
**Human-Animal Conflict: Exploring the
Relationships with Conflict between
Humans and Other Animals**



ISAZ 10th Anniversary Conference

**Program and Abstracts of the Conference
University of California at Davis
August 2nd - 4th, 2001**

Workshop Location: Alumni Center, UC Davis Campus

Hosted by: UC Center for Animal Alternatives
School of Veterinary Medicine
University of California, Davis

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Conference Chair: Lynette Hart

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ISAZ 10th Anniversary Conference

Human-Animal Conflict: Exploring the Relationships with Conflict between Humans and Other Animals

Program Schedule

August 1, Wednesday

8:30–5:00 pm ISAZ Council Meeting, 1006 Haring Hall

August 2, Thursday

6:00–9:00 pm **Opening Reception and Registration**
Walter A. Buehler Alumni and Visitors Center
Joint reception with Nature in Legend and Story (NILAS)
Food will be available

August 3, Friday

8:30–9:00 am **Registration and coffee**

9:00–9:10 am **Welcome**

Chair: Lynette Hart

Ethical Issues

9:10–9:30 am **Hal Herzog and Scott Plous, Department of Psychology, Western
Carolina University; Department of Psychology, Wesleyan University**
Reliability of judgments of animal care and use committees

- 9:30--9:50 am** **Anthony L. Podberscek, Caroline Manser and Judith K. Blackshaw,**
 Department of Clinical Veterinary Medicine, Madingley Road,
 Cambridge, CB3 0ES, United Kingdom; Stone Lane Veterinary Clinic,
 Royston, UK; School of Veterinary Science, University of Queensland,
 Brisbane 4072, Queensland, Australia
***Conflict at the school: Australian veterinary students'
 perceptions of, and opinions on, animal experimentation***
- 9:50--10:10 am** **Joanna Swabe, Bart Rutgers and Elsbeth Noordhuizen-Stassen,**
 Department of Animals and Society, Faculty of Veterinary Medicine,
 Utrecht University, Yalelaan 17, 3584 CL Utrecht, The Netherlands
***Killing animals: An interdisciplinary investigation of cultural
 attitudes and moral justifications***
- 10:10--10:30 am** **Break**
- 10:30--10:50 am** **Dennis C. Turner, I.E.A.P., 8816 Hirzel, and Zoology Institute,**
 University of Zurich, Switzerland
***Ethical considerations in the use of companion animals in
 animal-assisted therapy and animal-assisted activities***

Aggressive Dogs

- 10:50--11:50 am** **Keynote Address, Ed Sayres, San Francisco Society for the Prevention
 of Cruelty to Animals**
Preventing and solving problems with aggressive dogs
- 11:50--1:15 pm** **Lunch**
- 1:15 pm** **Chair: Dennis Turner**
- 1:15--1:55 pm** **Target paper, Liv Emma Thorsen, Institute of Culture Studies,
 University of Oslo, Norway**
***Promenading aristocrats and vagrant vagabonds: The
 discussion of the stray dog in The Norwegian Kennel Club's
 Journal 1908-1940***

- 1:55–2:15 pm** **Allison Nixon, Lynette Hart, and Neil Willits**, Companion Animal Behavior, Southampton University, Southampton, England; Department of Population Health and Reproduction, University of California, Davis
Successful dog adoptions: Influences of dog behavior on retention and relinquishment
- 2:15–2:35 pm** **Cornelia Wagner**, School of Veterinary Medicine, University of Wisconsin, Madison, WI 53706-1102
Germany's ban of "dangerous" dog breeds and its impact on canine welfare
- 2:35–2:55 pm** **Dorit Urd Feddersen-Petersen**, Institut für Haustierkunde, University of Kiel, Olshausenstr.40, D-24118 Kiel, Germany
"Normal aggressive behaviour" in domestic dogs
- 2:55–3:15 pm** **Break**

General Conflict

- 3:15–3:35 pm** **Marcie Griffith and Jennifer Wolch**, Department of Geography, University of Southern California, Los Angeles, CA 90089
Attitudes to marine wildlife among Asians and Pacific Islanders living in Los Angeles
- 3:35–3:55 pm** **Stephanie LaFarge and Stephen Zawistowski**, American Society for the Prevention of Cruelty to Animals, 424 E. 92nd St., New York, NY 10128
Psycho-educational intervention with adjudicated animal abusers: A first evaluation of process and results
- 4:00 pm** **Annual General Meeting**
- 6:00–9:00 pm** **Poster Reception - 10th Birthday Party**
Walter A. Buehler Alumni and Visitors Center
Food and beverages

Posters

Penny L. Bernstein, Kent State University Stark Campus, Canton, OH 44720

Cat owners favor keeping cats indoors

Sue Crespo, DERA Fort Halstead, Sevenoaks, UK

The occurrence and effects of stress in kenneled dogs--a review paper

Sarah Fifield, Psychology Department, University of Canterbury, Christchurch, New Zealand

What does 'member of the family' mean? Species and attitudinal differences in the attribution of family member status

Deborah Goodwin, Nell Davidson, and Pat Harris; Anthrozoology Institute, University of Southampton, Bassett Crescent East, Southampton, SO16 7PX, United Kingdom

To stable or not to stable? That is the question.

Linda J. Keeling and Anette Wichman, Department of Animal Environment and Health, Swedish University of Agricultural Sciences, Box 234, 532 24 Skara, Sweden

Assessing the relationship between horse and owner: Conflict or cooperation

Eve Marschark and Ronald Baenninger, Department of Psychology, Temple University, Philadelphia, PA

Field training of Border Collies and their owners

Masahiro Okamoto, Kiyoko Yamaguchi, Yoshimi Fugimoto and Hiroshi Yamada, Department of Dairy Science, Rakuno Gakuen, University, Ebetsu, Hokkaido, 069-8501, Japan

Change of impression of sheep and goats before and after contact with these animals in high school students

Masahiro Okamoto, Kiyoko Yamaguchi, Hitomi Noguchi, and Hiroshi Yamada, Department of Dairy Science, Rakuno Gakuen, University, Ebetsu, Hokkaido, 069-8501, Japan

Relaxing effect of contact with sheep and goats on high school students

Valerie K. Sims, Matthew G. Chin, and Autumn D. Robinson, Department of Psychology, University of Central Florida, Orlando, FL 32816

Caregiver beliefs about control and punishment of companion animals

Mary W. Wood and Lynette A. Hart, U.C. Center for Animal Alternatives, School of Veterinary Medicine, University of California, Davis, CA 95616

Avoiding "pet overpopulation": A web-based gateway to current information

August 4, Saturday

8:30–9:00 am **Registration and coffee**

9:00–9:10 am **Welcome**

Chair: Maureen Adams

General Conflict (continued)

9:10–9:50 am **Target paper, Marie Suthers-McCabe, Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, Virginia**
Safe pets program for victims of domestic violence

9:50–10:10 am **Irene Rochlitz, Tamara de Wit and Donald M. Broom, Animal Welfare and Human-Animal Interactions Group, University of Cambridge, Madingley Road, Cambridge CB3 OES, United Kingdom**
A pilot study on the longevity and causes of death of cats in Britain

International Perspectives

10:10–10:50 am **Target paper, James Serpell and Yuying Hsu, Center for the Interaction of Animals and Society, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA 19104-6010**
Cultural influences on attitudes to stray dogs in Taiwan

10:50–11:10 am **Break**

11:10–11:30 am **Joanna Swabe, Department of Animals and Society, Faculty of Veterinary Medicine, Utrecht University, Yalelaan 17, 3584 CL Utrecht, The Netherlands**
Rats of the sky: The aetiology of an urban conflict between people and pigeons

11:30–1:00 pm **Lunch**

- 1:00 pm** **Chair: James Serpell**
- 1:00--1:20 pm** **A. Sato, K. Uetake and T. Tanaka**, School of Veterinary Medicine,
Azabu University, 1-17-71 Fuchinobe, Sagamihara 229-8501, Kanagawa,
Japan
*The prevalence of potential behaviour problems of pet dogs
in Japan*
- 1:20--1:40 pm** **General Discussion of Human-animal Conflict**

General Topics

- 1:40--2:20 pm** **Target paper, Gene Myers**, Western Washington University,
Bellingham, Washington
*Sense of self in relation to wild animals: A qualitative study
of wild black bears and people with intimate knowledge of
them*
- 2:20--2:40 pm** **Katherine C. Grier**, Department of History, University of South Carolina
Changing perspectives on dog training, 1850 to 1950
- 2:40--3:00 pm** **Valerie K. Sims, Matthew G. Chin, and Cariluz Torres**, Department of
Psychology, University of central Florida, Orlando, FL 32816
Verbal interactions with zoo animals
- 3:00-3:20 pm** **Break**
- 3:20--3:40 pm** **R. Lee Zasloff, Lynette A. Hart, Neil Willits, Joan Miller, and Peggy
Raddon**, Center for Animals in Society, School of Veterinary Medicine,
University of California, Davis, CA 95616
*Differences in the care of cats versus dogs in Salt Lake
County, Utah*
- 3:40--4:00 pm** **Concluding remarks**

Closing Reception

Joint Reception with International Society for Applied Ethology
Cantina del Cabo, 139 G Street
Bring ticket for food

Abstracts

(alphabetical by speaker)

Information Services Suitable for Human-animal Interactions Field

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The paper and diskette information service called Humans & Other Species (H&OS) was purchased just over a year ago by the American Veterinary Medical Association (AVMA) under auspices of the AVMA's Committee on the Human-Animal Bond. The Committee and the AVMA are making recommendations for the future of H&OS. This paper outlines some ways in which members in the field of human-animal interactions might support AVMA and H&OS.

