livestock.

Prohibits an establishment covered by the Federal Meat Inspection Act to pass nonambulatory livestock through inspection.

Defines "covered entity," and "humanely euthanize."

H.R. 2693 To reauthorize the Marine Mammal Protection Act of 1972, and for other purposes.

Introduced on July 10, 2003, by Wayne Gilchrest (R-Maryland) and referred to the Committee on Resources. On November 5, it was ordered reported to the House as amended. This Act may be cited as the "Marine Mammal Protection Act Amendments of 2003." Related bill: H.R.3316

Provides limited authority to export marine mammal products.

Provides authorizations for appropriations for the Departments of Commerce and Interior to carry out functions under the act for fiscal years 2004-2008.

Authorizes the Secretary of Commerce to initiate research into nonlethal removal and control of nuisance pinnipeds.

Amends the sections on scrimshaw exemptions and polar bear permits.

Amends the definition of harassment and amends the section on incidental takings.

H.R. 2932 To amend the Federal Food, Drug, and Cosmetic Act to preserve the effectiveness of medically important antibiotics used in the treatment of human and animal diseases.

Introduced July 25, 2003, by Sherrod Brown (D-Ohio) and referred to the House Committee on Energy and Commerce and on August 8, it was referred to the Subcommittee on Health.

Preservation of Antibiotics for Medical Treatment Act of 2003 - Amends the Federal Food, Drug, and Cosmetic Act to provide for a phased elimination of the nontherapeutic use in food-producing animals of critical antimicrobial animal drugs. Defines "critical antimicrobial animal drug" and "nontherapeutic use."

Requires manufacturers of a critical antimicrobial animal drug or an animal feed for food-producing animals containing such a drug to report annual sales information.

H.R. 3316 To reauthorize the Marine Mammal Protection Act of 1972, and for other purposes.

Introduced on October 16, 2003, by Frank Pallone, Jr. (D-New Jersey) and referred to the House's Committee on Resources Subcommittee on Fisheries Conservation, Wildlife and Oceans. In addition, on October 27, executive comment was requested from Commerce and Interior. This act may be cited as the "Marine Mammal Preservation and Recovery Act of 2003."

In the Congressional Record, Representative Pallone said, "Summarizing key provisions, the bill would:

Provide a refined definition for the term "harassment" that is consistent with the recommendations of the National Research Council and accounts for the cumulative, as opposed to merely incidental, effects of behavioral changes in marine mammals.

Enhance protections for marine mammals in captivity, including the establishment of a new advisory committee to encourage the promulgation of regulations by the Secretary of Agriculture for captive care and maintenance, an updated and publicly accessible captive marine mammal inventory, and elimination of all marine mammal traveling exhibits.

Provide increased funding opportunities for the development of fishing gear that would decrease harmful interactions with marine mammals.

Authorize research and grant programs to study methods of non-lethal deterrence and control of nuisance seals and sea lions, whose robust populations have been of growing concern in coastal California.

Reauthorize and improve the John H. Prescott funding assistance program to allow an improved nationwide response to stranding and entanglement events.

Clarify the provisions regarding the import and export of Native marine mammal handicrafts.

Modernize the system of penalties and fines for violations of the Act for the first time in 30 years.

Expand the list of fisheries included in the take reduction team process to include both commercial and non-commercial fisheries using comparable gear.

H.R. 3320 To improve migratory bird management by the Animal and Plant Health Inspection Service of the Department of Agriculture, and for other purposes.

Introduced on October 16, 2003, by Mike Ross (D-Arkansas) and referred to the Committee on Resources, and in addition to the Committee on Agriculture. This act may be cited as the "American Aquaculture and Fishery Resources Protection Act."

SECTION 1. MIGRATORY BIRD MANAGEMENT BY THE DEPARTMENT OF AGRICULTURE.

(b) EXEMPTION FROM NEPA- Migratory bird management activities carried out by the Secretary of Agriculture shall be exempt from the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(c) ACTIONS UNDER THE MIGRATORY BIRD TREATY ACT- An agent, officer, or employee of the Animal and Plant Health Inspection Service of the Department of Agriculture that carries out any activity relating to migratory bird management may take the following actions under the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.):

(1) Issue depredation permits to stakeholders or cooperators of the Service.

(2) Manage and take migratory birds.

H.R. 3446 To provide for the protection of the last remaining herd of wild and genetically pure American buffalo.

Introduced November 5, 2003, by Maurice D. Hinchey (D-New York) and referred to the House Committee on Resources. On November 13, it was Referred to the Subcommittee on National Parks, Recreation, the Subcommittee on Fisheries Conservation, Wildlife and Oceans and the Subcommittee on Forests and Forest Health. In addition, executive comment was requested from Interior. This act may be cited as the "Yellowstone Buffalo Preservation Act."

Congress finds the following:

(1) More than any other animal, the American buffalo (Bison bison) is a wildlife icon of the United States. The American buffalo is the symbol that represents the Department of the Interior. The American buffalo is profoundly significant to Native American cultures and, perhaps more than any other wildlife species, has influenced our history.

(2) The American buffalo is still under assault, as it was in the late 19th Century when it was nearly exterminated. At the end of the great slaughter, in which tens of millions of buffalo were killed, only a few hundred wild buffalo remained in the Nation and all were located in Yellowstone National Park. Due to poaching, their numbers were reduced to 25 by the year 1900.

(3) The offspring of the 25 survivors comprise the Yellowstone buffalo herd and are the only wild, free-roaming American buffalo to continuously occupy their native habitat in the United States.

(4) The Yellowstone buffalo herd is genetically unique. Unlike captive ranched buffalo, which are now relatively common, the Yellowstone buffalo herd has never interbred with cattle and has retained its wild character.

(5) Because the Park lacks extensive low-elevation winter habitat that provides bison and elk with access to winter forage, wildlife migrate from the high elevation plateau of Yellowstone National Park to lower elevation habitat adjacent to the Park in winter and spring.

(6) The Yellowstone buffalo herd was exposed to the bacterium Brucella abortus, which can cause the disease brucellosis, in 1917. Brucellosis is only transmitted through animal ingestion of contaminated reproductive products. Brucellosis can cause abortions in infected animals, but only infectious females who have the bacteria in their reproductive system represent any potential threat of transmission. The risk of transmission between wild buffalo and cattle was deemed low in a 1992 General Accounting Office report, and again in a 1998 National Research Council study. In fact, there has never been a confirmed incidence of brucellosis transmission in the wild from buffalo to cattle. Buffalo with brucellosis and cattle have grazed together for over 50 years in the Jackson Hole area south of Yellowstone without any incident of disease transmission. Despite these facts, the National Park Service, the United States Forest Service, and the State of Montana Department of Livestock haze, capture, and kill members of the Yellowstone buffalo herd in an attempt to keep them unnaturally confined within Yellowstone National Park. At the same time, approximately 13,000 Yellowstone elk, some of which also harbor brucellosis, are allowed unfettered access to Federal land outside the Park. Since 1984, nearly 3,700 American buffalo have been killed in Montana as a result of this policy. In the winter of 2002-2003, 244 buffalo were killed by the Federal and State agencies, including 231 buffalo which were captured and slaughtered by the National Park Service.

(7) The key lower elevation habitat needed by American buffalo is primarily on Gallatin National Forest lands adjacent to the north and west sides of the Park. On the north side, taxpayers spent $13,000,000 in 1999 for a private-Federal land exchange intended to make low elevation habitat adjacent to the Yellowstone River accessible to the Yellowstone buffalo herd and other wildlife. The land exchange has not yet been finalized by Federal agencies and therefore key habitat is not available to the Yellowstone buffalo herd.

(8) On the west side of the Park, the Horse Butte peninsula provides prime wildlife habitat for grizzly bears, trumpeter swans, bald eagles, wolves, and buffalo. The peninsula comprises approximately 10,000 acres of primar-

ily Gallatin National Forest Federal lands extending into Hebgen Lake.

(9) National Park Service lands have been set aside for the conservation of resources and values and for the enjoyment and use of all citizens. The Federal lands adjacent to the Park represent some of the most valuable and important wildlife habitat in the lower forty-eight states. They are integrally connected to the health of wildlife residing seasonally in our Nation's oldest national park. Together, the Park and the adjacent Federal lands provide some of our Nation's richest opportunities for recreation, wildlife viewing, family camping, wildlife conservation, fishing, and other recreational and sporting activities. These Federal lands should be preferentially managed to sustain this rich and diverse wildlife resource and to provide the public with enjoyment of this National treasure.

(c) PURPOSE- The purpose of this Act is to provide for the protection of the Yellowstone buffalo herd by allowing the Yellowstone buffalo herd to freely roam Federal lands outside of the Park. The Federal lands that are affected by this Act are those within the Park and adjacent to it on the north and west boundaries as indicated by zones 2 and 3 on the Modified Preferred Alternative Map on page 181 of the 2000 Bison Management Plan for the State of Montana and Yellowstone National Park Final Environmental Impact Statement.

(d) DEFINITIONS- For the purposes of this section, the following definitions apply:

(1) HAZING- The term `hazing' means any individual effort to drive away, obstruct, chase, scare, or deter natural movements of wildlife, including hazing efforts carried out on foot or horseback or efforts aided by machinery, aircraft, or any type of noise-making device.

(2) INDIVIDUAL- The term `individual' means any person representing a State or Federal Government.

(3) PARK- The term `Park' means Yellowstone National Park.

(4) SECRETARY- The term `Secretary' means the Secretary of the Interior.

(5) YELLOWSTONE BUFFALO HERD- The term `Yellowstone buffalo herd' means the wild, free roaming, unfenced buffalo living primarily within Yellowstone National Park.

(e) PROHIBITED ACTS; CRIMINAL PENALTIES-

(1) PROHIBITED ACTS- No individual may kill, haze, or capture any buffalo on Federal land or land held under Federal conservation easements or use any form of bait to lure buffalo from any Federal land onto private land until the duties under subsection (f) are carried out.

(2) PENALTIES-

(A) INITIAL VIOLATION- Any individual found to be in violation of paragraph (1) for the first time shall be fined not more than $5,000 or imprisoned not more than 1 year or both.

(B) SUBSEQUENT VIOLATIONS- Any individual found to be in violation of paragraph (1) after the first such finding shall be fined not more than $10,000 or imprisoned not more than 2 years or both.

(c) REWARD- One half of any fine collected under this subsection or $2,500, whichever is less, shall be paid to any person or persons giving information which leads to conviction of a violation of this subsection.

(D) EXCEPTION- This subsection shall not apply to a person that is found to have been hazing a buffalo if the person is physically endangered or private property was damaged by a buffalo.

(f) DUTIES- The Secretary and other appropriate Federal agencies shall ensure that the following is accomplished not later than 3 years after the date of the enactment of this Act:

(1) The Yellowstone buffalo herd is allowed to freely roam the Park and the Federal lands adjacent to Yellowstone National Park on the north and west boundaries as indicated by zones 2 and 3 on the Modified Preferred Alternative Map on page 181 of the 2000 Bison Management Plan for the State of Montana and Yellowstone National Park Final Environmental Impact Statement without being hazed. These lands shall be made available preferentially for buffalo and wildlife use.

(2) Management authority of the Yellowstone buffalo herd within the Park is under the sole jurisdiction of the National Park Service.

(3) The land exchange described in section 1(b)(7) with the private property owner has been finalized, as set forth in the agreement executed in 1999, so that the Yellowstone buffalo herd may freely roam the lands described in paragraph (1).

(4) The National Park Service has disassembled the Stephens Creek Buffalo Capture Facility.

(5) The Secretary has made every effort practicable to allow the Yellowstone buffalo herd to freely roam Federal lands through incentives and cooperative efforts with adjacent private landowners, including through acquisition, easement, cattle vaccination, and landowner agreement pertaining to temporal and spatial separation of livestock from the Yellowstone buffalo herd.

H.R. 3484 To amend the Animal Welfare Act to improve the standards for the care and treatment of certain animals, and for other purposes.

Introduced on November 7, 2003, by Ed Whitfield (R-Kentucky) and referred to the House Committee on Agriculture. This act may be cited as the "Puppy Protection Act of 2003."

SEC. 2. BREEDING REQUIREMENTS.

Section 13(a)(2) of the Animal Welfare Act (7 U.S.C. 2143(a)(2)) is amended—

...3) by adding at the end the following:

'(c) for addressing the initiation and frequency of breeding of female dogs so that a female dog is not—

'(I) bred before the female dog has reached at least 1 year of age; and

'(ii) whelped more frequently than 3 times in any 24-month period.'.

It also provides for suspension or revocation of license, civil penalties, judicial review, and criminal penalties.

H.R. 3705 To amend the Federal Meat Inspection Act to enhance the safety of beef and beef food products originating in the United States by requiring the testing of cattle for bovine spongiform encephalopathy (commonly known as mad cow disease) at the time of slaughter, and for other purposes.

Introduced January 20, 2004, by George Miller (D-California) and referred to the Committee on Agriculture. This act may be cited as the "Mad Cow Testing Act of 2004."

Amends the Federal Meat Inspection Act to require the post-mortem testing of cattle carcasses and parts intended for human consumption for bovine spongiform encephalopathy (mad cow disease). Requires that: (1) such tests be conducted only by Animal and Plant Health Inspection Service personnel; and (2) testing costs be covered through fees collected from slaughtering, meat-canning, salting, packing, rendering, and other establishments subject to such testing.

Authorizes the Secretary of Agriculture to delay such testing if an accurate test is not available for cattle under a certain age. Requires the Secretary to evaluate at least yearly during the course of any such delay whether a test has been developed.

H.R. 3787 To amend the Animal Health Protection Act to require the establishment of an electronic nationwide livestock identification system, to prevent the unauthorized release of information collected under the system, to promote an objective review of Department of Agriculture responses to livestock disease outbreaks, and for other purposes.

Introduced February 10, 2004, by Colin C. Peterson (D-Minnesota) and referred to the House Committee on Agriculture. This Act may be cited as the "National Farm Animal Identification and Records Act." Related Bills: H.R.3822, S.2008

SEC. 10409A. NATIONWIDE LIVESTOCK IDENTIFICATION SYSTEM.