Partnerships. To establish priorities for H&OS, the AVMA and members of various research and practice communities should work together. Practitioners and researchers in many of the communities of interest have differences in kind similar to that of surgeons and biomedical researchers. On the other hand, animal behaviorists, who are becoming a significant segment of veterinary practice, require both clinical and research papers. The sources for clinical and research papers differ, and AVMA will need a steady flow of current journal citations from a variety of sources to speak to the needs of diverse interests, e.g., animal behaviorists and pet loss counselors, food animal welfarists and those wildlife specialists interested in the impact of humans on wildlife, therapists and volunteers using animal-assisted therapies, service animal providers and researchers interested in the impact of companion animals on human health at all ages.

Web sites. Most web sites established by academic units and organizations are not built to provide a ready flow of current information. Therefore H&OS should cite only current literature, which should flow into the H&OS database, which in turn cites some of the earlier literature.

Subject areas. H&OS should cover the human-companion animal issues, first. That is, the selection and maintenance, including training of companion animals, animal shelter issues, service animals, animal-assisted therapy and activities, pet loss, and the many impacts of companion animals on families and society. From there, it should proceed by steps to cover as many of the areas as possible.

Electronic formats. The flow of information may be made largely through the internet, by email or web distribution. If desired, subjects cited may be offered in a variety of ways: animal assisted therapy and activities only; selection, maintenance (and training) of companion animals; etc. It is not possible to satisfy all customers with an electronic product; a paper version will also be needed.

Organization. An editorial board, composed initially of the Committee on the Human-Animal Bond and interested members from the HAI field, should be provided for guidance. A board of contributors from individual fields is needed, as well as partners for exchange of publications, and a managing editor (a member of the AVMA staff).

Cat Owners Favor Keeping Cats Indoors

**Penny Bernstein, Kent State University Stark Campus, Canton, OH 44720;
pbernstein@stark.kent.edu**

In the last thirty years there has been increasing debate about whether pet cats (*Felis sylvestris catus*) should be allowed outdoors. In the last five years this debate seems to have intensified. Studies that indicated cats can take quite large numbers of prey, especially songbirds, fears caused by increases in infectious diseases such as Feline Leukemia and Feline Acquired Immunodeficiency Syndrome and pressure from animal shelters and cat rescuers who may require prospective adopters to keep cats indoors have brought the debate to the fore. Groups such as the Humane Society of the United States (HSUS) and the American Society for the Prevention of Cruelty to Animals (ASPCA) are increasingly asked to take a stand on this issue. The data presented here indicate how owners over the last 7 years have dealt with this issue.

As part of a survey to examine the use of space in the home by pet cats under different density conditions, I collected information about whether the cats were allowed outdoors. Although the original intent was to investigate whether time spent outside would affect use of space in the home, these data also provided insights into owner decisions about whether to let their pets out. Owners were asked to list which of their cats were allowed outdoors, when (daytime or night), for approximately how long, and whether they were restricted in any way or not. Owners often also volunteered further information.

Currently, 94 surveys have been analyzed from single-cat households, and 26 from two-cat households. Surveys were gathered from a large random sample. Most of the single-cat surveys were gathered in 1997 (55%), while most of the two-cat surveys were from 1997 and 2000 (31% and 38%). Over 50% of single-cat owners (53%) reported keeping their cat indoors at all times, and over 60% of two-cat owners did so (61.5%). An additional 10-11.5%, respectively, let their cats out but with restrictions. These included walking the cat on a leash, having them on an enclosed patio supervised by the owner, or having them on a line in a yard surrounded by a high fence with a cat baffle. In the two-cat households, 11.5% of owners reported that one cat was allowed out while the other was not. Reasons cited for keeping cats indoors include concerns about their safety, fear of loss on large farms, or to avoid fleas. In at least some households, the cats themselves were reported as not wanting or liking to go outside. For example, "even if the door is wide open the cat will not run out", or "if the door opens, he backs up or goes to the other side of the room".

Clearly, most owners in the U.S. currently keep cats indoors. This may be an increasing trend: a 1997 survey showed that 35% of owners kept cats indoors always. Whether this results in an increase in cat behavior problems indoors is unknown.

The Occurrence and Effects of Stress in Kennelled Dogs – A Review Paper

Sue Crespo, DERA Fort Halstead, Sevenoaks, UK; screspo@dera.gov.uk

One area that has been overlooked in research on dogs is the effect on their working capability due to different housing systems. Links between stress and behaviour in guide dogs with corresponding physiological evidence have been found. It is assumed that the same links would be seen in other working dogs, especially as the dogs used are of similar breeds. The assumption is made that the demonstrated stress effects of housing systems both physiologically and behaviourally would impair the dogs working ability, possibly even shortening the dogs working life.

Introduction

This paper reviews the potential effects of stress on military dog capability due to housing conditions. Military dogs are largely obtained as gifts from the general public or from animal shelters and so their background cannot be controlled. This is hypothesized to influence their ability to cope with a kennel life and therefore affect their working capability. Working dog kennels are largely old-fashioned, as housing practices have remained unchanged for a long time; it is therefore hypothesized that some dogs would benefit from new kennels, which take account of the breed characteristics and behavioral biology. It is suggested that new kennels and practices would improve the working capabilities of dogs, possibly also increasing the number of dogs passing their training, and therefore benefiting the military by making it a more cost-effective program.

A number of different areas are looked at with reference to stress effects, and a checklist of housing requirements and procedures is produced, along with a guide to assessing the stress level of the dog in a particular housing system.

Discussion and Conclusions

A number of parameters can be used as indicators of stress, the most useful for working dogs being non-invasive and quantitative techniques; behavioral measurements have also been shown to be effective. A number of causal factors of stress have been reliably reproduced and verified and should be initial considerations when planning working dog housing. In order to monitor stress, baseline measurements are required. For working dogs that are donated these could be taken in their "neutral" home environment before entering the training facility. A short questionnaire on the dogs personality completed by the owner would also help, with inclusion of the normal routine for the dog. This will allow changes both physiologically and behaviorally to be identified early allowing for attempts to remove or modify the causal factors to eliminate or reduce stress. Examples are social

enrichment (kennel mate), environmental enrichment (toys etc.), environmental complexity (height etc.) and noise reduction (insulation). Familiarization to aspects of the new life may also be key in reducing stress effects.

Dog housing should aim to satisfy the five freedoms, accepting that individual differences can affect how well a particular freedom is satisfied. Small modifications to legislation on space requirements in animal housing will lead to improved welfare. Legislation should be developed that considers noise levels and noise reduction techniques for dog housing. There should be provisions within legislation to allow animals some control over their environment, perhaps introducing complexity requirements.

“Normal Aggressive Behavior” in Domestic Dogs

Dorit Urd Feddersen-Peterson, Institut für Haustierkunde, University of Kiel, Olshausenstr.40, D-24118; dfeddersen@ifh.uni-kiel.de

“Normal behavior” of domestic animals usually is defined as behavior of healthy animals living in a reference system of “semi-natural” environment. Behavioral studies carried out under “semi-natural” housing conditions, with dogs living in packs, in comparison to a wolf pack of the most equivalent number of members, sex ratio and age, demonstrated the inability of some breeds (poodles, retrievers, pugs, f.e.) to cooperate and compete, as in establishing and maintaining a rank order (Feddersen-Petersen, 2000). Interactions were not adaptive, and the members could not cope with challenges from the environment. They did not succeed in removing a threat, the situation became uncontrollable and the state stress remained. Acute stress became chronic. Aggressive encounters escalated. Others (German Shepherds, Alaskan Malamutes, Bullterriers f.e.) did not leave the health issue or what it is, this means that if an individual evaluates an event or state in the environment as a threat (i.e. a stressor) and the animal is able to reduce or eliminate that threat by taking some behavioral action, then the situation is controllable. They were mentally in quite better shape, living under “semi-natural” conditions.

The groups differed significantly with respect to 5 of 7 behavioral measures:

1. Much more frequent and much more severe aggressive behavior in poodles and retrievers, much more often escalations of aggressive communications;
2. Much more frequent and variable social play in the wolves, German Shepherds and Alaskan Malamutes, showing aggressive encounters in a more ritualized manner;
3. Greater social tolerance in the wolves, German Shepherds and Malamutes;
4. More nonagonistic approaches in them - and
5. More allogrooming.

An escalation model presenting agonistic encounters from aggressive communication up to damaging fights with an opponent will be presented.

“Normal aggressive behavior” of dogs often causes dangerous situations. Examples of family dogs will be given, concerning the genesis, the interactive aspects between man and animal, and the prevention of conflict escalation to damaging fights by using the escalation model.

Literature cited:

Vocalization of European wolves (*Canis lupus lupus* L.) And various dog breeds (*Canis lupus f. fam*). *Arch Tierz Dummerstorf* 43(2000)4, 387-397.

What Does 'Member of the Family' Mean? Species and Attitudinal Differences in the Attribution of Family Member Status

Sarah Fifield, PhD, Psychology Department, University of Canterbury, Christchurch, New Zealand; djfifield@hotmail.com

Several studies have found their pet owning sample to give their pet "person" or "member of the family" status. When asked directly if they consider their pet to be a family member, the majority of pet owners answer positively, possibly to give a socially desirable response. In a pilot study it was noted that when asked why their pet was allowed into the house, many subjects claimed it was because they were "a member of the family" even when the subject admitted they were not particularly fond of the animal. Given the enormous number of animals that are euthanised at animal shelters, it seems that "member of the family" does not have the same meaning for cats and dogs as it does for human family members. This study examines what "member of the family" means for pets.