'(a) System Required- Not later than 90 days after the date of the enactment of the National Farm Animal Identification and Records Act, the Secretary shall establish an electronic nationwide livestock identification system to require the identification of livestock to enhance the speed and accuracy of the response of the Department of Agriculture to outbreaks of disease in livestock. Because livestock diseases are not constrained by State boundaries, the livestock identification system shall apply to all livestock born in the United States or imported and cover the movement of livestock in both interstate commerce and intrastate commerce.

'(b) Capabilities- The livestock identification system shall be capable of tracing, within 48 hours, livestock from birth to slaughter.

'(c) Participation by States- The Secretary shall use the authority provided by section 10411(a) to cooperate with States to secure information for inclusion in the livestock identification system. Subject to subsection (f), the Secretary shall provide States with access to the livestock identification system.

'(d) Use of Existing Technology- The Secretary may use technology developed by private entities before the date of the enactment of the National Farm Animal Identification and Records Act to operate the livestock identification system.

'(e) Financial Assistance- To the extent funds are made available pursuant to subsection (g) to carry out this subsection, the Secretary shall provide financial assistance to producers to assist the producers in complying with the requirements of the livestock identification system. In providing such assistance, the Secretary shall ensure that producers with smaller livestock operations are not placed at a financial disadvantage in complying with such requirements.

'(f) Release of Animal Identification Numbering Information-

'(1) Freedom of information act- Information obtained through the livestock identification system is exempt from disclosure under section 552 of title 5, United States Code.

'(2) Character of livestock identification system information- Except as provided in paragraphs (3) and (4), information obtained through the livestock identification system—(A) may not be released; (B) shall not be considered information in the public domain; and (C) shall be considered commercial information that is privileged and confidential.

'(3) Limited release of information authorized- Notwithstanding paragraph (2), the Secretary may release information obtained through the livestock identification system regarding particular livestock if—(A) the information involves livestock threatened by disease or pest; (B) the release of the information is related to actions the Secretary may take under this subtitle; and (C) the person obtaining the information needs the information for reasons consistent with the public health and public safety purposes of the livestock identification system, as determined by the Secretary.

'(4) Limited release of information required- Notwithstanding paragraph (2), the Secretary shall release information obtained through the livestock identification system regarding particular livestock—(A) to the person who owns or controls the livestock, if the person requests such information; (B) to the Attorney General for the purpose of law enforcement; (C) to the Secretary of Homeland Security for the purpose of national security; (D) to a court of competent jurisdiction; and (E) to the government of a foreign country, if release of the information is necessary to trace livestock threatened by disease or pest, as determined by the Secretary.

'(5) Conflict of law- If the information disclosure limitations or requirements of this subsection conflict with information disclosure limitations or requirements of a State law—(A) this subsection shall take precedence over the State law, if the conflict involves interstate or international commerce; and (B) the State law shall take precedence over this subsection, if the conflict involves intrastate commerce in that State.

'(g) Authorization of Appropriations- There is authorized to be appropriated to the Secretary $175,000,000 to carry out this section.'

SEC. 3. REVIEW OF DEPARTMENT OF AGRICULTURE RESPONSES TO OUTBREAKS OF DISEASE IN LIVESTOCK.

Section 10411 of the Animal Health Protection Act (7 U.S.C. 8310) is amended by adding at the end the following new subsection: '(f) Review of Responses to Outbreaks of Disease- The Secretary may appoint an international panel of scientific experts to provide an objective review of a response by the Department of Agriculture to an outbreak of disease in livestock and to identify areas for improvements in such responses.'

H.R. 4001 To authorize the Secretary of Agriculture to use the Agricultural Research Service to conduct research regarding the likelihood and risks of the transfer between animal species of the proteinaceous infectious particles, known as prions, that cause transmissible spongiform encephalopathies, and for other purposes.

Introduced March 18, 2004, by Tom Latham (R-Iowa) and referred to the Committee on Agriculture's Subcommittee on Conservation, Credit, Rural Development and Research.

Section 1. Agricultural Research Service Research on Interspecies Transfer of Proteinaceous Infectious Particles Causing Transmissible Spongiform Encephalopathies.

(a) Research Program Authorized- The Secretary of Agriculture may establish a research program under which the Agricultural Research Service will conduct research regarding the likelihood and risks of the transfer between animal species of the proteinaceous infectious particles, known as prions, that cause transmissible spongiform encephalopathies. In carrying out the research program, the Agricultural Research Service shall specifically study the risks associated with feeding livestock by-products to other animals, such as chickens, turkeys, and hogs, which are subsequently slaughtered and the by-products of which are feed to livestock or whose offspring are slaughtered and the by-products of which are feed to livestock.

(b) Authorization of Appropriations- There is authorized to be appropriated to the Secretary of Agriculture to carry out the research program $15,000,000 for fiscal year 2005, $20,000,000 for fiscal year 2006, and $25,000,000 for fiscal year 2007.

H.R. 4264 To amend title 18, United States Code, to strengthen prohibitions against animal fighting, and for other purposes.

Introduced on May 4, 2004, by Mark Green (R-Wisconsin) and referred to the House Committee on the Judiciary. This Act may be cited as the "Animal Fighting Prohibition Enforcement Act of 2004."

SEC. 2. ENFORCEMENT OF ANIMAL FIGHTING PROHIBITIONS.

(a) In General- Chapter 3 of title 18, United States Code, is amended by adding at the end the following:

'Sec. 39. Animal fighting prohibition

'(a) Sponsoring or Exhibiting an Animal in an Animal Fighting Venture-

'(1) In general- Except as provided in paragraph (2), it shall be unlawful for any person to knowingly sponsor or exhibit an animal in an animal fighting venture, if any animal in the venture was moved in interstate or foreign commerce.

'(2) Special rule for certain states- With respect to fighting ventures involving live birds in a State where it would not be in violation of the law, it shall be unlawful under this subsection for a person to sponsor or exhibit a bird in the fighting venture only if the person knew that any bird in the fighting venture was knowingly bought, sold, delivered, transported, or received in interstate or foreign commerce for the purpose of participation in the fighting venture.

'(b) Buying, Selling, Delivering, or Transporting Animals for Participation in Animal Fighting Venture- It shall be unlawful for any person to knowingly sell, buy, transport, or deliver, or receive for purposes of transportation, in interstate or foreign commerce, any dog or other animal for purposes of having the dog or other animal participate in an animal fighting venture.

'(c) Use of Postal Service or Other Interstate Instrumentality for Promoting Animal Fighting Venture- It shall be unlawful for any person to knowingly use the mail service of the United States Postal Service or any instrumentality of interstate commerce for commercial speech promoting an animal fighting venture except as performed outside the limits of the States of the United States.

'(d) Violation of State Law- Notwithstanding subsection (c), the activities prohibited by such subsection shall be unlawful with respect to fighting ventures involving live birds only if the fight is to take place in a State where it would be in violation of the laws thereof.

'(e) Sharp Instruments- It shall be unlawful for any person to knowingly sell, buy, transport, or deliver in interstate or foreign commerce a knife, a gaff, or any other sharp instrument attached, or designed or intended to be attached, to the leg of a bird for use in an animal fighting venture.

'(f) Penalties- Any person who violates subsection (a), (b), (c), or (e) shall be fined under this title or imprisoned for not more than 2 years, or both, for each such violation.

'(g) Definitions- For purposes of this section—

'(1) the term "animal fighting venture" means any event which involves a fight between at least two animals and is conducted for purposes of sport, wagering, or entertainment except that the term "animal fighting venture" shall not be deemed to include any activity the primary purpose of which involves the use of one or more animals in hunting another animal or animals, such as waterfowl, bird, raccoon, or fox hunting;

'(2) the term "instrumentality of interstate commerce" means any written, wire, radio, television or other form of communication in, or using a facility of, interstate commerce;

'(3) the term "State" means any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, and any territory or possession of the United States; and

'(4) the term "animal" means any live bird, or any live dog or other mammal, except man.

'(h) Conflict With State Law- The provisions of this section do not supersede or otherwise invalidate any such State, local, or municipal legislation or ordinance relating to animal fighting ventures except in case of a direct and irreconcilable conflict between any requirements thereunder and this section or any rule, regulation, or standard hereunder.'

House Rpt.108-193 - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Bill, 2004

On July 9, 2003, [Henry] Bonilla (R-Texas), from the Committee on Appropriations, submitted the following report together with additional views [To accompany H.R. 2673] [Editor's Note: HR 2673 – Making appropriations for Agriculture, Rural Development, Food and Drug Administration, and Related Agencies for the fiscal year ending September 30, 2004, and for other purposes – was passed, with amendments (see above), by the House of Representatives on July 14, 2003.]

Animal Welfare Information Center (AWIC)- AWIC is a key component of ARS' integrated information services program that enhances access to information about animal welfare. The Center assists researchers and others responsible for the care of laboratory animals with important information to enable them to comply with the humane standards established under the Animal Welfare Act. The Committee directs ARS to continue its support of animal welfare activities at the fiscal year 2003 level.

S.AMDT. 2088 to H.R.2673 To restrict funding for the approval for human consumption of meat produced from downed animals. [Editor's note-H.R. 2673 is the Consolidated Appropriations Act, 2004.]

Introduced on November 5, 2003, by Daniel Akaka (D-Hawaii) and agreed to in Senate by Voice Vote. On December 8, it was stripped out of the appropriations bill during conference. Related bills: S. 1298 & H.R. 2519 [Editor's note: See article USDA Issues New Regulations To Address BSE on page 32.]

On page 79, between lines 7 and 8, insert the following:

SEC. 7. PROTECTION OF DOWNED ANIMALS.

None of the funds appropriated or otherwise made available by this Act to pay the salaries or expenses of employees or agents of the Department of Agriculture may be used to approve for human consumption under the Federal Meat Inspection Act (21 U.S.C. 601 et seq.) any cattle, sheep, swine, goats, horses, mules, or other equines that are unable to stand or walk unassisted at an establishment subject to inspection at the point of examination and inspection, as required by section 3(a) of that Act (21 U.S.C. 603(a)).

S. 137 A bill to improve the administration of the Animal and Plant Health Inspection Service of the Department of Agriculture, and for other purposes.

Introduced on January 9, 2003, by Blanche Lincoln (D-Arkansas) and referred to the Senate Committee on Agriculture, Nutrition, and Forestry.

Exempts any migratory bird management carried out by the Secretary of Agriculture through the Animal and Plant Health Inspection Service from the National Environmental Policy Act of 1969 (including regulations). Authorizes a Service employee acting under the Migratory Bird Treaty Act to: (1) issue a depredation permit to a Service stakeholder or cooperator; and (2) manage and take migratory birds.

S. 313 A bill to amend the Federal Food, Drug, and Cosmetic Act to establish a program of fees relating to animal drugs.

Introduced February 5, 2003, by John E. Ensign (R-Nevada). On November 18, 2003, it was signed by the President and became Public Law No: 108-130. This Act may be cited as the "Animal Drug User Fee Act of 2003."

Animal Drug User Fee Act of 2003 - (Sec. 3) Amends the Federal Food, Drug, and Cosmetic Act to direct the Secretary of Health and Human Services to assess and collect fees for an animal drug application, defined as a request for approval of a new animal drug (not including generic drugs). Directs the Secretary to also assess fees for a supplemental animal drug application, defined as a request for a change in an approved animal drug application or in an approved generic animal drug application (if it requires safety or effectiveness data). Requires payment upon submission or the application will be considered incomplete and not accepted. Excepts from payment applications which were previously filed but withdrawn or not approved without a waiver or refund.

Assesses annual fees on animal drug products, establishments, and sponsors. Declares that only one such fee per category must be paid each year.

Establishes a fee schedule for FY 2004 through 2008, including total fee revenues for animal drug products, establishments, and sponsors. Adjusts fees to reflect inflation, review workload, and operating reserves of carryover user fees (in the final year).

Directs the Secretary to establish before each fiscal year, based on the fee schedule revenue amounts and the adjustments, the following: (1) animal drug application fees and supplemental animal drug application fees (for applications in which safety or effectiveness data are required); (2) animal drug sponsor fees; (3) animal drug establishment fees; and (4) animal drug product fees. Reduces or waives fees: (1) in excess of administrative costs; (2) that present a significant barrier to innovation; (3) if an animal drug application or supplemental animal drug application is intended solely for use of an animal drug in specified types of feed; (4) if an animal drug application or supplemental animal drug application is intended solely to provide for minor uses or use in minor species; or (5) for first applications by a small business.

Makes fees available for obligation only to the extent provided in advance in appropriations Acts. Authorizes appropriations. Offsets any excess fees against subsequent appropriations.

(Sec. 4) Establishes public accountability and reporting requirements.

(Sec. 5) Sets a sunset of October 1, 2008, for the provisions of this Act not pertaining to public accountability and reports and a sunset of 120 days after such date for such accountability and reporting provisions.

S.666 A bill to provide incentives to increase research by private sector entities to develop antivirals, antibiotics and other drugs, vaccines, microbicides, detection, and diagnostic technologies to prevent and treat illnesses associated with a biological, chemical, or radiological weapons attack.

Introduced on March 19, 2003, by Joseph I. Lieberman (D-Connecticut) and referred to the Committee on Finance. This act may be cited as the "Biological, Chemical, and Radiological Weapons Countermeasures Research Act of 2003."

Amends the Homeland Security Act of 2002 to add a new title, Title 18: Biological, Chemical, and Radiological Countermeasures Research.

Among the items contained in this act, is one provision concerning research animals:

SEC. 6. APPROVALS OF CERTAIN DRUGS BASED ON ANIMAL TRIALS.

(a) FEDERAL FOOD, DRUG, AND COSMETIC ACT- Section 505(d) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 355(d)) is amended by adding at the end the following: `In the case of drugs and diagnostic devices for use against lethal or permanently disabling toxic chemical, biological, radiological, nuclear, or other substances, when adequate and well-controlled studies of effectiveness in humans cannot ethically be conducted because the studies would involve administering a potentially lethal or permanently disabling toxic substance or organism to healthy human volunteers, and when adequate field trials assessing use of the drug or diagnostic device (in situations such as after accidental or hostile exposure to the substance) have not been feasible or where adequate volumes of human samples for diagnosis from previous exposures is not available, the Secretary may grant approval based on evidence of effectiveness derived from appropriate studies in animals. The Secretary may promulgate regulations establishing standards, criteria, and procedures for use of the authority contained in the preceding sentence.'