Subjects were families of primary-school aged children (5-12 years) from three state-funded schools. Approximately half were from rural districts. All participants completed questionnaires on their parents', their own, and their children's pet owning history as part of a demographic study. An indirect open-ended question (Is your pet allowed inside the house? Why or why not?) was used to assess "member of the family" status. Subjects were also asked to extent they would go to find a lost pet, what would happen to the pet if they moved to another city (approx 90 minute plane trip away), and what would happen to the pet if they moved "overseas".

Over half (52%) of participants said their favorite pet was allowed in the house because it had "member of the family" status. These subjects were significantly more likely to say they would advertise, offer a reward, or go to any lengths to retrieve a lost pet ($\chi^2 = 42.1, p < .001$) than those who did not give their pet "member of the family" status. Of these, 33% said they would do everything possible to get a lost pet back, 13.4% said they would advertise and offer a reward, 37.8% said they would advertise. Almost 16% would not try to get their pet back if there was a monetary cost. This effect was not correlated to household income. Those who gave their pet "member of the family" status were more likely than other pet owners to take their pet with them if they moved

a short distance ($\chi^2 = 11.9, p < .001$), or overseas ($\chi^2 = 21.5, p < .001$). Nevertheless, 37.9% of subjects would leave their "family member" pet behind if they moved overseas, and a further 19.1% would only take the pet if it was convenient. Thus, only 43% of the "family member" pets would travel with the rest of the family to a new country. It was concluded that although "member of the family" status does in some instances suggest a high level of attachment, it is not necessarily a useful construct to use in describing people's attachment to their pets, or pets' status in the family, particularly when participants are asked direct questions regarding their pets' status.

To Stable or Not to Stable? That is the Question.

Deborah Goodwin, Nell Davidson, and Pat Harris

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The horse:human conflict of interests began as a predator prey relationship. When the horse was domesticated it traded its freedom of movement, ability to choose its own mates and diet, for a relationship with man where food, protection from predators and health care were provided. However, the ease with which domestic horses can assume a feral lifestyle indicates that the basic biology of its behavior, which ensured its survival for 65 million years, remains relatively unchanged. One of the major changes that domestication has imposed on the horse has been restriction in its opportunity to choose its own food. Many competition and leisure horses are currently maintained under very different conditions from those in which their ancestors evolved. The diet of feral domestic horses includes a range of forbes, grasses and browse species, however, the majority of stabled horses are provided with a single forage. In the trials reported here we offered horses the opportunity to choose between environments with restricted and multiple forage sources available and studied their behavior.

In a series of four replicated trials, twelve competition horses were introduced for five minutes into each of two identical stables, which contained either a single forage, or six forages. Their behavior was recorded on videotape and compared using an ethogram of 13 mutually exclusive behavior patterns. At the end of these sessions the horses were allowed a further five minutes to choose between the stables, and the duration in each stable was recorded and compared.

Data was analyzed using the Observer 3 and SPSSPC V8. Square root transformations normalized the data allowing GLM factorial ANOVAs to be used. When in the single forage stable, horses looked out over the stable door more frequently ($F=66.0, df=11, P<0.001$), moved around the stable for longer ($F=161.6, df=11, P<0.001$), manipulated straw bedding for longer ($F=34.8, df=11, P<0.001$), and exhibited a group of other behavior patterns, which may have been indicative of frustration ($F=8.5, df=11, P<0.05$). When allowed to choose between the stables horses were found to spend significantly more time in the Multiple forage stable ($t=58.3, 10df, P<0.001$).

In these trials the behavior of stabled horses with single or multiple forages available was significantly different. When allowed to choose between these stables the horses showed a clear preference for the multiple forage stable. Further study is required to determine whether these effects persist over longer periods. However, it appears that when horses are allowed to choose a diverse forage diet, more closely resembling the abundance of forage species available in the feral or free-ranging state, these stabled domestic horses preferred the multiple forage stable. As the stable environment restricts much of the horses' behavioral repertoire through social isolation, making the stable environment more diverse through foraging enrichment may represent an important method of promoting the welfare of domestic horses.

Changing Perspectives on Dog Training, 1850 to 1950

**Katherine C. Grier, Department of History, University of South Carolina;
kgrier00@sc.edu**

Dog training is a form of conflict resolution since the “untrained” dog, the animal allowed to follow its own inclinations with little or no intervention from human beings, will almost inevitably engage in normal behaviors contrary to the preferences of his owner. It is also an imperfect exercise of human power over animal will and intelligence. Examining the literature of dog training published between 1850 and 1950 suggests that changing approaches to the practice reflect the evolution of ideas about the reasons for conflict between dogs and people and about appropriate expressions of power over dogs by civilized human beings.

By the 1940s, published advice on training also reflects the simultaneity of several very different understandings of the natures and capacities of dogs. These reflected the following:

- longstanding folk wisdom that granted dogs a large measure of intelligence and decision-making competence,
- a military model of the hunting dog as soldier,
- a domestic construction of animals as dependents much like children, and
- the gradual and only partial infiltration of a science-based model of animal intelligence that rejected common beliefs in the agency and reasoning power of dogs.

The other striking characteristic of dog-training literature published in the twentieth century is its sheer abundance, particularly after 1920. Advice on creating the model canine citizen appeared in scores of books and in hundreds of thousands of small pamphlets given away as premiums by companies selling food and patent medicines for dogs. With titles like *I'm Really No Problem! But You Should Know How to Feed and Care for Me!* (Published by the Ken-L Ration Division of The Quaker Oats Company in 1947), these booklets probably reached more dog owners than any other medium for training information, and form a principal source for this paper.

Attitudes to Marine Wildlife Among Asians and Pacific Islanders Living in Los Angeles

Marcie Griffith and Jennifer Wolch, Department of Geography, University of Southern California, Los Angeles, CA 90089, USA; mgriffit@usc.edu

Situated on the Southern California coast, Los Angeles is a magnet for worldwide immigration and home to one of the largest, most rapidly growing, and culturally diverse populations in North America. Although it is widely recognized that attitudes to animals vary from culture to culture, little scholarly research has explored how these attitudes might change when people move from rural to urban settings, or emigrate from one world-region to another. This study examines culturally-based animal practices and cross-cultural differences in attitudes toward marine animals among Asians and Pacific Islanders living in southern California (n = 103). Data for this project were collected as part of a larger telephone survey of 850 Los Angeles County residents 18 years and over. The survey consisted of a total of one hundred questions designed to probe attitudes, utilization, stance on policy issues, interactions and experiences, and knowledge, involving marine wildlife and the coastal zone and were designed to discern how demographic traits, socio-economic status, personal background features, and past or present geographic and cultural context might shape attitudes toward marine animals as well as cross-cultural attitudes toward the animal practices of other race/ethnic groups in the region.

Participants were generally well educated and had moderate incomes. They were predominantly foreign born, bilingual, and slightly more than half had lived in southern California more than ten years. The majority were male, under forty-five years of age, with no children living in the home. Most respondents felt they had access to southern California beaches, and were somewhat informed about threatened and endangered species, but nearly all were uninformed about the safety of consuming local fish. When queried regarding local policy issues such as dolphin mortality from tuna fishing nets, collection of endangered tidepool animals for human consumption, and wetland development and the reduction of coastal animal habitat, most favored taking some kind of action in order to protect marine animals and the coastal zone.

Analysis of attitude questions suggest that many Asian and Pacific Islanders living in Los Angeles have a mix of attitudes that are not always consistent with one another. Scores were especially high on attitude items measuring utilitarian, aesthetic, animal welfare, environmental, and human-animal co-existence attitudes. Compared to the overall sample, the Asian-Pacific Island group had significantly different attitudinal patterns. A majority felt looked down upon for their animal practices and attitudes, but were generally accepting of the practices and attitudes of other groups. In addition to adding to current knowledge surrounding practices and attitudes to marine wildlife, these findings may have important implications for understanding and preventing culture clashes in racially diverse areas such as Los Angeles, and in informing policy makers involved in decisions regarding marine wildlife and the coastal zone.

Reliability of Judgments of Animal Care and Use Committees

Harold Herzog, Department of Psychology, Western Carolina University and Scott Plous, Department of Psychology, Wesleyan University; herzog@email.wcu.edu

Biomedical and behavioral research with non-human animals inevitably involves conflicts of interest between scientists and subjects. In the United States, federal legislation mandates that research institutions establish Institutional Animal Care and Use Committees (IACUCs) to review studies that involve animal subjects. This system is based on the assumption that animal care committees can reliably evaluate the anticipated costs and benefits of animal experiments. Using actual protocols, we assessed the inter- and intracommittee reliability of judgments made by randomly selected IACUCs.

Fifty university and college IACUCs selected from the OPRR master list participated in the study. These committees included a total of 566 voting members, 87% of whom took part in the research. Each IACUC sent us their three most recently reviewed protocols involving animal behavior and, in turn, agreed to review three masked protocols contributed by other participating committees. (Behavior was broadly defined to include psychology, neuroscience, psychopharmacology, animal cognition, and ethology.) The members of the receiving committees independently rated each of the three protocols on six dimensions: clarity of the protocol, the quality of the experimental design, how convincing the justification of the research was, the scientific value of the research, the applied and clinical value of the study, and the degree of pain or stress involved. (The participants were given a pain scale to aid them with the sixth rating). After committee members had made their independent evaluation of the protocols, the IACUC met as a group and, using its standard operating procedures, rendered a collective decision about the research (approve as written, approve contingent on minor modification, defer decision, disapprove unless major modifications are made).