(b) PUBLIC HEALTH SERVICE ACT- Section 351 of the Public Health Service Act (42 U.S.C. 262) is amended by adding at the end the following:

'(k) APPROVAL OF CERTAIN PRODUCTS AND DIAGNOSTIC DEVICES BASED ON ANIMAL TRIALS- In the case of biological products and diagnostic devices for use against lethal or permanently disabling toxic chemical, biological, radiological, nuclear, or other substances, when definitive human effectiveness studies in humans cannot ethically be conducted because the studies would involve administering a potentially lethal or permanently disabling toxic substance or organism to healthy human volunteers, and when adequate field trials assessing use of the drug (in situations such as after accidental or hostile exposure to the substance) have not been feasible, the Secretary may grant approval based on evidence of effectiveness derived from appropriate studies in animals. The Secretary may promulgate regulations establishing standards, criteria, and procedures for use of the authority provided under this subsection.'.

S.741 A bill to amend the Federal Food, Drug, and Cosmetic Act with regard to new animal drugs, and for other purposes.

Introduced on March 27, 2003, by Jeff Sessions (R-Alabama) and referred to the Committee on Health, Education, Labor, and Pensions. On November 21, it was ordered to be reported with an amendment in the nature of a

substitute favorably. This act may be cited as the "Minor Use and Minor Species Animal Health Act of 2003."

Amends the Federal Food, Drug, and Cosmetic Act to define: "minor species" as animals other than cattle, horses, swine, chickens, turkeys, dogs, and cats; and (2) "minor use" as use on minor species or on other species for a disease or condition that occurs infrequently or in limited geographic areas. Provides for: (1) designation of new animal drugs for minor use; and (2) three-year approval exclusivity.

Provides for establishment of an index of unapproved new animal drugs for minor species, and allows marketing of such drugs that evidence no human food safety concern.

Authorizes: (1) designation of new animal drugs for minor use or minor species; and (2) grants or contracts for development (and exclusivity) of designated new animal drugs. Modifies new animal drug approval requirements.

S.1036 A bill to provide for a multi-agency cooperative effort to encourage further research regarding the causes of chronic wasting disease and methods to control the further spread of the disease in deer and elk herds, to monitor the incidence of the disease, to support State efforts to control the disease, and for other purposes.

Introduced on May 9, 2003, by Wayne A. Allard (R-Colorado) and referred to the Committee on Agriculture, Nutrition, and Forestry. This act may be cited as the "Chronic Wasting Disease Support Act of 2003."

Defines "chronic wasting disease" as a transmissible disease of the nervous system afflicting deer and elk.

Requires the Secretary of the Interior to develop a grant program to allocate funds to the State agency responsible for wildlife management to develop and implement long-term management strategies to address such disease.

Directs the Secretary of the Interior to establish a computer modeling program to predict the spread of chronic wasting disease in deer and elk.

Directs the Secretary of the Interior (through the U.S. Geological Survey) and the Secretary of Agriculture (through the Animal and Plant Health Inspection Service) to conduct surveillance and monitoring programs on Federal lands to identify: (1) the rate of infection in wild herds of deer and elk; (2) the cause and extent of the spread of the disease; and (3) areas promoting the disease.

Directs the Secretary of Interior to develop and maintain a web site that displays surveillance and monitoring program data and modeling information.

Directs the Secretary of Agriculture to: (1) develop guidelines for the collection of animal tissue samples, and a protocol for assessing samples in the laboratory; (2) develop a program for the inspection of laboratories conducting chronic wasting disease tests; (3) provide for the upgrading of Federal laboratories approved to process such samples; and (4) expand and accelerate research on the disease through the Agricultural Research Service and Cooperative State Research grant program.

Requires the Secretaries of Agriculture and of the Interior to enter a cooperative agreement for the purpose of coordinating actions and disbursing funds authorized under this Act.

S.1460 A bill to amend the Federal Food, Drug, and Cosmetic Act to preserve the effectiveness of medically important antibiotics used in the treatment of human and animal diseases.

Introduced on July 25, 2003, by Edward M. Kennedy (D-Massachusetts) and referred to the Committee on Health, Education, Labor, and Pensions. This act may be cited as the "Preservation of Antibiotics for Medical Treatment Act of 2003."

Amends the Federal Food, Drug, and Cosmetic Act to provide for a phased elimination of the nontherapeutic use in food-producing animals of critical antimicrobial animal drugs. Defines "critical antimicrobial animal drug" and "nontherapeutic use."

Authorizes the Secretary of Agriculture to make payments to livestock or poultry producers to defray the costs of reducing such drugs' use, with priority given to family-owned or small farms and ranches.

Amends the Farm Security and Rural Investment Act of 2002 to direct the Secretary to provide grants for university research and demonstration programs to phase out the nontherapeutic use of critical antimicrobial animal drugs in livestock or poultry.

Amends the Federal Food, Drug, and Cosmetic Act to require manufacturers of a critical antimicrobial animal drug or an animal feed for food-producing animals containing such a drug to report annual sales information.

S.2008 A bill to amend the Animal Health Protection Act to direct the Secretary of Agriculture to establish an electronic nationwide livestock identification system, and for other purposes.

Introduced on January 20, 2004, by Arlen Specter (R-Pennsylvania) and referred to the Committee on Agriculture, Nutrition, and Forestry. This act may be cited as the "National Farm Animal Identification and Records Act."

Amends the Animal Health Protection Act to direct the Secretary of Agriculture to establish an electronic nationwide livestock identification system (for individual animal identification) to enhance the Department of Agriculture's response to outbreaks of livestock disease. Requires that such system: (1) be capable of tracing, within 48 hours, an individual animal from birth to slaughter; and (2) provide for access by States and inclusion of State information. Authorizes the Secretary to: (1) provide producer participation assistance; and (2) appoint an international panel of scientific experts to review the Department's response to an outbreak of livestock disease.

S.2346 A bill to amend the Animal Welfare Act to ensure that all dogs and cats used by research facilities are obtained legally.

Introduced on April 26, 2004, by Daniel K. Akaka (D-Hawaii) and referred to the Committee on Agriculture, Nutrition, and Forestry. This act may be cited as the "Pet Safety and Protection Act of 2004."

SEC. 2. PROTECTION OF PETS.

(a) RESEARCH FACILITIES- Section 7 of the Animal Welfare Act (7 U.S.C. 2137) is amended to read as follows:

'SEC. 7. SOURCES OF DOGS AND CATS FOR RESEARCH FACILITIES.

'(a) DEFINITION OF PERSON- In this section, the term `person' means any individual, partnership, firm, joint stock company, corporation, association, trust, estate, pound, shelter, or other legal entity.

'(b) USE OF DOGS AND CATS- No research facility or Federal research facility may use a dog or cat for research or educational purposes if the dog or cat was obtained from a person other than a person described in subsection (d).

‘(c) SELLING, DONATING, OR OFFERING DOGS AND CATS- No person, other than a person described in subsection (d), may sell, donate, or offer a dog or cat to any research facility or Federal research facility.

‘(d) PERMISSIBLE SOURCES- A person from whom a research facility or a Federal research facility may obtain a dog or cat for research or educational purposes under subsection (b), and a person who may sell, donate, or offer a dog or cat to a research facility or a Federal research facility under subsection (c), shall be—

‘(1) a dealer licensed under section 3 that has bred and raised the dog or cat;

‘(2) a publicly owned and operated pound or shelter that—

‘(A) is registered with the Secretary;

‘(B) is in compliance with section 28(a)(1) and with the requirements for dealers in subsections (b) and (c) of section 28; and

‘(C) obtained the dog or cat from its legal owner, other than a pound or shelter;

‘(3) a person that is donating the dog or cat and that—

‘(A) bred and raised the dog or cat; or

‘(B) owned the dog or cat for not less than 1 year immediately preceding the donation;

‘(4) a research facility licensed by the Secretary; and

‘(5) a Federal research facility licensed by the Secretary.

The act also provides penalties for violations.

S.2352 A bill to prevent the slaughter of horses in and from the United States for human consumption by prohibiting the slaughter of horses for human consumption and by prohibiting the trade and transport of horseflesh and live horses intended for human consumption, and for other purposes.

Introduced on April 27, 2004, by John E. Ensign (R-Nevada) and referred to the Committee on Agriculture, Nutrition, and Forestry. This act may be cited as the “American Horse Slaughter Prevention Act of 2004.” Related Bill: H.R.857

SEC. 2. PURPOSES.

The purposes of this Act are—

(1) to prohibit the slaughter of horses for human consumption; (2) to prohibit the sale, possession, and trade of horseflesh for human consumption; and (3) to prohibit the sale, possession, and trade of live horses for slaughter for human consumption.

SEC. 4. PROHIBITED ACTS.

A person shall not—

(1) slaughter a horse for human consumption;

(2) import into, or export from, the United States—

(A) horseflesh for human consumption; or

(B) live horses intended for slaughter for human consumption;

(3) sell or barter, offer to sell or barter, purchase, possess, transport, deliver, or receive—

(A) horseflesh for human consumption; or

(B) live horses intended for slaughter for human consumption; or

(4) solicit, request, or otherwise knowingly cause any act prohibited under paragraph (1), (2), or (3).

The bill also provides for penalties for violations.

S. Concurrent Resolution 55 A concurrent resolution expressing the sense of the Congress regarding the policy of the United States at the 55th Annual Meeting of the International Whaling Commission.

Introduced on June 12, 2003, by Olympia J Snowe (R-Maine) and referred to the Committee on Foreign Relations. Related Bill: H.Con.Res.216

Expresses the sense of Congress that: (1) at the 55th Annual Meeting of the International Whaling Commission the United States should remain firmly opposed to commercial whaling, and take other specified related steps; (2) at the 13th Conference of the Parties to the Convention on International Trade in Endangered Species, the United States should oppose all efforts to reopen international trade in whale meat or to downlist any whale population; and (3) the United States should make full use of all appropriate diplomatic mechanisms, relevant international laws and agreements, and other appropriate mechanisms to implement these goals.

Urges the United States to take appropriate steps to convince foreign countries whose nationals are engaging in trade in whale meat or a taking which diminishes the effectiveness of the Convention to cease such trade or taking.

S. Resolution 269 Urging the Government of Canada to end the commercial seal hunt that opened on November 15, 2003.

Introduced on November 20, 2003, by Carl Levin (D-Michigan) and referred to the Committee on Foreign Relations.

RESOLUTION

Whereas on November 15, 2003, the Government of Canada opened a commercial hunt on seals in the waters off the east coast of Canada;

Whereas an international outcry regarding the plight of the seals hunted in Canada resulted in the 1983 ban by the European Union of whitecoat and blueback seal skins, and the subsequent collapse of the commercial seal hunt in Canada;

Whereas the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 et seq.) bars the import into the United States of any seal products;

Whereas in February 2003, the Ministry of Fisheries and Oceans in Canada authorized the highest quota for harp seals in Canadian history, allowing nearly 1,000,000 seals to be killed over a 3-year period;

Whereas harp seal pups can be legally hunted in Canada as soon as they have begun to molt their white coats at approximately 12 days of age;

Whereas 97 percent of the seals culled in the 2003 slaughter were pups between just 12 days and 12 weeks of age, most of which had not yet eaten their first solid meal or learned to swim;

Whereas a 2001 report by an independent team of veterinarians invited to observe the hunt by the International Fund for Animal Welfare concluded that the seal hunt failed to comply with basic animal welfare regulations in Canada and that governmental regulations regarding humane killing were not being respected or enforced;

Whereas the 2001 veterinary report concluded that as many as 42 percent of the seals studied were likely skinned while alive and conscious;

Whereas the commercial slaughter of seals in the Northwest Atlantic is inherently cruel, whether the killing is conducted by clubbing or by shooting;

Whereas many seals are shot in the course of the hunt, but escape beneath the ice where they die slowly and are never recovered, and these seals are not counted in official kill statistics, making the actual kill level far higher than the level that is reported;

Whereas the commercial hunt for harp and hooded seals is not conducted by indigenous peoples of Canada, but is a commercial slaughter carried out by nonnative people from the East Coast of Canada for seal fur, oil, and penises (used as aphrodisiacs in some Asian markets);

Whereas the fishing and sealing industries in Canada continue to justify the expanded seal hunt on the grounds that the seals in the Northwest Atlantic are preventing the recovery of cod stocks, despite the lack of any credible scientific evidence to support this claim;

Whereas 2 Canadian Government marine scientists reported in 1994 that the true cause of cod depletion in the North Atlantic was over-fishing, and the consensus among the international scientific community is that seals are not responsible for the collapse of cod stocks;

Whereas harp and hooded seals are a vital part of the complex ecosystem of the Northwest Atlantic, and because the seals consume predators of commercial cod stocks, removing the seals might actually inhibit recovery of cod stocks;

Whereas certain ministries of the Government of Canada have stated clearly that there is no evidence that killing seals will help groundfish stocks to recover; and

Whereas the persistence of this cruel and needless commercial hunt is inconsistent with the well-earned international reputation of Canada: Now, therefore, be it

Resolved, That the Senate urges the Government of Canada to end the commercial hunt on seals that opened in the waters off the east coast of Canada on November 15, 2003.■

AMERICAN FORCES INFORMATION SERVICE
NEWS ARTICLES

Pet Fostering May Be Deploying Troops' Answer for Saving Fido and Kitty

by
Harry Noyes
Special to the American Forces Press Service

For the harried soldier, scurrying to wrap up a thousand details before deploying to an unknown future, pet abandonment is a decision born of desperation and fraught with guilt.

For a frightened, bewildered animal, suddenly ripped from a secure and comfortable home and thrust into a terrifying world of shelters—or worse, life as a stray on the streets—abandonment almost always means an early death.

Moved by a love of animals and gratitude to their country's defenders, a growing number of Americans are offering an alternative scenario, pet fostering.

These stay-at-home patriots open their homes to the dogs and cats—and sometimes the rats, parrots, iguanas, boa constrictors and tarantulas—of departing soldiers who have no one else to care for their animals.

When the soldier returns, he or she gets to restart life with a beloved family member. The pet is healthy and happy, and the soldier, guilt-free.

The trick is getting soldiers and foster-caregivers together and making sure that the parties (human and animal) are a good fit for each other, said Maj. Steven D. Osborn of U.S. Army Veterinary Command here.