Of the 150 protocols evaluated, the second committee's final decision differed from the first in 118 cases. Indeed, the intercommittee agreement on the final judgments of the protocols was not significantly different from chance ($Kappa = -.04, P = .32$). In 79% of these cases, the judgments of the reviewing IACUCs were more negative than that of the original committee. Reliabilities between members of the same reviewing committee on various dimensions of the protocols were also low; intracommittee intraclass correlations (ICCs) were less than .30 for five of the six dimensions. Judgments of pain and suffering were the exception ($ICC = .59$).

These results suggest that protocol evaluations made by IACUCs exhibit low reliability. Further, this lack of agreement appears to take place both between committees and within members of the same committee. These results pose a potentially serious problem for the animal research oversight system in the United States.

Assessing the Relationship Between Horse and Owner: Conflict or Co-operation

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Matching horse and rider is important to minimize the risk of injury and promote pleasure from the sport. This study follows on from two earlier questionnaire studies carried out in Sweden to investigate horse riding accidents. Twenty-five owners bringing their horses (various breeds and ages) to the farrier school at the Swedish University of Agricultural Sciences were asked to take part in this study (acceptance rate 78%). Owners filled in a questionnaire about their own and the horse's temperament, their respective backgrounds and the owner's assessment of the horse-owner relationship while the horse was being shod. Following this, the farrier and the researcher also answered questions about their impressions of the horse. The horse was then observed in four different tests to independently assess the horse's temperament and the horse-owner relationship.

Factor analyses showed no obvious relationships between the owner's temperament and their horse's temperament and owners were satisfied with their horse (mean=4.7 out of a possible 5). To determine whether owners are reliable assessors of their horse's temperament, their answers on the questionnaire were compared with those of the farrier and the researcher. Of the 7 temperament traits that were compared, all three people were consistent concerning the aggressiveness of the horse (PABAK values 0.86, 0.86, 0.82). For the following 3 characteristics only the owner and farrier were consistent; 'attentiveness' (0.53), 'ease of shoeing' (0.50), 'nervousness' (0.44). Other traits were poorly correlated.

The tests were intended to independently assess the temperament of the horse and the horse's relationship to the owner. In the novel object test, horses moved more often when the owner was present than when the horse was alone ($H=5.05$, $D.F.=1$, $P=0.025$) but they did not approach the novel object closer when the owner was standing next to it. Nor did they go over a noisy wooden bridge quicker if the owner led them versus the unknown researcher. Horses did however go slower over the bridge the first time compared to the second time (Medians 9.0 s vs 6.0 s; $H=12.83$, $D.F.=1$; $P<0.001$). In a correlation analysis, horses that spent more time near the novel object went over the bridge the first time more quickly than horses that spent less time near the novel object ($r=-0.46$; $P<0.01$). The median time taken to traverse a corridor with plastic sheeting was 9.0 s (interquartile range 9.0, 11.0 s) and there was a significant positive correlation between the time horses took to go over the bridge the first time and the time they took to traverse the corridor ($r=0.36$; $P=0.048$). Horses took on average 7.0s to go into the transport trailer (large interquartile range 5.0-32.0 s).

In summary, owners were usually reliable when assessing the temperament of their horse, but there were nevertheless differences between the horses in the tests that were not apparent from the questionnaire. All owners assessed their relationship with the horse as good, but horses show little evidence of greater 'trust' in their owner compared to an unknown person in novel situations.

Psycho-educational Intervention with Adjudicated Animal Abusers: A First Evaluation of Process and Results

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The prevalence of abuse and neglect of companion animals is a topic special significance for several professional groups: mental health practitioners, law enforcement agents, animal welfare personnel and humane educators. As research evidence confirms the link between animal abuse, family violence, and psychopathology, the members of various human service agencies and the criminal justice system are seeking an effective consequence for persons arrested and convicted of animal cruelty. This presentation will report on a sample of 42 animal abusers adjudicated in New York City who were court ordered to participate in a 12-week psycho education Intervention Program offered to the criminal justice system by the Counseling Department of The American Society for the Prevention of Cruelty to Animals (ASPCA). This is the largest cohort of perpetrators of animal cruelty to have been studied thus far in the United States.

The data available for analysis includes demographic factors such as age, gender, ethnic identity, socioeconomic status, education and employment history, as well as information on the animal victims. Several standardized measures of psychological functioning were administered including: Symptom Checklist-90-R (SCL-90-R), Boat Inventory of Animal related Experiences, Hamilton Depression Scale, California Personality Inventory, Rosenberg Self-Esteem Measure, Companion Animal Bonding Scale, Miller-Rada Commitment to Pet Scale, Pet Attachment Scale. The current sample showed relatively low prevalence of DSM-IV diagnosis of Axis I or II mental illness. Preliminary findings also show that 85% of animals that were abused were also 'loved and cared for' by those perpetrators.

The presentation will demonstrate the methodology and theoretical orientation of the ASPCA Intervention Program. To the authors' knowledge, this was the first program of its kind available to the courts. An assessment of the Intervention program's effectiveness will be discussed, along with suggestions for its replication by other agencies. It will also be compared to other similar intervention programs employed by the courts for adjudicated individuals. One of the most important outcomes of this work is the progress it makes toward identifying and verifying a system of personality profiling of animal abusers. This is a necessary step in the development of treatment matching schema that will validate the use of similar Interventions to reduce animal abuse in our society.

The presentation will also provide some discussion on the role that the Intervention can play in raising the awareness of animal cruelty and neglect within the criminal justice system.

Field Training of Border Collies and their Owners

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Modification of instinctive, breed-specific behavior has been studied in a wide variety of vertebrate species. Using techniques of operant conditioning, both rewards and punishments can be effectively used by trainers outside the usual laboratory environment.

In this study we measured the improvement, over many weeks, of herding sheep by seven border collies. At the same time their owners were learning to control them under the instruction of the first author (a qualified expert), so that dogs and owners could compete in field trials of sheep herding. Access to sheep apparently serves as a reward for border collies, while prevention of access (blocking) appears to be punishing. Blocking acts occurred consistently at higher levels than acts that gave access, and both were more frequent than verbal praise rates during the weekly sessions. By the end of training this pattern was reversed, and rewards were more frequent than punishers. Both were more frequent than vocalizations by the trainers (who were themselves being trained).

While positive reinforcement can be used exclusively in training operant behaviors, it appears that punishment and negative reinforcement may be desirable and even necessary for modifying instinctive behaviors, or those that have been bred for through artificial selection.

Sense of Self in Relation Wild Animals: A Qualitative Study of Wild Black Bears and People with Intimate Knowledge of Them

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Previous research has suggested that interactions with familiar animals (primarily pets) may shape social development and sense of self in early childhood. The present study builds on such earlier work, but varies two factors: Do adults develop their identities in relation to wild non-human animals? This question is significant because work on children's interactions suggests a sense of self in relation to animals is based on social interaction invariants that are present across the life-span, but its occurrence in adulthood has not been explored. Wild animals are significant because they offer some, but not as many, interactive cues as do companion animals. Is a sense of

relatedness to them nonetheless possible? This qualitative study explored this possibility by looking at expert adults' reported perceptions of, and interactions with, black bears, in terms of processes such as reflected appraisal and other bases of a social self.

Subjects in this study were 10 adult males from Washington State, USA. There were two each in four different types of intimate familiarity with Black bears (bow hunting, wildlife biology, tracking, growing up 80 years ago in rural Washington), plus one pair with low expertise who reported bear intrusions to the Dept. of Wildlife. Each was interviewed for 45 to 90 minutes on their experiences with bears, and other open-ended questions relevant to identity, knowledge of bears' minds, community in relation to bears, and other topics. Interviews were transcribed, and coded using qualitative data analysis software. Themes and variations on the motivating theoretical concerns were analyzed for patterns supporting or disconfirming a connection between close familiarity and sense of self.

Across the different types of experience, and across the different worldviews of the participants (except for those in the bear intrusion report category), several strong commonalities stood out, including: extensive first-hand knowledge of bears; perception of bears as subjective; experiencing the self as perceived by bears; tendency to read body language in encounters; and statements suggesting that bears enter the subjects' social identities. Particularly interesting is that all subjects (except suburbanites) reported "respecting" bears, but not fearing them. The pattern of findings suggests that specific aspects of identity or self derive from interaction with bears directly, independently of cultural influences. The latter influences were examined in relation to a more abstract level of relatedness, that of nature as a community of subjectivities. This perception was not universal among the subjects, but other patterns of seeing nature as a community were found also. In conclusion, this exploratory and theory-building study suggests that sense of self in relation to wild Black bears is a potential among adults. Specific underlying processes are identified which merit investigation in other subject populations and situations.

Successful Dog Adoptions: Influences of Dog Behavior on Retention and Relinquishment

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An alarming number of adult dogs adopted from animal shelters are eventually returned. Behavior problems are often cited as the reason for failed adoptions. A privately funded San Francisco Bay Area shelter is attempting to address the behavioral aspect of failed adoptions with a proactive training and behavior program. This study assesses the adoption success rate for this shelter, and identifies factors that

correlate with retention or relinquishment. The owner's assessment of the presence or absence of a bond between the owner and dog is also evaluated. The Chi square test and Fisher's exact test are used to determine the statistical significance of factors related to relinquishment or retention.