Osborn recommended beginning the search locally. Soldiers can check with installation veterinary treatment facilities, which may be familiar with local services. But in the event the VTF isn't, the soldier should not give up.

Check next with local humane societies, animal-control facilities and breed clubs. If that does not turn up a suitable program, then cast a wider net regionally or even nationally. Of course, a more distant foster home involves costs for transportation of the animal, but this is a small price for owners who love their pets and feel a sense of responsibility toward them.

Several World Wide Web sites now exist to help soldiers with general advice on fostering and with brokering services to bring pet owners and foster-caregivers together.

These sites do not assume responsibility for the pets. Even if a site matches up pet owners and pets with potential caregivers, the pet owner is responsible for the final decision to work with a particular caregiver.

It is also the pet owner's responsibility to communicate fully and openly with foster-caregivers, to ensure both sides are comfortable and confident with arrangements, to settle all questions about expenses beforehand, and to draw up a contract outlining such details.

The pet owner is generally responsible for veterinary bills, special foods and the like. The owner may offer a gratuity for the foster-caregiver if he or she wishes to, but most services are set up on the understanding that fostering per se is free of charge to the soldier.

Among the relevant websites are these:

NetPets "Military pets foster project" (https://www.netpets.org/netp/foster.php)is a nonprofit service that says it has recruited and screened 5,000 foster- caregivers. Caregivers must provide references and contact information about their veterinarians. Founder Steve Albin phones the veterinarian before accepting a would-be fosterer. There is no charge to soldiers, who can fill in an online form describing their pets. Albin will then match each pet with one or more suitable foster homes. There are also links for signing up as a foster-caregiver and for donations to support the site.

Feline Rescue (www.felinerescue.net, and click on "Operation Noble Foster" box) is a nonprofit service that says it has received many fostering offers. The site has a database allowing owners to do their own searches for suitable fosterers. Feline Rescue does not screen fosterers itself, but collects screening information for pet owners to study. In turn, it asks owners to provide a "cat resume" to help the fosterer determine whether a particular cat is suitable for his or her home. The site also offers a sample contract form.

The Humane Society of the United States (www.hsus.org/ace/11822) doesn't offer foster-brokering services, but it has much information to assist military pet owners, including a checklist and a sample contract form. The society works with other animal-protection organizations to encourage local shelters to develop fostering programs.

4MilitaryFamilies (www.4militaryfamilies.com/pets.htm) provides information and tips for taking care of military pets during foster care or moves.

(Harry Noyes is assistant editor of The Mercury, the U.S. Army Medical Command newspaper, at Fort Sam Houston, Texas.) ■

Announcements...

Meetings and Workshops

The Jackson Laboratory

Workshop on Embryo Handling

Date(s): Oct 6, 2004 - Oct 8, 2004
Location: Genetics Resource Building Training Laboratory, 600 Main Street, Bar Harbor, ME.

This workshop session is offered separate from the Cryopreservation Workshop for those who need to acquire skills in embryo handling techniques necessary to cryopreserve and re-establish strains.

Topics include: Embryo collection, embryo transfer methods, and basic aseptic surgery.

For more information, contact Karen Grant, 600 Main Street, Bar Harbor, ME 04609; phone: 207-288-6263; fax: 207-288-6080; e-mail: kgk@jax.org

Workshop on Cryopreservation of Mouse Germplasm

Date(s): Oct 10, 2004 - Oct 15, 2004
Location: Genetics Resource Building Training Laboratory, 600 Main Street, Bar Harbor, ME.

The cryopreservation course is offered to teach methods in cryopreservation for banking of research strains of mice. Several methods of cryopreservation are now available and because no single method is adequate for all the various strains of mice being developed, a variety of methods are taught. The course is designed primarily as a "hands-on" laboratory program in which participants will learn techniques for the cryopreservation of cleavage-stage embryos, spermatozoa, and ovaries.

Topics include:

Embryo "slow" equilibrium freezing to -80°C in plastic cryotubes

Embryo "two-step" equilibrium freezing to -35°C in plastic straws

Embryo non-equilibrium "ultra-rapid" cooling or "vitrification" in straws without the use of a controlled rate freezer

Sperm freezing in cryotubes without the use of a controlled rate freezer and recovery of frozen sperm by in vitro fertilization

Ovary "slow" equilibrium freezing to -80°C in plastic cryotubes

General principles of cryobiology

Inventory databases for individual programs

Long-term storage systems

Cryogenic equipment

In addition, general principles of cryobiology, development of inventory databases for individual programs, and adaptation of long-term storage systems and cryogenic equipment for different situations will be discussed. For more information, contact Karen Grant, 600 Main Street, Bar Harbor, ME 04609; phone: 207-288-6263; fax: 207-288-6080; e-mail: kgk@jax.org

Colony Management: Principles and Practices

Date(s): Nov 14, 2004 - Nov 18, 2004
Location: Highseas Conference Center, Schooner Head Road, Bar Harbor, ME.

This workshop is designed to provide training in the theory and practice of maintaining mouse colonies for production and research. The newly expanded 4-day program is designed for colony managers, animal care technicians, and students requiring an understanding of issues relating to the management of animal research and production colonies. (technicians, colony managers, students, Ph.D. scientists).

Topics include:

Overview of jax mice: nomenclature and uses

Basic principals of mammalian genetics

Breeding strategies

Genetics quality control

Importation and animal health

Resources for genetically engineered mice

Facility design

Considerations in tracking and storage of colony data

For more information, contact Judi Alexander, 600 Main Street, Bar Harbor, ME 04609; phone: 207-288-6326; fax: 207-288-6080; e-mail: judih@jax.org

Humane Society of the United States

Solving Conflicts with Beaver

Cosponsored by USDA Forest Service Lake Tahoe Basin Management Unit http://www.hsus2.org/hsu/BrochurePDF1.pdf

July 14, 2004 or July 15, 2004
9:00 a.m. to 4:30 p.m.
Register by June 30, 2004

At this workshop, you will learn to successfully manage problems that arise when beaver fell trees and their dams flood property and roads. Objectionable flooding can often be solved while retaining beneficial beaver wetlands. Experts will describe and demonstrate practical, lasting, cost-effective solutions. Participants will learn about beaver ecology and biology, the beaver's role in the ecosystem, and different types of exclusion and flow devices. Each 1-day program will feature a morning of classroom presentations by leading beaver and wetlands scientists followed by a field demonstration in the afternoon. Participants will travel to a site with historic beaver flooding to observe and participate in the construction of a typical beaver damage control device. Please dress appropriately for outdoor conditions at a beaver dam site for the afternoon field demonstration: boots and field clothes, waders if you have them. For those interested only in attending the morning classroom session, you may register at a reduced fee.

Registration Fees:

$125.00 Full day rate, $75.00 Morning classroom session only. For more information, contact Ellen Truong at 301-548-7731 or etruong@hsus.org.

National Cruelty Investigations Schools

http://www.hsus2.org/hsu/educationleti1.htm

In partnership with the Law Enforcement Training Institute (LETI) at the University of Missouri-Columbia, The National Cruelty Investigations Schools (NCIS) were designed for animal cruelty investigators at the Federal, State, & local levels; humane society cruelty investigators; animal control officers; police officers and sheriff's deputies responsible for the investigation of animal cruelty complaints; animal shelter administrators; and other individuals interested in learning a systematic approach to animal cruelty investigations.

Courses will be held:

Sept 13-17, Billings, MT, Level II
Oct 4-8, Rochester, NY, Level III
Oct 11-15, Columbia, MO, Level I
Nov 8-12, Mobile, AL, Level II
Nov 15-19, Rio Rancho, NM, Level I
Nov 29-Dec 3, Sacramento, CA, Level I
Dec 6-10, Reno, NV, Level III

If you have questions about the exact training event location or about registration, please contact Lisa Dority at LETI: 800-825-6505 or doritya@missouri.edu. General program questions may be directed to Janet Snyder, HSU Training Director: 301-258-3119 or jlsnyder@hsus.org.

Office of Laboratory Animal Welfare, National Institutes of Health

http://grants1.nih.gov/grants/olaw/olaw.htm

IACUC 101 Workshop in California

The Office of Laboratory Animal Welfare (OLAW), National Institutes of Health, will co-sponsor an IACUC 101 Workshop with the California Biomedical Research Association, and the University of California, Irvine, on September 14. IACUC 101 is a full day didactic and interactive training course. Participants will receive an extensive Resources Manual plus other valuable reference materials and information. The session will be held at Atrium Hotel, http://www.atriumhotel.com or (949) 833-2770. For more information about the IACUC 101 Workshop, contact Cindy Larsen, UCI clarsen@uci.edu; Desirée Glaspey, CBRA dglaspey@ca-biomed.org; or Mary Lou James mljames@socket.net.

The program and registration information are posted at Irvine_061004.doc

IACUC 101 upcoming dates:

- July 13-14 (includes IACUC 201), Research Triangle Park, NC—host, NCABR
- September 14, Irvine, CA—host, CBRA and UC Irvine
- November 2, University Park, PA—host, Pennsylvania State University

For more information, contact Mary Lou James, phone: (314) 997-6896; fax (314) 569-5841 (with notice); cell: (314) 498-6546; e-mail: mljames@mo.net

Scientists Center for Animal Welfare

IACUC-Advanced

Held on September 17, 2004, in Denver, Colorado. This workshop is sponsored by the Scientists Center for Animal Welfare and co-hosted with the University of Colorado Health Sciences Center and the National Jewish Medical & Research Center, Working for Animals Used in Research, Drugs and Surgery, and NIH, Office of Laboratory Animal Welfare.

The Scientists Center for Animal Welfare (SCAW) has developed an advanced program to train members of Institutional Animal Care and Use Committees (IACUC): IACUC-Advanced.

IACUCs are mandated by the Animal Welfare Act, PHS Policy and the FDA to oversee the welfare, care, and use of animals used in research, testing, and teaching. IACUC-Advanced will give IACUC members an opportunity to learn new information, to discuss complicated protocols with fellow IACUC members, and to keep current with new and developing events.

IACUC-Advanced will provide 1-day workshops in different regions around the United States. The format will let small groups discuss specific, complex topics that are relevant to IACUC functions. Each workshop will be structured in similar design, with slight changes made to update information and to meet special needs. The registration form can be found at http://www.scaw.com/iacuc-advanced.htm

And don't forget the **SCAW Winter Conference** in San Antonio, Texas, December 6-7, 2004.

Scientists Center for Animal Welfare, 7833 Walker Drive, Suite 410, Greenbelt, MD 20770 phone: (301) 345-3500; fax: (301) 345-3503; e-mail: info@scaw.com; Web: www.scaw.com

AALAS National

The 55th American Association for Laboratory Animal Science National Meeting will be held October 17-21, 2004, at the Tampa Convention Center in Tampa, FL. Programs will be mailed in July. More information can be found at http://www.aalas.org/education/conferences/2004_NM

Advances in the Care and Use of Laboratory Animals

This meeting will be held in Buenos Aires, Argentina from November 9 to November 12, 2004. It is organized by the Asociación Argentina de Ciencia y Tecnología de Animales de Laboratorio (AACyTAL) and the International Council for Laboratory Animal Science (ICLAS) together with Federación de Sociedades Sudamericanas de Ciencia en Animales de Laboratorio (FESSACAL) and Asociación Centroamericana, del Caribe y Mexicana de la Ciencia de Animales de Laboratorio (ACCMAL).

For more information, please go to: www.fbmc.fcen.uba.ar/aacytal or contact: D.V.M. Cecilia Carbone, President Organizing Committee, e-mail: infoaacytal@fbmc.fcen.uba.ar, phone: (54-211)-45763369, fax:(54-221)-4211276

Canadian Aquaculture Institute

Care, Handling and Use of Aquatic Animals

http://www.upei.ca/fishcarecourse/

This course, that will be held from August 23 to August 27, 2004, is aimed at professionals who are involved in the care and/or experimental use of fish, crustaceans and mollusks. This program will be of particular value to animal care and laboratory technicians and grad student-level researchers with entry to mid-level experience with aquatic animals. This program may also be of interest to veterinary and laboratory animal techni-

cians, and technical staff in aquariums, zoos, and aquaculture environments.

The course will be delivered with a combination of on-line, classroom, and laboratory teaching using the expert facilities at the Atlantic Veterinary College in Charlottetown, Prince Edward Island (Canada). The 5-day Care, Handling and Use of Aquatic Animals course is $1650 CDN/person. Registration fee is subject to a 7% Goods and Services Tax.

Refining Reduction Alternatives to Laboratory Animals in Toxicology

http://www.uku.fi/~tnevalai/satellite10704.html

A satellite meeting of the 10th International Congress of Toxicology 11-15 July, 2004; Tampere, Finland to be held July 10, 2004 in Kuopio, Finland.

This meeting aims at genuinely assessing where toxicological research is going in terms of number of animals used, i.e., in the Reduction alternative. Participants are invited to submit abstracts for free communications on the topic of the satellite. Please prepare an abstract containing title, author(s), affiliation(s) and maximum of 300 words text and send it to Timo.Nevalainen@uku.fi. Deadline for abstracts is June 15, 2004.

Please register for the meeting by June 30, 2004. For more information, contact Timo Nevalainen at e-mail: Timo Nevalainen@uku.fi

Information Resources

Pain Hurts

Pain: How to understand, recognize, treat, and stop.

This software program provides insight into all aspects of pain management, including physiology, pathophysiology, origin of pain, pain recognition and assessment in many species of companion (cats, dogs, pot belly pig, ferrets, rabbits, guinea pigs, chinchillas, hamsters, gerbils, reptiles) and laboratory (mice, rats) animals and available analgesic drugs and modalities for all situations, age groups, and species. This is accomplished through 122 video cases (cats, dogs, PB pig, and bird), 10 animated movies, full audio and screen text, printable reference discussion documents, and tabulated treatment regimens and information for easy daily access within the various sections dealing with all painful situations. Available in DVD or as 2 CDs. The cost of the program is $199. For more information on this program, visit http://www.jonkar.com

Relieving Pain: Assessment and Management of Post-Operative Pain in Dogs and Cats

This interactive software package allows veterinarians to assess post-operative pain in dogs and cats by providing pre-analgesic and post-analgesic treatment video clips accompanied by detailed explanations of various pain behaviors in each case presented. A variety of actual post-operative cases are presented, and in each case the participant is asked to examine and assess the animal's behavior. A potential problem, such as pain, dysphoria or anxiety exists, where the medication, dosage, and route of administration must be selected to treat the problem. The package sells for $150.00 for a single user and $250.00 for multiple users and is available at http://www.jonkar.com

"How To Write An Application Involving Research Animals" Tutorial

The National Institute of Allergy and Infectious Diseases (NIAID) and the Office of Laboratory Animal Welfare (OLAW) have developed a Web tutorial that provides a step-by-step guide to the preparation of an application and covers such topics as considering alternatives, obtaining assurances and IACUC approval, just-in-time processes, NIH review of animal subjects applications, grant awards, IACUC monitoring of awards, and reporting requirements.

Although designed specifically for NIAID applicants, the information is relevant to any investigator submitting an application to NIH for an activity involving animals. It is available at: http://www.niaid.nih.gov/ncn/clinical/researchanimals/tutorial/index.htm

Guidelines for the Care and Use of Mammals in Neuroscience and Behavioral Research

Expanding on the Guide for the Care and Use of Laboratory Animals, this new publication of the Institute for Laboratory Animal Research (ILAR) provides current best practices for animal care and use and discusses how applicable regulations and guidelines can be applied to neuroscience and behavioral research. The book treats the development, evaluation, and implementation of animal-use protocols as a decision-making process, not just a decision. It encourages the use of professional judgment and careful interpretation of regulations and guidelines to develop performance standards that ensure animal well-being and high-quality research. This book will be an indispensable resource for researchers, veterinarians, and IACUCs.

The Office of Laboratory Animal Welfare (OLAW) has sent each IACUC Chair of Public Health Service Assured institutions one paperback copy. A limited supply of paperback and CD copies are available without charge from OLAW. To request one, write to OLAW@od.nih.gov and specify the title of the publication and format (paperback or CD). Limit one per request. Copies may be purchased from National Academies Press at http://www.nap.edu/catalog/10732.html

Animal Care and Management at the National Zoo: Interim Report

The U.S. House of Representatives Committee on House Administration (with oversight of the Smithsonian Institution) held a hearing on March 5, 2003, in which questions were raised regarding the quality of animal care and management at the National Zoo. It recommended a science-based review of the institution by the National Academies. In response to this request, the Board on Agriculture and Natural Resources and the Institute for Laboratory Animal Research convened a committee and charged it to conduct a review of the care and management of animals at the National Zoo. This report is available at http://www.nap.edu/catalog/10932.html

LAMA Disaster Preparedness Resource

http://www.lama-online.org/OLAW-1.html

The Laboratory Animal Management Association (LAMA) held a meeting and educational seminar on May 1-3, 2002, in Jackson Hole, Wyoming, on Disaster Planning and Management in laboratory animal research facilities. This meeting brought together experts in disaster preparedness and response with institutional representatives who have experienced natural disasters in laboratory animal facilities. The presentations at that meeting and links to Federal and non-federal resources are available.

New Book in Laboratory Animal Science

Manual of Rodent Genetics: Concepts and Applications (*Manual de Genética de Roedores de Laboratorio: Principios Básicos y Aplicaciones*).

This book, in Spanish, by veterinarians Fernando Benavides and Jean-Louis Guénet covers all major aspects of the classical

and molecular genetics related to the rodents as laboratory animals (with the stress in the laboratory mouse and rat). Topics include basics of molecular genetics techniques, cytogenetics, cryopreservation of embryos and germ cells, systematics and use of the newly wild-derived strains, gene mapping and genome sequencing projects, mutations, transgenesis, chemical and targeted mutagenesis, and rodents as models of human diseases. This is a unique book not only because it is a major source of information on rodent genetics but also because it is the first book of its kind in Spanish available for the professionals and technicians working with laboratory rodents in Spain, Latin America, and other Spanish-speaking countries. The book was published by Sociedad Española para las Ciencias del Animal de Laboratorio (SECAL) and Universidad de Alcala and sponsored by Laboratory Animals, Ltd., and SECAL.

Dr. Jean-Louis Guénet is the Head of the Mammalian Genetics Unit at Institut Pasteur, Paris, France, and is a world authority in mouse genetics. Fernando Benavides is Dr. Guénet's disciple and is now an assistant professor at M.D. Anderson Cancer Center, Smithville, Texas. Fernando Benavides is also an ACLAM diplomate since 2003.

The book (ISBN: 84-8138-584-0) has 312 pages, 74 figures, one full-color picture, and 22 tables. It can be requested by e-mail to "Servicio de Publicaciones de la Universidad de Alcalá" (almacen.public@uah.es). The price of the book is € 20 (about $24). Further information is available at http://www.secal.es

On the Web

Animal Ethics Infolink

http://www.animalethics.org.au/

This website has been developed in Australia by the Animal Research Review Panel and New South Wales Agriculture's Animal Welfare Unit. Its aim is to assist researchers, teachers, and members of Animal Ethics Committees to access information about the operation of the Animal Research Act 1985, Animal Research Regulation 1995, and the Code of Practice in New South Wales. In addition to specific information about this legislation, including relevant policies and guidelines, this site provides general information about legislation in other states and countries and links to many sites from which useful, general information promoting the humane care and use of animals for scientific purposes can be sourced.

Animal and Plant Health Inspection Service Rulemaking (How a regulation becomes a regulation)

http://www.aphis.usda.gov/ac/aphisrulemaking.html

Animal Sciences Group, Wageningen Universiteit en Researchcentrum [Research program: Husbandry management, stress and animal welfare]

http://www.ard.asg.wur.nl/reearch/researchprog2.asp?programmanr=21

This research program aims to improve the welfare of agricultural animals and contributes to welfare policy on a national and international level.

The research is of a strategic nature. The focus is on behavior, stress processes and adaptability of individual animals and the analyses of factors in husbandry systems relevant to animal welfare. The knowledge is applied to answer questions about welfare in specific conditions, the measuring of welfare and the effects of improving welfare on health and product quality.

Projects

- The development of coping mechanisms in dairy cattle–Ir. C.G. van Reenen
- Adaptation of lactating sows: interactions between housing conditions at different reproduction stages–Dr. Ing. H. Hopster
- Insight in the relevance of roughage (and its characteristics) in the prevention of oral stereotypes and stomach wall damages–Ir. C.G. van Reenen
- Muscle physiology in the current slaughter pigs in relation to housing, welfare and product quality–Dr.Ir. R.E. Klont
- Feed measures and nutritional and ethological saturation–Dr. A.W. Jongbloed
- Development of instruments for on farm monitoring of welfare–Dr. Ing. H. Hopster

Projects: (links to reports are provided on the webpage)

- Development of criteria for the assessment of stunning methods for fish
- Feed restriction and stress in broiler breeders
- Measuring and monitoring farm animal welfare
- Development of tools for monitoring health and welfare in dairy cattle
- Effects of prenatal stress in sows on behaviour and stress physiology in the offspring
- Research into practical consequences of standards for increased space allowance in fattening pigs
- Effects of milk production on individual adaptive capacity in high-yielding dairy cows
- The temperamental traits of horses
- Relevance of substrate for finishing pigs
- A scientific framework to assess animal welfare
- Feather pecking in laying hens
- Animal welfare parameters

Bibliography Of Training Materials On Experimental Design And Statistical Analysis From The Frame Reduction Committee

http://www.frame.org.uk/reductioncommittee/bibliointro.htm

The FRAME Reduction Committee was formed in 1998. Its members come from industry and academia and have expertise in statistics, experimental design, animal welfare, and alternatives. The committee's aim is to reduce the number of animals used in research, education and testing, without compromising the scientific quality of research and without disrupting scientific progress.

The Canadian Aquaculture Institute (CAI)

http://www.upei.ca/~cai/index.html

A leader in providing continuing education opportunities in the fields of aquaculture medicine, fish health, and management.

Canadian Council on Animal Care Guidelines on the Care And Use of Wildlife

http://www.ccac.ca/english/gdlines/wildlife/Wildlife.pdf
http://www.ccac.ca/french/gdlines/wildlife/AnimauxSauvages.pdf

These guidelines are necessarily broad and are limited to basic principles that will assist investigators, wildlife managers, and animal care committees in the development and review of protocols and standard operating procedures.

Canine Inherited Disorders Database

http://www.upei.ca/cidd

Centre for Best Practice for Animals in Research (CBPAR)

http://www.mrc.ac.uk/index/public-interest/public-ethics_and_best_practice/public-use_of_animals_in_research/public-cbpar.htm

CBPAR is dedicated to ensuring high standards in all aspects of laboratory animal use. Acting as a resource for the scientific community, CBPAR is committed to developing, disseminating, and implementing information on best practice in the use and welfare of laboratory animals, and to applying the 3Rs. Sponsored by the Medical Research Council, London.

Code of Recommendations for the Welfare of Livestock—Pigs

http://www.defra.gov.uk/animalh/welfare/farmed/pigs/pigcode.pdf

Department of Defense Biomedical Research

http://www.scitechweb.com/acau/brd/

This database has been developed from biomedical research, testing, or training programs being federally funded in FY1998, FY1999, FY2000, and FY2001. The areas of research, testing, and training include, but are not limited to, the following: infectious diseases, biological hazards, toxicology, medical chemical defense, medical biological defense, clinical medicine, clinical surgery, physical protection, training, graduate medical education and instruction.

Department of the Interior WebCams

http://www.doi.gov/webcam.html

You need a break from the lab! See Old Faithful, Mammoth Hot Springs, Glacier National Park (5 different cameras), Big Bend National Park, and Grand Canyon National Park–Yavapai Point.

Information on Dog Tail Docking Provided for the Animal Welfare Division, United Kingdom

http://www.defra.gov.uk/animalh/welfare/domestic/awbillconsulttaildocking.pdf

This paper briefly reviews docking in farm species as a basis for comparison with the historical, anatomical, behavioural, and current views on tail docking in dogs in the UK. Several aspects of pain in dogs relevant to tail docking are described as are current veterinary attitudes to the procedure.

Miami University Libraries's Guide to The Literature Review/Alternatives Search

http://staff.lib.muohio.edu/~nmoeckel/iacuc/index.html

The alternatives search is not accomplished by "anding" the keywords from your search with the term "alternatives" or even "animal testing alternatives." You need to consider such things as procedures, handling, test conditions, and the environment you will be subjecting the animals to, and determine if there are ways to minimize pain and distress for the animal.

Resources for Teaching Research Ethics

http://poynter.indiana.edu/tre/resources.shtml

Sir James Dunn Animal Welfare Centre, Atlantic Veterinary College, University of Prince Edward Island, Canada

http://www.upei.ca/~awc/

The Centre provides service, research, and education in the welfare of dogs, cats, horses, and wildlife.

The Welfare Of Non-Human Primates Used In Research

http://europa.eu.int/comm/food/fs/sc/scah/out83_en.pdf

European Commission, Report of the Scientific Committee on Animal Health and Animal Welfare ■

New CDC Website for Animal/Human Health Risks

The U.S. Centers for Disease Control and Prevention (CDC) has created a website to provide people with information about the health-related risks of owning and caring for animals. Links are located throughout the website for general information about companion and wild animals and the diseases they could carry. The website offers important information about safe practices for handling domestic animals and avoiding wild ones. The Healthy Pets, Healthy People website is online at www.cdc.gov/healthypets.

By following CDC's simple tips on the Healthy Pets, Healthy People website, you can enjoy your pets while protecting yourself against diseases they carry. Because wild animals can carry diseases that are dangerous to people, CDC discourages direct contact with wildlife. You should never adopt wild animals as pets or bring them home. Teach children never to handle unfamiliar animals, wild or domestic, even if the animals appear to be friendly.

To prevent illness due to animal contact, the Centers for Disease Control and Prevention recommends the following for all people, but especially for those at greatest risk of getting sick from pets:

- ✓ Always wash your hands thoroughly with soap and running water after contact with animals and their feces.
- ✓ Avoid rough play with cats and dogs to prevent scratches and bites.

A person's age and health status may affect his or her immune system, increasing the chances of getting sick. These people include:

- ✓ Infants and children less than 5 years old
- ✓ Elderly
- ✓ Pregnant women
- ✓ People undergoing treatments for cancer
- ✓ People who have received organ transplants
- ✓ People with HIV/AIDS.