The population selected includes dogs six months of age or older originally received as owner relinquishments or strays. Telephone surveys were successfully administered to 50 female and 50 male adopters six to eighteen months after adoption.

Seventy-two percent of the adoptions in this study were successful. Twenty-eight percent of the adoptions failed (resulting in the relinquishment of the dog). There was a strong correlation between owners taking their dog to a veterinarian and retention ($p=.0061$). Owners who trained their dogs in obedience were also more likely to retain their dog ($p=.0281$). Failed adoptions could not be significantly correlated with the lack of a bond between the owner and the dog.

Half of all relinquished dogs were returned for reasons unrelated to the dog's behavior. Changes in owner lifestyle, apparent mismatches of owner and dog, and the owner's medical problems were the most frequent non-behavioral reasons for relinquishment. Aggression problems were the most commonly reported (79%) behavioral problem among relinquishers. Most behavior problems (in retained and relinquished groups) were observed within one day of adoption. Dogs returned for behavioral reasons were relinquished an average of seven weeks after adoption.

Despite the rigorous temperament testing methods used at this shelter, there were a large number of aggression cases reported by owners. Testing methods may need to be reevaluated to ensure that aggression is detected at the shelter prior to adoption. In cases of people-directed aggression, the ethical argument of adopting out potentially aggressive dogs should be considered.

The time between adoption and relinquishment of dogs with behavior problems appears to be an opportunity to provide owners with information that could result in controlling or alleviating the behavior problem. Contacting each owner within one week of adoption to provide behavioral advice if needed could prove to be an effective way for this shelter to significantly decrease the rate of relinquishment.

Relaxing Effect of Contact with Sheep and Goats on High School Students

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Studies of companion animals suggest that animals such as dog and cat may have a relaxing effect on human being. This study examines the effect of contact with small ruminants such as sheep and goats on high school students by means of self-evaluating

psychological questionnaire sheets. In trial 1, 37 students were subjected the self-rating depression scale (SDS) and the state-trait anxiety inventory (STAI) before and after contact with sheep and goats. In trial 2, 130 students were subjected the Yatabe-Guilford character test (YG character test) and profile of mood status (POMS) in addition to these 2 tests. All of these tests were used in trial 3 by 53 students.

In trial 1, the average score of SDS and STAI decreased significantly after contact with 5 sheep and 5 goats. There were some sexual differences between boys and girls. In trial 2, the SDS score decreased significantly after 10 min contact with adult female goats and dams with kids, and after 30 min contact with kids. The STAI score decreased significantly after 5 min contact with adult goats, after 10 min contact with adult goats and dams with kids, and after 30 min contact with kids. The POMS test indicated that anger, fatigue and confusion were mitigated after contact with these animals. The number of significant parameters increased as the contact time with kids increased.

In trial 3, the score of SDS and STAI did not significantly decrease after watching still photo, movie photo of sheep and goats and single contact with the animals but anger and fatigue did. The all parameters of POMS were the highest at the 1st contact of twice or triple contact groups, and the parameters decreased to lower level at 2nd and 3rd contact. The results suggest that contact with sheep and goats have a relaxing effect on human beings and the effect may remain for a certain period.

Change of Impression of Sheep and Goats Before and After Contact with These Animals in High School Students

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High school students who live in urban area have few chances to contact with small size ruminants such as sheep and goat in Japan. This study examines impression of sheep and goats in high school students by means of semantic differential test sheet before and after contact with these animals. Thirty-five pairs of adjective were selected from 80 pairs, and a semantic differential test sheet was developed. The semantic differential test sheet was applied and tested by 130 university students, and analyzed by factor analysis. Five major factors were abstracted and named, and finery 20 pairs of adjective were selected according to their factor loading. The factor I was named as "easiness of approach to characteristics of animals"; factor II "activity of animals", factor III "easiness of approach to appearance of animals", factor IV "figure of animals" and factor V "mightiness of animals", respectively.

In trial 1, 37 high school students (13 boys and 24 girls) were divided into 3 groups and allowed to play with 5 sheep (3 lambs and 2 female adults) and 5 goats (3 kids and 2 female adults). The goats were small breeds. In sheep, the average score of emotional parameters in factor I shifted 0.71 points toward positive direction. In goat,

all parameters in factor I shifted significantly and average score increased 1.39 points. The some parameters in other factors also changed significantly. There were some sexual differences between boys and girls.

In trial 2, 130 students were divided into 21 groups, and 2 groups were allowed to play with 5 kids, 5 female goats or 3 kids and 3 dam goats for 5, 10 or 30 min. The other 3 groups were the control and took a walk for 5, 10 or 30 min. Many emotional parameters evaluating impression of goat shifted toward positive direction after contact, and some parameters for sheep shifted significantly without any contact with sheep. The results indicate that the contact with sheep and goats emotionally affects human being and improves the impression of these animals.

Conflict at the School: Australian Veterinary Students' Perceptions of, and Opinions on, Animal Experimentation

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Animal experimentation is a controversial issue. Veterinary students learn about it through lectures and are also exposed to it directly in some of their practical classes. How then do they feel about this issue? What do they believe goes on in research institutions which use non-human animals. Do they agree with it? Are their opinions dependent on which stage of the course they are at? Do male students respond differently to female students? This study aimed to find out.

Seventy-nine first-year (mean age = 17 years; 19 males, 60 females) and sixty-eight fourth-year Australian veterinary students (mean age = 20 years; 25 males, 43 females) from the same school responded to a questionnaire given to them during one of their classes. This represents 84% and 75% of all students from those years, respectively. The students were asked for demographic information (age, sex) and then there was a series of open-ended and structured questions about animal experimentation. Open-ended questions were categorized and coded by two of us; agreements of over 80% were achieved.

The responses to the question 'What comes to mind when animal experimentation is mentioned?' were coded as: neutral (factual comments, no opinion), positive, negative and mixed (giving both positive and negative comments). The majority of responses to this question were neutral comments (1st years, 55%; 4th years, 46%). Negative comments were the next most common category (22% for each year). Fourth-year students (19%) were significantly more likely to give positive comments than first-year students (6%; $\chi^2=7.1$, $df=1$, $p<0.01$).

The majority (>80%) of the students in each year agreed that animal experimentation was 'worthwhile'. However, overall, male students were significantly more likely to

say that experimentation was worthwhile, than female students ($\chi^2=7.6$, $df=1$, $p<0.01$). While the majority of students also agreed that animal experimentation was 'necessary', first-year female students were significantly more likely to say 'no' or 'unsure' ($\chi^2=19.9$; $df=3$; $p<0.001$), than all other students.

Overall, fourth-year students were significantly more likely to agree that animals in research institutions received 'enough care', than first-year students ($\chi^2=17.1$, $df=3$, $p<0.001$). This difference was largely fuelled by the female students; 16% of first-year students responded 'yes' while 55% of fourth-year students did the same. When asked if animals could be used for experimentation – if treated with enough care – first-year female students were significantly more likely to say 'no' or 'unsure', than all the other students ($\chi^2=16.8$, $df=3$, $p<0.001$).

Finally, the majority of first-year students (92.4%) and all of the fourth-year students agreed that it was acceptable to use animal shelter dogs, which were destined to be euthanized, as teaching aides for students. Approximately 25% of the students who responded 'yes' to this question, added a provision – that it was acceptable, only as long as the dog did not suffer any pain. First-year female students were more likely to add this provision than any other students ($\chi^2=8.9$, $df=3$, $p<0.05$).

The fourth-year student's greater acceptance of animal experimentation may reflect a) their increasing knowledge about the ways in which animal experiments are regulated, b) their becoming more pragmatic, and/or c) their becoming desensitized to animal suffering.

A Pilot Study on the Longevity and Causes of Death of Cats in Britain

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Most of the published studies on longevity and causes of death of companion animals have been restricted to dogs, despite cats currently being the most popular pet in many Western countries. The aim of this study was to collect data on the longevity and causes of death of domestic cats in Britain, with particular emphasis on road traffic accidents.

Questionnaires were sent randomly to 1,000 members of a national cat charity, as a flyer inserted into the charity's magazine. Members were asked the age of their last cat when it died or went missing, the cause of its death and questions about its characteristics (breed, sex) and lifestyle (how much time it spent outdoors). One hundred and eighty two questionnaires were returned.

Most cats (85 %) were non-pedigree. The majority of cats (72 %) were euthanised, while 25 % died and 3 % went missing. The mean age at death was 12 1/2 years (range 4 months to 22 1/2 years). The four main causes of death were old age/senility (27 %; mean age 17

1/2 years), cancer (23 %; mean age 12 3/4 years), kidney failure (13 %; mean age 14 years) and road traffic accidents (12 %; mean age 4 1/4 years). Cats dying in road accidents were significantly younger than cats dying from other causes (General Linear Model ANOVA, DF=7, F=25.1, p<0.001). Binary logistic regression showed that for every one-year increase in the cat's age, the odds of dying in a road accident, as compared with dying from other causes, decreased by a third (odds ratio 0.67, z=-4.63, p<0.001). For every additional hour the cat spent outdoors during the day in autumn and winter, the odds of dying in a road accident, as compared with other causes, increased by a quarter (odds ratio 1.25, z=2.5, p<0.01). There was no effect of breed or season on cause of death.