If you fit into one of the groups of people outlined above, you should avoid contact with the following animals:

- ✓ Reptiles (turtles, lizards, and snakes)
- ✓ Baby chicks and ducklings
- ✓ Puppies and kittens less than 6 months old
- ✓ Pets with diarrhea

From May/June 2003, Volume XVIII, No. III, FDA Veterinarian Newsletter ■

Recent publications from AWIC

Printed and Web versions available:

Information Resources on Bats
AWIC Resource Series No. 17, August 2002
http://www.nal.usda.gov/awic/pubs/bats/bats2.htm

Information Resources on Elephants
AWIC Resource Series No. 18, April 2003
http://www.nal.usda.gov/awic/pubs/elehants/elephants2.htm

Information Resources on Ferrets, September 1991 - July 2002
AWIC Resource Series No. 15, July 2002
http://www.nal.usda.gov/awic/pubs/ferrets/ferrets.htm

Information Resources on Fish Welfare, 1970 - 2003
AWIC Resource Series No. 20, July 2003
http://www.nal.usda.gov/awic/pubs/Fishwelfare/fishwelfare.htm

Information Resources on Induced Molting in Chickens, 1902-2002
AWIC Resource Series No. 14, September 2002
http://www.nal.usda.gov/awic/pubs/molting/molting2.htm

Information Resources on the Care and Use of Molluscs
AWIC Resource Series No. 22, May 2003
http://www.nal.usda.gov/awic/pubs/molluscs/molluscs2.htm

Information Resources on Swine Housing, Care and Welfare
AWIC Resource Series No. 21, May 2003
http://www.nal.usda.gov/awic/pubs/swinehousing/swinehousing2.htm

Nutrient Composition of Whole Vertebrate Prey (Excluding Fish) Fed in Zoos, 2002
http://www.nal.usda.gov/awic/zoo/WholePreyFinal02May29.pdf

Proceedings: Symposium on Swine Housing and Well-being, June 5, 2002, Des Moines, Iowa
http://www.nal.usda.gov/awic/pubs/swineproceedings2002.pdf

Web only:

Audio-Visuals Relating to Animal Care, Use, and Welfare, January 2003
http://www.nal.usda.gov/awic/pubs/aw200001.htm

Bovine Spongiform Encephalopathy (BSE) and Other Animal Related Transmissible Spongiform Encephalopathies, January 2004
http://www.nal.usda.gov/awic/pubs/bsebib.htm

Disposal of Dead Production Animals, 2003
http://www.nal.usda.gov/awic/pubs/carcass.htm

Information Resources for Animal Facility Sanitation and Cage Wash
AWIC Resource Series No. 19, February 2003
http://www.nal.usda.gov/awic/pubs/cagewash.htm

Information Resources on Newcastle Disease in Birds
AWIC Resource Series No. 23, May 2003
http://www.nal.usda.gov/awic/pubs/newcasle/newcastle2.htm

Johne's Disease–Mycobacterium avium subsp. paratuberculosis, January 2003
http://www.nal.usda.gov/awic/pubs/johnes/johnes.htm

Old World Camels: Arabian and Bactrian, 1941-2003
http://www.nal.usda.gov/awic/pubs/camels.htm

Quail, Pheasant, Finches, Ostrich, Dove, Parrot, 2004
http://www.nal.usda.gov/awic/pubs/Birds/birds.htm

South American Camelids: Llamas, Alpacas, Vicunas, and Guanacos, 1943-2003
http://www.nal.usda.gov/awic/pubs/llama.htm

Tuberculosis in Animals
AWIC Series No. 2004-01, January 2004
http://www.nal.usda.gov/awic/pubs/TB/TBMain.htm

West Nile Virus Bibliography, 1965-2002
http://www.nal.usda.gov/awic/pubs/westnile/westnilebib.htm

Humane Endpoints Database Now Available at Altweb

This database, from Altweb at Johns Hopkins University in Baltimore, Maryland, is designed to help investigators find the earliest endpoint that is compatible with the scientific objectives of their research. An endpoint may be defined as "the point at which an experimental animal's pain and/or distress is terminated, minimized, or reduced by taking actions such as killing the animal humanely, terminating a painful procedure, or giving treatment to relieve pain and/or distress." (From the Canadian Council on Animal Care (CCAC) Guidelines on Choosing an Appropriate Endpoint in Experiments Using Animals in Research Teaching and Testing (1998) http://www.ccac.ca/english/gui_pol/gdlines/endpts/APPOPEN.HTM)

Actual selection of an endpoint should involve consultation with the laboratory animal veterinarian and the animal care and use committee. For additional resources on humane endpoints, please see http://altweb.jhsph.edu/topics/humane-endpoints.htm.

USDA News...

USDA Begins Field Trial for Resident Canada Geese Populations

FORT COLLINS, Colo., March 1, 2004—The U.S. Department of Agriculture's Animal and Plant Health Inspection Service's National Wildlife Research Center today announced that it will begin field trials of a new product designed to humanely reduce resident Canada goose populations in the northwest United States.

The new technology, produced in collaboration with scientists at Innolytics, LLC, reduces nonmigratory or resident Canada goose populations by decreasing hatchling numbers.

APHIS will conduct these trials by providing a treated bait to geese to prevent eggs from hatching. The baiting method and bait design limit exposure to nontarget avian species. The effects are fully reversible and are not harmful to geese, birds or other waterfowl.

Research shows that large populations of resident, nonmigratory geese pose increased risks to agriculture, and health risks to humans and animals. Infectious organisms transmitted by geese include *E. coli* and *Salmonella* bacteria.

"Following more than 4 years of research with this technology, we are delighted to initiate these trials," said Kathleen Fagerstone, director of product development at NWRC. NWRC and organizations such as Innolytics work together to develop humane and nonlethal solutions to diminish wildlife conflicts," Fagerstone said.

APHIS' NWRC is devoted to the resolution of conflict caused by the interaction of wild animals and society. The center applies scientific expertise to the development of practical methods to resolve these problems and to maintain the quality of the environments shared with wildlife.

USDA Issues New Regulations To Address BSE

WASHINGTON, Jan. 8, 2004 —The U.S. Department of Agriculture's Food Safety and Inspection Service today issued four new rules to implement announcements made last week by Agriculture Secretary Ann M. Veneman to further enhance safeguards against Bovine Spongiform Encephalopathy (BSE).

On Dec. 30, 2003, Secretary Veneman announced a number of policies that will further strengthen protections against BSE, including the immediate banning of non-ambulatory (downer) animals from the human food supply. Rules to address the remaining issues are on display at the Federal Register today and are the result of many months of development. These policies involve: requiring additional process controls for establishments using advanced meat recovery (AMR) systems; holding meat from cattle that have been tested for BSE until the test results are received and they are negative; and prohibiting the air-injection stunning of cattle.

The rules released today include:

Product Holding. USDA is publishing a notice announcing that FSIS inspectors are no longer marking cattle tested for BSE as "inspected and passed" until confirmation is received that the cattle have, in fact, tested negative for BSE. FSIS will be issuing a directive to inspection program personnel outlining this policy.

Specified Risk Material. With the filing of an interim final rule, FSIS is declaring that skull, brain, trigeminal ganglia, eyes, vertebral column, spinal cord and dorsal root ganglia of cattle 30 months of age or older and the small intestine of all cattle are specified risk materials, thus prohibiting their use in the human food supply. Tonsils from all cattle are already considered inedible and therefore do not enter the food supply. These enhancements are consistent with the actions taken by Canada after the discovery of BSE there in May. These prohibitions are effective immediately upon publication in the Federal Register.

In this rule, FSIS is requiring federally inspected establishments that slaughter cattle remove, segregate and dispose of these specified risk materials so that they cannot possibly enter the food chain. To facilitate the enforcement of this rule, FSIS has developed procedures for verifying the approximate age of cattle that are slaughtered in official establishments. State inspected plants must have equivalent procedures in place to prevent these specified risk materials from entering the food supply.

Advanced Meat Recovery. AMR is a technology that removes muscle tissue from the bone of beef carcasses under high pressure without incorporating bone material. AMR product can be labeled as "meat." FSIS has previously established and enforced regulations that prohibit spinal cord from being included in products labeled as "meat."

This interim final rule expands that prohibition to include dorsal root ganglia, clusters of nerve cells connected to the spinal cord along the vertebral column, in addition to spinal cord tissue. In addition, because the vertebral column and skull in cattle 30 months and older will be considered inedible, they cannot be used for AMR.

Air-Injection Stunning. To ensure that portions of the brain are not dislocated into the tissues of the carcass as a consequence of humanely stunning cattle during the slaughter process, FSIS is issuing an interim final rule to ban the practice of air-injection stunning.

Related Documents

The following regulations [were] published in the Federal Register, and [went] into effect, on January 12, 2004.

Docket No. 03-048N, Bovine Spongiform Encephalopathy Surveillance Program

Docket 03-025IF, Prohibition of the Use of Specified Risk Materials for Human Food and Requirements for the Disposition of Non-Ambulatory Disabled Cattle

Docket No. 03-038IF, Meat Produced by Advanced Meat/Bone Separation Machinery and Meat Recovery (AMR) Systems

Docket No. 01-033IF, Prohibition of the Use of Certain Stunning Devices Used to Immobilize Cattle During Slaughter

NOTE: Access news releases and other information at the FSIS web site at http://www.fsis.usda.gov.

Animal Welfare Research in USDA's Agricultural Research Service

Gentler Hens for Poultry Production

by Don Comis

This article was originally published in Healthy Animals Issue 17, January 2004

A team of Agricultural Research Service and Purdue University animal scientists and behaviorists at West Lafayette, Indiana, is working on improvements in humane treatment of poultry, while keeping the business bottom line in mind.

Heng Wei Cheng, in the ARS Livestock Behavior Research Unit at West Lafayette, and Purdue animal scientist William M. Muir are part of this research team dealing with issues such as housing environment for poultry—primarily the type and size of cages—and some routine practices such as beak trimming and induced molting.

Many of their approaches center around the less aggressive birds they are breeding. Using group selection, they put 12 sibling chicks in cages without trimming their beaks, a procedure used to minimize pecking injuries. After 58 weeks, the scientists select chickens from those cages that have had the lowest mortality rates from pecking and the highest egg production. The gentle birds have a 1.3 percent mortality rate from pecking, far lower than commercial lines.

Traditionally, breeding chickens are kept in individual cages and selected for egg production; the new approach also selects for social skills useful for living in commercial egg layer cages. The goal is to select gentle birds that do not need their beaks trimmed. Cheng and colleagues are also researching the most humane way to trim beaks.

Cheng and Purdue scientist Scotti Hester are researching poultry housing alternatives, such as cages with perches and boxes for sand-bathing and nesting. Chickens grow stronger bones by using perches. Cheng is also researching alternatives to induced molting, the practice of withholding food from hens to cause a rest in egg laying, which results in more and bigger eggs in months to come.

Bird Barrier Decreases Pond Plundering by Cormorants

by Jim Core

This article was originally published in Healthy Animals Issue 16, December 2003

Twine serves as the basis for a low-tech solution to a growing problem for aquaculture in the Mississippi River Delta.

Double-crested cormorants, commonly called water turkeys, are migratory birds that winter in the Delta region. They feed on channel catfish fingerlings in farm ponds, typically from September to mid-April, and sometimes longer. The Agricultural Research Service wants to help reduce cormorant damage by dispersing their populations away from areas of high catfish production.

Andy Radomski, a wildlife biologist at the ARS Harry K. Dupree Stuttgart National Aquaculture Research Center in Arkansas, developed a barrier by stringing twine at 30-meter intervals (about 100 feet) across ponds. He estimates a three-person crew can manually complete a 15-acre pond in about 3 hours. The material cost ranges from $20 to $80 per 15-acre pond. The twine must be tied to posts so that it remains at least 3 feet above the water in the middle of the pond. If the string is too close to the water, the birds are more likely to still land.

Only 2.3 birds an hour on average were counted on ponds where the technique was tested, compared with 10.6 birds on control ponds.

The technique initially decreases the number of cormorants landing on a pond, and then additional cormorants are less likely to land because they seek safety in numbers.

Aquaculturalists claim cormorant depredation as their biggest wildlife problem. Besides eating fingerlings, the birds also injure catfish, disturb their feeding patterns, and potentially carry diseases. Although their populations were once threatened, cormorant numbers in the Delta have steadily risen, nearly tripling during the past decade alone. They fly from nearby roost trees, land on ponds, and periodically dive for young catfish. Each bird can consume 1-1.5 pounds of catfish a day.

The technique is easy to use and maintain, nonlethal, and cost-efficient, though it would not deter all fish-eating birds, according to Radomski.

Healthy Animals can be found at http://www.ars.usda.gov/is/np/ha/index.html.

ARS is the U.S. Department of Agriculture's chief scientific research agency.

US Fire Academy (USFA) Announces Independent Study Program: Livestock In Disasters

EMMITSBURG, MD. - Livestock can be overlooked victims of disaster and the associated economic impact can affect small and large producers in affected areas. The high winds and storm surge from Hurricane Floyd killed thousands of pigs and poultry in North Carolina. Heat waves across the mid-Atlantic states in 2001 killed several million poultry. And more than 90,000 cattle either froze or drowned in the blizzards and subsequent floods in the north central states in 1997. These caused interruption of America's food supply, economic losses, public health problems and a huge cost to the American taxpayer in disaster assistance.

To address this issue, the U.S. Department of Homeland Security (DHS), the Federal Emergency Management Agency (FEMA), and the U.S. Fire Administration (USFA) announce a new independent study program called "Livestock in Disasters" (IS-111), designed and presented by FEMA's Emergency Management Institute (EMI). It is aimed at farmers, emergency managers, and all other first responders who are involved in livestock agriculture.

"There are two major objectives in this training program. Preventing the loss of livestock and increasing the ability to more effectively respond when there is a loss," said USFA Deputy Administrator Charlie Dickinson. "It not only addresses the problems associated with natural disasters such as floods and blizzards, it is also concerned with effective response to outbreaks of animal disease." Topics covered in Livestock in Disasters include animal and public health issues, evacuation of animals, providing feed and water in times of disaster, and building wind-resistant barns and farm buildings. The course also includes information on assistance from the U.S. Department of Agriculture (to help prepare for a disaster or available to help recover from a disaster) and developing community emergency plans to address this issue.

Livestock in Disasters IS-111 is available to all Americans. The course materials can be downloaded from EMI's Independent Study website: http://training.fema.gov/emiweb/is.

Printed copies of IS-111 can be obtained by calling EMI's Independent Study office at 301-447-1200. The course takes 10 to 12 hours to complete.

USFA is part of FEMA. Both USFA and FEMA are part of the Department of Homeland Security.

U.S. Fire Administration, 16825 S. Seton Ave., Emmitsburg, MD 21727; tel: (301) 447-1000, fax: (301) 447-1052

International News...

United Kingdom

New Regulations Laid in Parliament to Enhance Animal Welfare at Slaughter and Killing

News Release 531/03
15 December 2003
Department for Environment, Food and Rural Affairs (DEFRA), United Kingdom
http://www.defra.gov.uk
London, England

DEFRA today introduced amendments to the legislation governing animal welfare at slaughterhouses, knacker's yards and during culls, resulting from measures introduced to control disease outbreaks. The amendments are designed to enhance animal welfare. The amending Statutory Instrument recognises the considerable developments in slaughter and killing methods which have taken place since the adoption of the EU Council Directive 93/119/EC on the protection of animals at the time of slaughter or killing in 1993. It amends the Welfare of Animals (Slaughter or Killing) (WASK) Regulations 1995, which implements the Directive in Great Britain. [Editor's note: The Welfare of Animals (Slaughter or Killing) (Amendment) (England) Regulations 2003 was laid before Parliament on December 15, 2003. It came into force on January 6, 2004. The provision relating to hanging times for poultry will come into force on January 6, 2005 in order to allow slaughterhouse operators time to alter their procedures where necessary. The amendments are made on animal welfare grounds, based on scientific research which has been undertaken by the University of Bristol, to which DEFRA

contributed funding, and by the Roslin Institute. Details of the amendments can be found on the DEFRA website at http://www.defra.gov.uk/animalh/welfare/farmed/slaughter/wask-guide1.pdf]

Animal Welfare Minister Ben Bradshaw said the Government had a commitment to improve continually the standards of animal welfare at slaughter and killing. "The changes will offer improvements to the welfare of animals at slaughter and killing, without imposing undue burdens on industry," he said.

The Statutory Instrument makes four amendments to the WASK Regulations. It will:

- permit the wider use of the new percussive device (modified captive bolt pistol) for use when culling poultry for disease control purposes;
- end the current ban on the bleeding of animals in the sight of other animals of the same species, bringing England into line with Scotland, although the ban will still apply to equines;
- 12 months after coming into force, reduce the maximum time poultry may be hung before being stunned or killed from six to three minutes for turkeys and from three to two minutes for other poultry excluding ratites and;
- require the surrender of suspended/revoked slaughter licences to the Meat Hygiene Service to ensure that a slaughterman who has had his or her licence suspended/revoked cannot operate as a slaughterman in another slaughterhouse or knacker's yard.

The modification of domestic legislation follows detailed consultation with farming, animal welfare and slaughtering industry stakeholders and falls within the constraints of the EU Directive.

New Pig Welfare Code and Pig Welfare Regulations Introduced

Statutory Instrument 2003 No. 299
The Welfare of Farmed Animals (England) (Amendment) Regulations 2003
http://www.legislation.hmso.gov.uk/si/si2003/20030299.htm

Contains "Additional Conditions That Apply to the Keeping of Pigs"

The new, user-friendly code covers stockmanship, handling, health, housing and feed and water.

Animal Welfare Minister Elliot Morley said the code would help boost welfare throughout the pig industry. "The new code is not onerous for pig farmers, but is there to help stockmen care for their animals. It is a positive force for improving the welfare of pigs." The new Regulations implement two pig welfare directives. The directives introduce an EU-wide ban on close confinement sow stalls, with full effect from 1 January 2013. Under UK legislation, such sow stalls were banned from the beginning of 1999. The key provisions of the new Regulations are:

- all pigs to have permanent access to manipulable materials
- an increase in the minimum weaning age from 21 to 28 days
- minimum space allowances for sows and gilts

Eurostar launches service for guide dogs under the [United Kingdom] Pet Travel Scheme

DEFRA
23 September 2003

Eurostar has launched a new service for blind and partially sighted owners and their guide dogs as part of the UK's Pet Travel Scheme. [Editor's note: Eurostar is the rail service directly linking the UK to France and Belgium via the Channel Tunnel.]

The service, which the company operates on its Paris, Lille and Brussels routes to and from London Waterloo, starts on 28 September 2003. When returning to Waterloo, guide dog owners must show their Pet Travel Scheme documents.

Eurostar has worked closely with DEFRA, the Royal National Institute of the Blind, and the Guide Dogs for the Blind Association to provide this service.

Over 100,000 dogs and cats have entered the UK under the Pet Travel Scheme since it was launched in February 2000. While Eurotunnel has taken part in the scheme since its launch, this is the first time that Eurostar has permitted any type of animal to travel on its trains.

To qualify for entry into the UK under the Pet Travel Scheme, dogs must first be microchipped, then vaccinated against rabies, blood tested by a DEFRA-recognised laboratory and issued with a PETS certificate. The PETS certificate is not valid for entry to the UK until six months have passed from the date the blood sample was taken which led to a successful blood test result. Pets must also be treated against ticks and tapeworms 24-48 hours before they embark on the approved route bringing them into the UK.

For more information on the rules of the Pet Travel Scheme and a list of approved routes, contact the PETS Helpline on 0870 241 1710 or visit the PETS section at http://www.defra.gov.uk/animalh/quarantine/index.htm

See also the Eurostar website www.eurostar.com or ring Eurostar on 08705 186 186.

International News...

United Kingdom Animal Statistics for 2002 Available

The Home Secretary publishes statistics on the use of animals in scientific procedures in Great Britain. Statistics for Northern Ireland are published separately. Animal statistics for 2002 are now available from the United Kingdom Home Office at http://www.homeoffice.gov.uk/docs/animalstats.html

The Animals in Scientific Procedures web page of the Home Secretary can be found at http://www.homeoffice.gov.uk/comrace/animals/index.html

European Union

David Byrne [European Commissioner for Health and Consumer Protection] calls for worldwide animal welfare standards–Commission granted official observer status at OIE

IP/04/253

Paris, 23 February 2004

The European Commission obtained today official observer status within the OIE (World Organisation for Animal Health) at the first ever global conference on animal welfare bringing together the 166 member countries of the OIE and various OIE-affiliated international organisations. While the EU has always been involved in the work of the OIE, the observer status will now enable the Commission to advance the EU´s view on all international animal health and welfare issues. At the opening of the conference Commissioner David Byrne promised to continue to actively support the OIE in its activities and welcomed the initiative to organise for the first time a global conference on animal welfare. "Getting animal welfare recognised at an international level is important for European citizens. The EU supports every step to achieve higher animal welfare standards not just within the EU but worldwide."

Animal welfare standards are not defined at an international level except in Conventions by the Council of Europe and some multilateral agreements. However current WTO provisions take little account of animal welfare and the EU can therefore not require its own animal welfare standards to be respected in third countries. Nevertheless the Doha 2001 conclusions placed non-trade concerns, including animal welfare, firmly on the agenda for future WTO agricultural negotiations. "Any moves to develop international standards have our wholehearted support," said David Byrne, "The significance of this conference should not be underestimated. It marks the very first opportunity for stakeholders, scientists and governments to debate animal welfare issues in a worldwide perspective."

European citizens care deeply about animal welfare and the unanimous decision of the OIE member countries to address animal welfare at this international level confirms the worldwide interest in this issue. The Commission endorses the OIE's approach of basing animal welfare guidelines and standards on the best available science and setting up expert groups to advise on the specific issues. Creating guidelines and standards at the OIE level is likely to facilitate their international acceptance. Recently OIE expert groups have been working to develop international standards and guidelines on the welfare of animals during land and sea transport, humane slaughter for consumption and the killing of animals for disease control and these are foreseen to be completed by 2005. Separate guiding principles on animal welfare are due to be adopted at the General Session of the OIE International Committee in May 2004. However OIE Member countries are free to maintain their own standards if these are higher, i.e. the EU standards.

David Byrne added: "I should mention the main criticism often voiced by producers and certain sections of the food industry that higher welfare standards lead to higher production and supply costs. The experience within Europe has shown that in many cases there are no significant additional costs in improving animal protection.

Indeed if such costs are experienced, they can be more than recovered by the price differential of superior more 'animal welfare friendly' products, provided that these are effectively marketed and consumers properly informed. It is of obvious importance that markets evolve and adapt in response to consumer demands. It is encouraging in this regard to see, for example, the shift towards the use of free range eggs by some of the international fast food chains."

New observer status for the European Commission

The OIE conference also marks the official confirmation of the European Commission's newly acquired observer status within the OIE. This will allow both organisations to agree on joint measures to improve international co-operation on animal health and welfare, combating zoonoses and ensuring the sanitary safety of food products of animal origin. The Commission's observer status will further strengthen the relationship between the Commission and the OIE through reciprocal agreements to keep each other informed and work together on matters of common interest.

Travelling with pets: Pet passports to be introduced in July 2004

Date: 27/11/2003

IP/03/1617

Brussels, 27 November 2003

Travelling with pets: Pet passports to be introduced in July 2004

The European Commission today adopted a Decision establishing a model passport which will allow pets and their owners to travel more easily within the European Union. New EU legislation(1) comes into force in July 2004 which will mean all cats, dogs and ferrets will need a passport to travel. The pet passport, a veterinary document, will provide proof that the animal has been vaccinated against rabies. This is the sole requirement for pets to travel to all Member States except Ireland, Sweden and the United Kingdom(2). The passport can also contain details of other vaccinations, including those not required by law, as well as information on the animal's medical history.

David Byrne, the EU Health and Consumer Protection Commissioner said: "This is great news for pet owners like myself. A pet passport will be accepted throughout the EU as proof that a pet has received the anti-rabies vaccination. It also makes it easier for vets to learn about the pet's medical history. This is a significant step for the free movement of people and their pets and a step that was made possible by dramatic advances made in our fight against rabies. Rabies is now close to being totally eradicated from the EU."

Why do pets need passports?

Harmonised veterinary controls on the movement of animals between Member States for trade have been in place for some time. The same rules do not exist for pets. Member States require many different documents to prove a pet meets the veterinary conditions required for travel.

Regulation 998/2003 harmonised the rules on travelling with pets to make it

easier for EU citizens and their cats or dogs to enjoy the freedom of movement within the Union. From 3 July 2004 the Regulation will require cats, dogs and ferrets to have a pet passport. It will provide proof that the animal has been vaccinated against rabies. This is the sole requirement for pets to travel to all Member States except Ireland, Sweden and the United Kingdom.

The pet passport will be accepted in all Member States. It can also contain details of other vaccinations and clinical examinations to give a clear picture of the animal's health status. This will facilitate veterinary checks and provide evidence of good health for a pet travelling to third countries free of rabies or where the disease is under control.

What will the passport look like?

The pet passport will measure 100 x 152 mm with a blue cover and the yellow stars of the European emblem. The languages used will be English and the official language of the Member State where the passport is issued. The words "European Union" and the name of the Member State will appear on the cover, along with the passport number which is the ISO code of the Member State followed by a unique number.

What difference will it make?

Travelling with pets will become much easier. All the different documents needed for travel into each Member State will be replaced by one veterinary document, the pet passport, which will be recognised across the EU. Visits to the vet will also become much more straightforward as the passport can instantly inform the vet about the pet's medical history.

More information: IP/02/950. If you would like to receive a copy of the passport electronically, please send an e-mail to ilse.gordts@cec.eu.int, indicating the language.

(1) Regulation 998/2003.

(2) Pets travelling to Ireland, Sweden and the United Kingdom from the rest of the EU need to have an antibody titration test several months after the rabies vaccination to check it has been effective. The UK and Ireland also require pets to be treated for ticks and tapeworm (echinococcus) as part of the Pets Travel Scheme (PETS). Pets travelling to Sweden need to follow different procedures according to the country of origin.

Fewer tests on animals and safer drugs: new EU tests save 200,000 rabbits per year

New, groundbreaking methods of drug testing to replace animals with safe alternatives, saving up to 200,000 rabbits per year, were unveiled today in Brussels by European Research Commissioner Philippe Busquin. The set of six tests detects potential fever-causing agents (pyrogens) in drugs, by using human blood cells instead of rabbits. The new tests have been developed by a EU-supported research team, involving national control laboratories, test developers, and companies. The tests are being validated by the Commission. They are already being used in over 200 laboratories across the world. Thanks to these alternative methods rabbits will no longer be needed to test the presence of pyrogens in parenteral (non oral) drugs.

"The use of animals to test drugs is unfortunately necessary to safeguard human health," said European Research Commissioner Philippe Busquin. "But we can reduce, replace and refine animal testing, with EU-sponsored research leading the way at world level. The EU's validation of these new testing methods will encourage their broad take-up by industry, ensure drug safety and quality, and reduce the use of animal research. This is an example of the European Research Area in action, developing an environment in which scientific results can be rapidly exploited and transformed into products and processes that improve quality of life, increase competitiveness and benefit animal welfare."

The safety and potency of commercially available medicines and vaccines must be guaranteed. Innovative research, funded and validated by the Commission, aims to replace existing animal-based test methods for fever-causing agents (pyrogens) in parenteral drugs with a new generation of in vitro tests that are more accurate, quicker and more cost-effective.

Blood cells replace rabbits

Understanding of human immunology has advanced rapidly in the past 20 years. Work on human fever reaction and development of test systems for fever mediator molecules, combined with improved cell biology techniques, now enables the innovative use of human cells as biosensors for pyrogens (fever-causing agents). The EU study (Cell factory project: Comparison and validation of novel pyrogen tests based on the human fever reaction, with a view to the ultimate replacement of the rabbit pyrogen test and the Limulus assay (QLK3-1999-00811)) set out to compare and harmonise six in vitro assays to develop a "state-of-the-art" method for inclusion into the European Pharmacopoeia–which sets the requirements for the quality control of drugs in Europe–thus improving consumer safety.

The EU role

The research project funded by the Commission under the EU Fifth Research Framework Programme (1998-2002) brought together the best teams from academia, industry and regulatory bodies. The Commission's Joint Research Centre (the "ECVAM" facility, or "European Centre for Validation of Alternative Methods") played a major role in the project through provision of scientific and technical advice on the design of the validation study, application of good laboratory practice procedures and distribution and coding of test material.

Industry and regulators jump on board

Interest from both regulatory authorities and industry is very high, with many contributions coming from outside the project consortium that included national control laboratories, test developers, a major pharmaceutical company and a producer of diagnostic kits. For example, the European Pharmacopoeia has set up an international expert group to draft a general method on these new tests. In fact, the tests are already in use in about 200 laboratories worldwide, with great success.

Further take-up and new applications

The Commission will take responsibility for further application of this multidisciplinary, international validation study, including an intended patent. This will encourage successful transfer of the tests and help open new fields for pyrogen testing, such as cellular therapies, medical devices and pollution control in the work place.

Reducing, replacing or refining animal experimentation

Drug quality control is a trans-national matter, which is standardised and regulated in Europe at EU level, thus requiring international collaborative efforts. The European Commission ensures full support for applications to reduce, replace or refine animal experimentation as required by the 1986 Council Directive (Novel in-vitro testing as alternatives to animal testing; Council Directive 86/609/EEC). This aim is echoed by the European Pharmacopoeia. The "Three Rs" provide a strategy to minimise

animal use, without compromising the quality of the scientific work being done.

ECVAM's role is to coordinate international validation studies, act as a focal point for the exchange of information, to set up and maintain a database on alternative methods, and to promote dialogue among legislators.

Background: pyrogen and non-oral drugs

Parenteral drugs are commonly employed throughout Europe for treating a variety of illnesses. Ensuring the safety of such widely used drugs requires strict monitoring and control against any possible pyrogenic contamination on a batch-by-batch basis. The most important pyrogen is endotoxin, a constituent of the cell wall of gram-negative bacteria that can generate endogenous fever mediators by white blood cells, particularly monocytes and macrophages.

Rabbits or…

In the rabbit pyrogen test, the test substance is injected into rabbits and any subsequent change in body temperature recorded. A significant rise in temperature indicates the presence of pyrogens. While it has served drug safety control for more than 50 years, it fails for important new therapies such as cellular products or species-specific agents.