Road traffic accidents are an important cause of death in young cats. The risk of a cat being killed in a road accident, compared with the risk of dying from other causes, decreases with increasing age and increases with time spent outdoors during the autumn and winter seasons. Knowing the longevity and most common causes of death of cats can help to prioritize and focus prevention, control and treatment efforts, and to educate owners.

The Prevalence of Potential Behavior Problems of Pet Dogs in Japan

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In Japan, there are few reports about the prevalence of behavior problems of pet dogs. Therefore, it is difficult to grasp the actual situation of the occurrence of behavior problems. In this study, the questionnaire survey was carried out to clarify the characterizations of the prevalence of behavior problems in Japan.

One thousand and seventy three responses were acquired from 1,060 dog owners whom were selected randomly at the public site (not veterinary hospital) for a preventive injection against rabies. The owners gathered at the site over 12 days during the survey. They were asked to reply to a list of 28 items, which could be potentially related to the occurrence of behavior problems of their dogs. As some items had three to twelve subitems, behavior problems were classified into 57 specific behaviors.

'Fearfulness' was the most prevalent (29.5%) in the 28 items, and 'barking' (23.8%), 'leash pulling' (19.6%), 'picking food' (13.8%), 'jumping up to people' (13.2%), 'aggressiveness' (12.1%) and 'food begging' (11.9%) followed it in the plural answer. Two hundred and twenty nine (21.3%) out of 1,073 dogs showed fearfulness against the loud noises such as thunder and fireworks. Chi-square tests showed significant relations between the prevalence of 'fearfulness' and gender (p<0.001), age (p<0.05), source of dog (p<0.05) and rearing place (p=0.029). Bonferroni tests showed that the prevalence of 'fearfulness' was significantly higher (all p<0.05) in neutered males than in entire males, females and neutered females. The prevalence of 'fearfulness' was also

significantly higher ($p < 0.05$) in females than in males. Adult dogs (2-9yrs old) showed a significantly higher ($p < 0.05$) prevalence of 'fearfulness' than young ones (<2yrs). Stray and foster dogs showed it significantly higher (all $p < 0.05$) compared to dogs acquired from friends and born at their own houses. Dogs kept indoors showed a significantly higher ($p < 0.05$) prevalence of 'fearfulness' than dogs kept outdoors.

Eight hundred and thirty nine dogs (78.2%) were regarded by their owners as exhibiting at least one behavior problem. These dogs exhibited a total of 2,507 problem behaviors (approximately 3.0 behavior problems per dog on the average). Multidimensional scaling and cluster analyses showed that three dimensional models would account for associations among 57 behavior problems. These dimensions were interpreted as degrees of 'protectiveness', 'selfishness' and 'excitability'.

These results suggest that (1) dog's 'fearfulness' may be related to gender, age, source and rearing place of the dog, and that (2) a dog that exhibits a certain behavior problem tends to possess other behavior problems.

Cultural Influences on Attitudes to Stray Dogs in Taiwan

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Within the last decade, stray or free-roaming dogs have become a serious social and animal welfare problem in Taiwan. This paper presents the results of a study that addressed the ultimate origins of this problem by investigating the cultural attitudes, beliefs and perceptions of the Taiwanese people regarding dogs in general, and stray dogs in particular.

Face-to-face interviews were conducted with individual members of various key focus groups: animal protectionists; dog owners and feeders; veterinarians; shelter workers and managers; politicians; urban, suburban, and rural residents. The information obtained from these interviews was used to construct a random digit-dialed telephone survey of a subset of 2000 Taiwanese residents. Survey data were used to describe the structure of Taiwanese attitudes to, and beliefs about, dogs, as well as illustrating how these attitudes and beliefs are influenced by such factors as age, gender, marital status, education, income, area of residence, religious orientation, and prior knowledge and/or experience of dogs.

Factor analysis of the survey results extracted three factors that accounted for 45% of the common variance in attitudes to dogs: 1. "Liking for dogs" (8 survey items); 2. "Viewing stray dogs as a problem" (5 items), and 3. "Reluctance to kill dogs" (4 items). All item scores had at least moderate loadings (0.47) on their designated factors, and little or no cross-loading on other factors. Factors 1 and 2 had acceptable reliabilities (Cronbach's alpha 0.72-0.78), while Cronbach's alpha for factor 3 was somewhat low (0.57). The construct validity of the three factors was confirmed by

association with other information provided by the survey. Analysis of the frequency distribution of the three attitude factors in the sampled population as a whole suggested that the scores for factors 1 and 2 were strongly positively skewed. Although scores for "Reluctance to kill dogs" were more normally distributed, a substantial proportion of the population was uncomfortable about the idea of killing or euthanizing dogs.

Multivariate analyses of the relationship between factor scores and demographic data established that scores on the "Liking for dogs" factor were related to age, household income, area of residence during childhood, and childhood exposure to family dogs. Age, gender, marital status, educational level, mother's religious beliefs, and the manner in which family dogs were kept during childhood (indoors only, outdoors only, or allowed in and out) were all significantly related to "Viewing stray dogs as a problem". Demographic items associated with "Reluctance to kill dogs" included gender, marital status, religion, income level, current housing situation, how childhood family dogs were kept, and area of residence.

The findings suggest that educational and policy efforts to reduce the stray dog problem on Taiwan would be most effective if they took into account these varying cultural and demographic influences.

Caregiver Beliefs about Control and Punishment of Companion Animals

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Researchers examining the link between animal cruelty and the abuse of humans have argued that need for control may be a motivating factor in both types of abuse. Specifically, abuse may take place when one perceives that he or she has little control over a situation and the human or animal other has a large degree of control over the situation. Research on perceived control in a caregiver-child interaction has found that individuals differ in how they attribute blame for an unsuccessful interaction (e.g., an adult takes care of a neighbor's child and it doesn't go well). Some individuals place greater blame on the child while others place greater blame on themselves. Assigning greater relative blame to the child during unsuccessful caregiver-child interactions (i.e., being low in perceived control) is associated with engaging in child abuse. Our previous research found that individuals with low perceived control during a caregiving situation reported greater negative affect when trying to teach a puppy. We also found that one aspect of low perceived control, believing that the child has a high degree of control over the social interaction (high CCF), is related to experiencing greater negative affect during a human-cat interaction during which there is an attempt to play with the animal. The current study examines how perceived control in a caregiver-child interaction is related to

attitudes about the severity of punishment that an animal or child deserves for engaging in problem behaviors.

Participants were 69 female undergraduates (mean age=21; median age=20) enrolled in undergraduate psychology classes. Participants completed the Parent Attribution Test (PAT) which assessed perceived control during an unsuccessful caregiver-child interaction. Perceived adult control (ACF) and the perceived child control (CCF) over the failure outcome were measured independently. Next, participants read a series of punishment scenarios in which a dog, cat, and child each engaged in three inappropriate behaviors (i.e., continuously making noise, chewing on a friend's coffee table, and going to the bathroom on the carpet), and rated how harshly they would punish the dog, cat, or child on a 7-point scale. The PAT and punishment scenarios were administered as part of a larger attitudinal survey on caregiver and animal issues

Each participant was classified as either high or low in perceived child control (CCF). Punishment ratings were averaged across scenarios creating an overall punishment rating. A 2 (CCF: High or Low) x 3 (Species: Cat, Dog, or Child) mixed ANOVA indicated a main effect for species ($F(2,67)=18.03, p<.0001$). The mean overall punishment rating was the lowest for child ($M=2.15, SD=1.09$), and the highest for dog ($M=2.79, SD=1.09$), with cat falling in the middle ($M=2.51, SD=1.05$). Post-hoc t-tests indicated that the mean overall punishment ratings given for the three species differed from each other at the .01 significance level. An interaction between species and CCF also was observed ($F(2,134)=4.08, p<.05$). For high CCF individuals, the dog and cat were not rated differently although both were given higher ratings than the child (Dog vs. Child: $t(30)=4.86, p<.0001$; Cat vs. Child: $t(30)=3.35, p<.01$). High CCF individuals rated cats and dogs as deserving a harsher punishment than the child. For low CCF individuals, post hoc t-tests revealed no significant different difference between the ratings of the cat and child, although the dog and cat were rated differently ($t(37)=2.83, p<.01$), and the dog and child were rated differently ($t(37)=2.98, p<.01$). Low CCF individuals rated cats and children as deserving less punishment than dogs. Additional analyses indicated that the effects seen for overall punishment ratings were driven by the participants punishment ratings for the most intense scenario in which the child (or animal) soiled the carpet. Furthermore, high and low CCF individuals differed in their beliefs regarding children's and animals' ability to control their own behavior.

The results provide additional evidence that the PAT may predict attitudes and behaviors during human-animal interactions. Specifically, the results suggest that perceiving that children have a high degree of control over what happens during an unsuccessful caregiver-child interaction can be used to predict how harshly one may punish a companion animal. The current research provides some empirical evidence to substantiate a link between animal abuse and child abuse.

¹Turner, D.C. 1996. Ethical Issues in Companion Animal Ownership, Use and Research. IN J. Nicholson and A.Podberscek, eds. Further Issues in Research in Companion Animal Studies, SCAS Study No. 3, Callander, Scotland, UK.