… horseshoe crabs?

Until now, the only in vitro alternative available is the LAL test, based on coagulation of blood from the horseshoe crab (Limulus polyphemus). However the LAL test detects only one class of pyrogens–endotoxins from gram-negative bacteria–leaving patients at risk from "non-endotoxin" pyrogens such as gram-positive toxins, viruses and fungi. It is also subject to interference by various non-pyrogenic substances. And, as it is based on the defence system of an arthropod, it cannot provide results perfectly relevant to humans.

No–human blood cells!

Six alternative cellular assays have therefore been developed to replace the animal rabbit pyrogen test and close the safety gap presented by use of the LAL test in controlling parenterals. All these test systems are based upon the response of human leukocytes (principally monocytes), which release inflammatory mediators (endogenous pyrogens) in response to pyrogenic contamination (exogenous pyrogens).

Quicker, more accurate and more effective

The new tests have several advantages compared with the rabbit test: they are less laborious, cheaper and more sensitive. Results of the validation study suggest that testing on animals can be completely replaced. In contrast to the LAL, the new assays are not restricted to endotoxins from gram-negative bacteria but detect all classes of pyrogens and reflect the potency of different endotoxins in mammals, without suffering interference from endotoxin-binding components in blood products. A commercial kit version for one of the assays has already been developed and standardised, and pre-tested cryopreserved (frozen) blood as a versatile test reagent containing the blood cells as biosensors is under development.

For further information please visit: http://ecvam.jrc.it/index.htmhttp://europa.eu.int/comm/research/quality-of-life/cell-factory/volume1/projects/qlk3-1999-00811_en.html

Commission acts against Belgium, the Netherlands and France for non-compliance with EU law on animal experiments

The European Commission has requested that the Netherlands and France comply with judgements of the European Court of Justice relating to an EU law on animal experiments. The law in question aims to ensure that, where animals are used for experimental or other scientific purposes, certain common animal protection provisions are applied across the European Union. The Court had found that the Netherlands and France had failed to adopt appropriate national legislation to implement the specific provisions of the EU law. The Commission's requests take the form of a letter of formal notice (the first stage of an infringement procedure under Article 228 of the Treaty). The Commission is also sending an additional final written warning or "Reasoned Opinion" to Belgium because it has failed to comply with the same law. In particular, the Commission is concerned that, despite recent modifications, Belgian legislation still allows too wide a scope for the experimental use of cats and dogs that have not been bred for the purpose.

The Netherlands

On 16 January 2003, the Court of Justice found that the Netherlands had failed to adopt the necessary measures to correctly transpose Articles 11 and 22(1) of the Animal Experiments Directive (Case C-2001/205). Article 11 concerns the release of animals that have been used for experimental purposes. It stipulates that an animal should be set free only when the maximum possible care has been taken to safeguard its well-being and provided that its health allows this to be done and there is no danger to public health or the environment. This measure has not been transposed into Dutch law. Article 22(1) relates to the mutual recognition of experiments. The Netherlands has not taken appropriate measures to enable the validity of data generated by experiments carried out in other Member States (insofar as this is possible) to be recognised, in order to avoid duplication of testing.

France

On 12 September 2002, the Court of Justice found that France had failed to adopt the measures required to correctly transpose several articles of the Animal Experiments Directive (Case C-152/00) into French national legislation. France has not correctly transposed Article 22(1) or Article 7(3), which relates to the minimising of harm and suffering for experimental animals. Finally, France has not fully transposed Article 18(1), which relates to individual identification marks.

Belgium

The case against Belgium follows a Commission investigation into a complaint that the Belgian authorities were allowing too wide a scope for exemptions for the experimental use of cats and dogs that were not bred for the purpose. This is in breach of Article 19(4) of the Directive. In July 2001, the Commission decided to refer Belgium to the Court of Justice but, following the adoption and notification of new Belgian legislation, the referral was not made. However, the new legislation still proved unsatisfactory, and the Commission has, therefore, sent Belgium a second Reasoned Opinion (final written warning).

Background

The Animal Experiments Directive

The Animal Experiments Directive (1) aims to ensure that, where animals are used for experimental or other scientific purposes, certain common animal protection provisions are applied across the EU. The Directive includes controls on breeding centres for

laboratory animals. It also defines general and specific criteria concerning the housing of animals, restrictions on their freedom of movement, the close monitoring of their physical condition, measures to prevent pain and undue suffering and the timely elimination of any physical defect or suffering. The relevant public authority must approve or register the centres, which must keep detailed records on the animals in their care.

Legal Process

Article 226 of the Treaty gives the Commission powers to take legal action against a Member State that is not respecting its obligations. If the Commission considers that there may be an infringement of Community law that warrants the opening of an infringement procedure, it addresses a "Letter of Formal Notice" (or first written warning) to the Member State concerned, requesting it to submit its observations by a specified date, usually two months.

In the light of the reply or absence of a reply from the Member State concerned, the Commission may decide to address a "Reasoned Opinion" (or final written warning) to the Member State. This clearly and definitively sets out the reasons why it considers there to have been an infringement of Community law and calls upon the Member State to comply within a specified period, usually two months.

If the Member State fails to comply with the Reasoned Opinion, the Commission may decide to bring the case before the Court of Justice.

Article 228 of the Treaty gives the Commission power to act against a Member State that does not comply with a previous judgement of the European Court of Justice. The article also allows the Commission to ask the Court to impose a financial penalty on the Member State concerned. The Commission will send a first written warning to the Netherlands and France.

For current statistics on infringements in general, please visit the following web-site:

http://europa.eu.int/comm/secretariat_general/sgb/droit_com/index_en.htm#infractions

(1) Council Directive 86/609/EEC on the approximation of the laws, regulations and administrative provisions of the Member States regarding the protection of animals used for experimental and other scientific purposes

EU research calls for improvements in cattle transport and handling before slaughter

The European Commission-funded project CATRA (CAttle TRAnsport), presented in Brussels, calls for improvements in cattle transportation. The study followed and monitored cattle on a series of journeys throughout Europe. Stressful transport conditions adversely affect not only animal welfare but can also impact on meat quality. According to the study, the transport logistics chain should be reviewed. Not only transport times, but also road conditions, climate and vehicle design need to be taken into consideration. Loading and unloading standards should also be improved. Relevant EU legislation should be properly implemented, but the Commission will additionally soon propose revised transport conditions for animals, taking into account the latest knowledge in this field.

"The EU is doing its share to improve cattle transport conditions", said European Research Commissioner Philippe Busquin. "Avoiding needless animal suffering is in industry's own interest: the quality of its product can be seriously affected by substandard transportation. This is why EU research not only studies cattle transportation, but also aims to support policy-making."

Better conditions for animal transportation

Transport of live animals, especially over long distances, is a controversial issue, and seen by many consumers as having a major, negative impact on animal welfare. In addition, the movement of animals over long distances to slaughter can potentially affect meat quality, whether through stress or factors such as animals fighting or damaging themselves on handling facilities.

Three-year, ten-partner €1.8 million project

The CATRA ("Minimising stress-inducing factors on cattle during handling and transport to improve animal welfare and meat quality") project has been supported since February 2000 by the European Union with a contribution of €1.8 million and is coming to a close with a final meeting on 17 June. CATRA has 10 partners and is co-ordinated by the Swedish University of Agricultural Sciences in Uppsala. Other partners come from Belgium, Finland, Germany, Italy, Norway, Slovenia and Spain.

Its objective is to provide data on which to base sound policy decisions. The purpose of the CATRA project was to develop methods for controlling and minimising stress in cattle during handling and transport, and then to produce guidelines for various end-users and policy makers.

Assessing key factors in animal transportation

The team of 10 partners from throughout Europe has used a combination of observations and experiments on cattle to gauge the direct effects of the transport itself on animal welfare and on the quality of meat following slaughter. In addition, related factors, such as road conditions, climate and animal handling facilities have been monitored.

Main findings

Some of the conclusions of the project are:

The entire logistics chain for journeys needs reviewing, including continuous monitoring of conditions on vehicles and improvements in delivery frequency to reduce delays at abattoirs. The full transport process needs to be optimised taking into consideration preparing animals before transport, improving loading and unloading facilities, controlling loading densities, controlling social grouping of animals, improving vehicles and drivers' skills.

The effect of transport on welfare is subject to strong interactions with other factors such as road quality, climate and vehicle design.

Transport time, while affecting the level of stress in animals, affects meat quality only when there are additional confounding factors, such as poor road conditions.

The most stressful activities during transport are loading and unloading, so that emphasis on loading and unloading facilities is critical to improving standards.

There is a need to improve vehicle design to mitigate against adverse climate and road conditions, in particular to control vibration. Similarly, improvements in the design of lairage facilities can reduce stress and improve meat quality.

For further information please visit: http://dbs.cordis.lu

European Centre for the Validation of Alternative Methods

Validated Methods are currently available on the ECVAM site and include:

New Scientifically Validated Methods

Recommendations for Method Deletions

Regulatory Acceptance

http://ecvam.jrc.it/page.cfm?voce=m&idvoce=3#3

International News...

ASIA

National Research Council of Thailand - Ethical principles and guidelines for the use of animals

http://www.nrct.go.th/~animal/guidelines_eng.htm

Beijing animal welfare law gets good reviews

http://www.ebeijing.gov.cn/News/BjToday/Local/t20040510_129856.htm

The Chinese capital is putting animal welfare under its legal system. If passed, legislation on animal welfare in Beijing would be the first in the country. The move is regarded as a remarkable step to improve the city's record on animal rights.

A draft regulation on animal epidemic prevention, published on the municipal government website on Saturday to solicit public opinions, contains specific requirements on raising animals in captivity, health treatment, living conditions, transportation and killing.

"It's a crucial and profound move since the regulation is the first in China. I'm glad to see that there are finally laws on animal welfare to go by," said Qiang Lei, an animal activist in Beijing.

According to the draft, animals should have adequate space, food and water, and should not suffer fear, pain or injury when they are transported.

People raising animals should provide necessary medical treatment to those that are sick or injured. Violators will be fined as much as 10,000 yuan (US$1,200), says the draft.

If an animal is to be killed for financial gain, it should be sedated and slaughtered quickly. It should be isolated to ensure that other animals cannot see the killing procedure.

The draft also stipulates that primary and junior middle school students should not take part in cruel biological experiments which may lead to animal injury or death.

The municipal government will set up special shelters for homeless animals, says the draft.

People who ill-treat or forsake animals, fail to kill animals humanely, or infuse water or other liquids into their bodies will be fined between 2,000 yuan and 10,000 yuan (US$240-1,200), according to the draft.

Moreover, people who feed animals with uneatable stuff will be ordered to suspend business and fined between 5,000 yuan and 30,000 yuan (US$600-3,600).

According to the Legal Affairs Office under the Beijing municipal government, the draft was worked out by the city's Agricultural Bureau and will be revised several times after soliciting public opinions.

The regulation is expected to take effect this year after deliberation among the city's top legislators, said the office.

"I am a little surprised to hear that the draft was worked out so quickly," said Qiang, who put forward a proposal to the municipal government this March urging for a law on animal welfare.

"Beijing took the lead in the country," said Mang Ping, another animal activist in Beijing.

"The clauses of the draft are identical with the spirit of international rules," she added.

"The Chinese used to regard animals as a form of natural resource, and there were no general animal protection laws in China."

See also:

Beijing considers legislation for animal welfare

http://www.ebeijing.gov.cn/bjtoday/t20040511_130192.htm

Animal welfare draft vetoed

http://www.sznews.com/szdaily/20040512/ca926612.htm

Live Animals Regulations

Regular Price: $94.00 additional discounts
Media: Book and CD-ROM
Language: English
Edition: 30
Effective Date: Oct 1, 2003 until Sept. 30, 2004

Description: How to transport animals safely so they arrive in good health?

An essential source on how to ship live animals safely, sensitively and cost-effectively, this manual specifies the minimum requirements for the international transport of animals and wildlife. It also indicates what precautions airlines, shippers, cargo agents and animal care professionals should take on the ground and in the air.

Enforced by the European Union and a number of other countries for the import and export of live animals, the regulations also include a comprehensive list of endangered species in which international trade for commercial purposes is restricted.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Office International des Epizooties (OIE) have adopted these regulations as their official guidelines for animal transportation.

The English version of the LAR now comes with a value-added CD-ROM, which includes an Adobe Acrobat PDF version of the manual to facilitate searching by use of keywords.

Produced annually in English, French, and Spanish

To order the English version, visit the IATA Live Animals Transportation by Air website at
http://www.iata.org/cargo/operations/liveanimals/index

French and Spanish versions can easily be found in the IATA online store at
https://www.iataonline.com/Store/default.htm

Search "French animals" or "Spanish animals"

“Meeting the Information Requirements of the Animal Welfare Act”

The Animal Welfare Information Center (AWIC) of the U.S. Department of Agriculture, National Agricultural Library (NAL) has developed a 2--day workshop for individuals who are responsible for providing information to meet the requirements of the Animal Welfare Act. Representatives from NIH, Office of Protection from Research Risks, and USDA's APHIS, Animal Care will be available for questions and answers . The workshop will be held at NAL in Beltsville, Maryland.

The act requires that investigators provide Institutional Animal Care and Use Committees (IACUC) with documentation demonstrating that a thorough literature search was conducted regarding alternatives. An alternative is any procedure that results in the reduction in the numbers of animals used, refinement of techniques, or replacement of animals.

The objectives of the workshop are to provide:

an overview of the Animal Welfare Act and the information requirements of the act.
a review of the alternatives concept.
a comprehensive introduction to NAL, AWIC, and other organizations.
instruction on the use of existing information databases/networks.
online database searching experience.

This workshop is targeted for principal investigators, members of IACUC's, information providers, administrators of animal use programs, and veterinarians. All participants will receive a resource manual.

The workshops will be held October 6-7, 2004 soon be announced on the AWIC website at http://www.nal.usda.gov/awic/awicworkshops

The workshop will be limited to 24 people, so please sign up quickly. There is no fee for the workshop.

For more information, contact AWIC at phone: (301) 504-6212, fax: (301) 504-7125, or e-mail: awic@nal.usda.gov, or write to: Animal Welfare Information Center, U.S. Department of Agriculture, National Agricultural Library, 10301 Baltimore Avenue, Beltsville, MD 20705--2351

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