Verbal Interactions with Zoo Animals

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Research on perceptions of animals in zoos indicates that humans view caged animals less favorably than their wild counterparts or those in more naturalistic cages, and that they prefer the one-on-one interactions with animals that take place during animal rides and in petting zoos. Little research has examined the specific behaviors that take place during one-on-one interactions in the zoo. This research examines speech during human-animal interactions, specifically speech about animals and directed to animals. Previous research shows that humans talk directly to companion animals such as cats and dogs, but has not examined speech toward zoo animals. It is predicted that people will be more likely to directly address a zoo animal if they perceive a social interaction with that animal.

Researchers observed 1574 separate interactions between human patrons and three types of zoo animals: mammals, birds, and reptiles. Twenty different species were observed; some were in traditional enclosures, and others resided in a petting zoo. Observations took place at the Central Florida Zoo. For each interaction, researchers recorded the approximate age of the patron (children: under 12 or adults: over 12), whether speech was directed toward the animal, and whether the person spoke about the animal. These data were collected as part of a larger data set that included information on non-verbal behaviors, enclosure type, and location of animal within the enclosure. Not all interactions were used in all analyses due to missing data.

Across all age groups, 73.9% of interactions yielded speech about the animal and 10.2% yielded speech toward the animal. Adult interactions (79.2%) were more likely to yield speech about the animal than were child interactions (65.1%), Chi-Square (1, N = 1539) = 36.27, $p < .001$. However, child interactions (15.2%) were more likely than adult interactions (7.2%) to contain speech toward animals, Chi-Square (1, N = 1537) = 24.13, $p < .001$. Petting zoo interaction (22.1%) yielded more speech directed toward the animal than did interactions at traditional enclosures (8.2%), Chi-Square (1, N = 1568) = 32.55, $p < .001$. However, the opposite pattern was observed for speech about the animal, with 78.0% of interactions at traditional enclosures yielding speech about the animal, and 49.5% of interactions in the petting zoo yielding speech about the animal, Chi-Square (1, N = 1570) = 80.45, $p < .001$. For traditional enclosures, child interactions (13.2%) yielded more speech toward animals than did adult interactions (5.4%), Chi-Square (1, N = 1319) = 24.80, $p < .001$. However, for speech toward the animal in the petting zoo, there was no significant difference between child (25.0%) interactions and adult interactions (19.7%), Chi-Square (1, N = 218) = .89, n.s..

Speech used in the zoo is related to the type of interaction in the zoo. Petting zoos, which present a social interaction between a human and an animal, encourage speech directed toward the animal, whereas traditional enclosures encourage speech about the animal. Speech toward an animal is an anthropomorphic behavior which may indicate more positive feelings toward the animal, and a greater feeling that the animal is accorded human value. While both adults and children speak more toward animals

during the social interactions of a petting zoo, children are more likely to anthropomorphize during interactions at traditional enclosures, suggesting that children may have more liberal criteria for perceiving social interactions. To encourage people to interact with zoo animals in a more social manner, enclosures should be designed to foster the perception of a social interaction.

Safe Pets Program for Victims of Domestic Violence

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There is growing recognition that animals living in violent households are often victims of abuse, and that people seeking refuge from such abusive situations are often unwilling to leave out of fear for their animal(s) safety. Safe Pets is a program that has been designed to meet short-term care and housing needs of animals owned by families in crisis. It provides a community based service for victims of domestic violence who must leave their homes and are in an emergency situation. Women fleeing from a situation of domestic violence may have to confront additional problems when they find out that due to health department and liability insurance issues many shelters cannot take in companion animals. The local humane societies may be overcrowded and have no facilities in which to provide long-term housing for pets. These women often find themselves facing the dilemma between leaving their companion animal(s) behind, who may likewise become victims of the abuser, or remaining in an unsafe situation themselves in an attempt to protect the animal. This presentation will demonstrate first-hand how to strengthen your community's response to this very real, but under-recognized consequence of domestic violence. Discover how to develop a safe house for pets and learn how you can educate the public on this issue.

- Problem statements
- Review of the literature
- Demographics
 - Multi-disciplinary intervention
 - Model – collaborative between a Women's Safe house and a Community Correction Center
- Documentation – inquiry and intake forms
- Policy development
- Screening tools - Correction Center residents
- Therapeutic advantages – Correction Center residents
- Cross training
 - Risks and untoward reactions
 - Veterinary issues
 - Visitation

Through the Safe Pets Program the Community Correction Center will provide protection and temporary shelter for companion animals that would otherwise be at

risk of abuse or neglect when victims of domestic violence seek safe refuge. The goal of the program is to reduce the potential for continued abuse to both people and their animals. Safe Pets helps families keep their pets, thereby maintaining and validating the human-animal bond. It is hoped that this Safe Pets Program will serve as a model for similar programs being developed. Programs such as this can change the ending to what women's advocates and police say is an all too familiar story. Participants in all aspects of the Safe Pets Program will come to understand the importance of preserving the human-animal bond and learn ways in which a collaborative effort can benefit both pets and people in the community.

Rats of the Sky: The Aetiology of an Urban Conflict Between People and Pigeons

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Pigeons have become avian pariahs of modern urban society. These birds are widely loathed by urban dwellers as disease-ridden pests. The term 'flying rats' that is so often used to vilify them speaks volumes about the contempt in which these birds are frequently held. In recent years, civic authorities across Europe have declared war on this species in a bid to control numbers, minimize public health risks and reduce the huge costs incurred from cleaning up monuments covered in pigeon excrement. Yet curiously the flocks of pigeons that congregate in the streets, piazzas and parks of all major European towns and cities are often regarded as much of a tourist attraction as a nuisance. Indeed, in spite of their popular image as vermin, there is no shortage of well-meaning urban folk who are prepared to dole out crusts of bread and birdseed to them, not to mention the enthusiasts who keep and breed this species of bird for fancy or racing sport.

The relationship between people and pigeons is thus far from a clear-cut one. As this paper will demonstrate, even if people perceive this species as filthy or a nuisance, they are still often prepared to show concern for the welfare of individual sick and injured birds. The manner in which pigeons are perceived and the way in which they are treated reflect the contradictory nature of our relationship to them. This paper will explore this ambivalent relationship, focusing on the nature of the urban conflict between people and pigeons. Drawing on data collected in Amsterdam, where the pigeon problem is - like in many other capital cities - high on the local public and political agenda, this paper will provide a sociological analysis of the broad variety of attitudes towards these birds and their right to freely inhabit urban spaces.

There are a number of key actors directly involved in pigeon politics in Amsterdam; these include the municipal public health department, local government policymakers, animal protection agencies, wild bird shelters, the animal ambulance service and pigeon fanciers. These actors tend to work at cross-purposes. For example, the animal ambulance will transport injured and ailing pigeons found by concerned members of

the public to the bird shelters, which in turn - wherever possible - will try to rehabilitate them. In stark contrast, the health department endeavors to regularly catch and gas large numbers of the birds to death; this strategy has in turn led to substantial public outcry. It is clear that the interests of these individual actors differ considerably, as do their power to influence official decisions also: public health and sanitation seem to stand in direct opposition to animal rights and welfare.

Yet, as this paper will illustrate, ambivalent attitudes towards pigeons also abound within the very organizations that one might assume would be sympathetic to them. Just as surprisingly, other actors, such as city councilors, have been prepared to take up the gauntlet in defense of the humble pigeon. Whilst recognizing that these birds are a public nuisance, they have attempted to dispel the notion that pigeons pose a real hazard to public health, encouraging more animal-friendly means of population control, such as egg-replacement. This paper will examine existing and proposed strategies for dealing with the pigeon problem, considering whether such lines of attack are - in the view of the actors involved - legitimate, morally defensible or even truly effective in combating these 'rats of the sky'.

Killing Animals: An Interdisciplinary Investigation of Cultural Attitudes and Moral Justifications

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Across the globe, billions of domesticated animals are deliberately killed each year to provide us with foodstuffs, hides, fur and other products; the lives of millions of others are terminated because they are sick, diseased or simply unwanted. Curiously, in spite of the ubiquity and scale of animal killing in modern society, there has been remarkably little social scientific or ethical research into this human practice.

To some extent, the research presented here hopes to remedy this by providing new insights into cultural attitudes towards and moral justifications of the killing of animals. This research focuses specifically on the Dutch context where killing domestic animals is legally prohibited, unless there are morally defensible and legitimate grounds for doing so. The principle upon which Dutch law is based assumes that terminating animal life is not a neutral moral act and requires moral justification. Established practices, such as the slaughter animals for food production and euthanasia of terminally ill pets, are - it appears - broadly taken to be unavoidable and unproblematic. They consequently enjoy wide, though by no means total, social acceptance.

However, as recent events in the Netherlands, such as the outbreak of swine fever in 1997 and the introduction of new measures to combat aggressive breeds of dog, have illustrated, the killing of ostensibly healthy animals has met with far less societal approval. The so-called 'preventative clearance' of pig farms as a response to the epidemic, entailing the mass destruction of (largely non-infected) pigs and the

euthanasia of piglets due to overfull stalls, led to an enormous public outcry. Similarly, the recent bid to eliminate dog breeds with a 'hereditary' abnormal propensity for aggression will ultimately lead to the death of healthy animals with no behavioral problems, since such animals will legally not be allowed to be re-homed. It has become clear that the killing of (healthy) animals, especially where it is perceived as unnecessary or avoidable, is particularly problematic.

This presentation will provide an overview of this research into the killing of animals, presenting our initial research findings. The research is interdisciplinary in nature, combining a mix of sociological and normative-ethical approaches. Social attitudes, cultural beliefs and moral intuitions about killing animals are investigated through both qualitative interviews with individuals routinely involved in killing animals, such as veterinarians and slaughterhouse workers, and a broader public attitudinal survey. The ethical research chiefly involves an analysis of norms and values relating to moral reasoning about killing animals. This analysis focuses mainly on lines of reasoning concerned with animal welfare and the intrinsic value of animals, questioning whether these arguments are fruitful in the development of an ethical framework for judging the acceptability of killing animals. Finally, a synthesis of the findings of both disciplinary approaches to the topic will be reached in order to produce a coherent vision of (Dutch) cultural attitudes and moral justifications for killing animals, thus offering policymakers the possibility of developing adequate guidelines in this area that will receive a broad level of social support.

PROMENADING ARISTOCRATS AND VAGRANT VAGABONDS **The Discussion of the Stray Dog in *The Norwegian Kennel Club's Journal*** **1908-1940**

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Today extremely few stray dogs are to be seen in Norwegian towns, suburbs and countryside. In the beginning of the 20th century, however, dogs still roamed freely in streets and fields. Some of them were homeless animals, but many of them belonged to owners who simply let their dogs out in the morning to roam freely. Today dogs - through their owners - are controlled by different means. One of them is the legal confinement of dogs' possibilities to run freely, another the decrease of rural space. This paper will, however, focus on the bourgeois attitudes to dog keeping, and on the possible indications of a new comprehension of keeping dogs, during the first four decades of the 20th century.

The subjects in this study are dogs of pure and mixed breed, males and females, seen and interpreted through a rhetoric performed by human males. The latter ones were members of the *Norwegian Kennel Club*, where the majority of the members belonged to the wealthy and/or the intellectual middle class. Their favourite dogs were hunting dogs like English gun dogs, hounds and Norwegian Elk Hounds, dogs that were associated with the free wilderness.

The main sources are *The Norwegian Kennel Club's Journal (Norsk Kennel Klubs Tidsskrift)*, answers to an open-ended questionnaire and literature. My method is hermeneutic, and my analysis is inspired by the social anthropologist Mary Douglas' definition of dirt being matter out of place; by the social geographer Chris Philo's understanding of the interrelationship between ways of thinking and talking about animals and the space consented to them; and by the social anthropologist James Howe's concept "paradoxical ideologies". The paper elaborates a topic taken from my book *Dog. Contributions to the Cultural History of Animals (Hund. Bidrag til dyrenes kulturhistorie*. In press).

In the above-mentioned period the Norwegian authorities sought to solve the stray dog problem by increasing the taxes imposed on dog keeping and by means of a rigid legislation. The rules for when and where to keep the dogs on a leash became more rigorous. The kennel club's board and members reacted strongly against this, arguing that the problems were caused by mongrels and curs - the vagabonds in the canine society, and not by the pure bred aristocratic dog who deserved a free, unleashed existence in accordance with its noble descent. Their arguments and metaphors reflected a human hierarchic social concept, and not the democratic, canine reality in which dogs are dogs and not breeds. At the same time this rhetoric concealed that the new restrictions meant that dogs who till then had been strolling freely, now had to be walked on a leash several times a day. The confinement of the dog's freedom implied less freedom for its master. Finally this particular discussion of the Norwegian stray dog clearly demonstrates some of the contrasting symbolic meanings embodied in the dog.

Ethical Considerations in the Use of Companion Animals in Animal-assisted Therapy and Animal-assisted Activities

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Latent potential, and in some discussions already expressed, conflicts arise when animals are used in therapy programs and animal-assisted activities to benefit human beings. The ethical arguments on such uses of animals, first published by the author¹ in 1996, are further developed in this presentation. These are, in turn, based upon the ideas of philosopher Gereon Wolters and ethicist/theologian Hans Ruh.

The sources of real and potential conflict that need to be, and are, addressed are:

- The use of animals vs. conventional therapy forms
- The use of wild vs. domesticated animals in such programs
- The housing and care of the animals involved
- The methods used to train the animals involved
- Risk management for the animals involved and the recipients of AAT/AAA as well as for third parties
- Training (or lack thereof) of personnel

The International Association of Human-Animal Interaction Organizations has taken initial steps to solve and/or avoid such conflicts with enactment of *The IAHAIO Geneva Declaration+ and *The IAHAIO Prague Guidelines on Animal-Assisted Activities and Animal-Assisted Therapy+. However, the author will point out weaknesses in both documents and suggest future courses of action.

Germany's Ban of "Dangerous" Dog Breeds and its Impact on Canine Welfare

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Dog bites do not only have direct effects on the victim and the individual dog involved in such an attack but can impact the dog population as a whole. It is not unusual that cities/states rush through legislation banning certain dog breeds in response to increased dog bite incident frequency or severity. Germany and other European countries have recently banned various dog breeds and restricted the ownership of others, and there is growing support for standardizing such regulations for the entire European Union. Many veterinarians, ethologists, animal welfare organizations, breed clubs and dog-sport associations have stressed in petitions opposing the breed-specific ordinances that banning certain breeds will not put an end to dog-bite related fatalities and are dangerous examples of poorly thought-out dog legislation.

This report critically discusses the impact of the new laws on canine welfare and the constitutional and practical issues that the enforcement of breed-specific ordinances raises. Furthermore it stresses public awareness and education as the most important practical alternative to breed-specific ordinances that will hold promise for prevention of dog bites and protect the welfare of dogs. This report shows the need for people in the pet care industry, including veterinarians, ethologists, trainers, breeders, and animal welfare groups to be actively involved in this educating process and in public policy making to prevent such dangerous dog laws in the future.

Avoiding "Pet Overpopulation": A Web-Based Gateway to Current Information

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The relinquishment of companion animals to animal shelters is a visible problem within the United States, often termed "pet overpopulation". Many people volunteer to help these dogs and cats and seek solutions to improve their health and care, but current authoritative information is not easily accessible. Many problems could be alleviated by employing improved strategies for animal care, for educating pet owners, and for assisting them in pet selection, yet most people lack the essential information. Many people from the general public, as well as pet store and shelter employees and

veterinarians, could benefit from timely and accessible information concerning optimal selection and care of pets. More awareness of risk factors for relinquishment would facilitate implementing more informed policies for pet adoption.

To address the need for up-to-date information on the selection and care of companion animals, and matching them with owners, a web gateway will be presented offering search templates for accessing refereed research literature pertaining to the selection, care, and welfare of dogs and cats, including risk factors contributing to compatibility and avoiding relinquishment. The gateway will be accessible through a central website: <http://www.vetmed.ucdavis.edu/CCAB/overpop.htm>

The search templates consist of stored searches on high-interest topics that are made available on the Web, allowing the user to conduct new searches in real-time from anywhere in the world. The templates are embedded in freely-available databases, including PubMed and AGRICOLA. Links to full-text information will also be provided when available. Topics for templates will be selected based on focus groups that include representatives of the various user groups. Templates will then be tested in hands-on workshops held in northern California. These templates will be useful to pet owners, pet store managers, organizations of pet owners, and veterinarians.

Differences in the Care of Cats versus Dogs in Salt Lake County, Utah

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“Responsible pet care” has become the watchword of animal shelters, humane societies, animal care and control units and other organizations concerned about the welfare of companion animals in the United States. For many years, these agencies have been allocating major resources of time, manpower, and funding to influence the way that pet owners care for their animal companions. However, little is known about the real effectiveness of these efforts and animal shelters continue to be inundated with unwanted pets. This large-scale demographic survey of Salt Lake County, Utah was conducted to learn about the general patterns of pet care in that locale. With regard to the care pet cats and dogs, the specific objectives of the study were 1) to learn about typical practices associated with pet care and management; 2) to assess pet care attitudes; and 3) to learn about community issues and problems regarding free-roaming cats and dogs, both owned and unowned. This presentation will report the findings regarding the first objective, focusing on issues such as pet acquisition, reproductive status, and identifications.

The survey was conducted by a mail questionnaire that was sent to 2050 randomly selected households in the 18 areas of Salt Lake County (SLC) serviced by the SLC Animal Services. Because one purpose of the survey was to assess community problems with stray animals, not all of the respondents were pet owners. A total of

612 completed questionnaires were returned. Of these, 367 (60%) were pet owners and 245 (40%) were nonowners. Among the pet owners, 182 (50%) had dogs only, 107 (29%) had cats only, and 78 (21%) had both dogs and cats. Approximately two thirds of all respondents were female. The mean age of the sample was 51 years, and the mean age of the pet owners was 47 years. Ninety-seven percent of all respondents were Caucasian and living in urban or suburban areas.

The survey results showed many differences in practices regarding dogs and cats. For example, 30% of cat owners and 6% of dog owners acquired their pets as strays, while 31% of dog owners and 2% of cat owners acquired their animals from breeders. A similar divergence was found in the cost of obtaining a dog or cat. More than three fourths (77%) of dog owners paid a fee to acquire their animals, and about one fourth (24%) of cat owners paid a fee. The amount paid for dogs ranged from \$10 to \$1,000 with a mean of \$170, while the fees paid for cats ranged from \$8 to \$350 with a mean of \$60. Wide disparity also occurred on the question of identification. Among dog owners, 91% reported that at least one dog carried some form of identification while this is true for 31% of cat owners. A significant proportion of the cat owners who acquired their cats from a shelter reported that their cats were identified, whereas those who obtained their cats from other sources reported having no identification. Few respondents reported having intact animals. The implications of these findings will be discussed and suggestions will be made as to how pet care practices may be improved.