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Articles Received

THE DISPLAY OF ELEPHANTS IN ANCIENT ROMAN ARENAS

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In the western world, the tradition of displaying elephants in order to entertain humans can be traced back to the ancient Romans. They were not, of course, the first people to do this, but they have provided us with some of our earliest information about why such displays were produced and why they were popular. In our modern era, when the display of elephants in circuses has become so controversial an issue, it is instructive to consider the origins of these events.

Elephant spectacles were popular because the Romans had endowed this species with symbolic significance. They identified elephants as agents both of a menacing natural world and of human military opponents, who used these animals as machines of war, much as modern armies use tanks. Thus the ability to dominate elephants in a Circus spectacle symbolized Rome's ability to bend the world to its will.

The Romans first encountered elephants in the 3rd century B.C., when Italy was invaded by Pyrrhus, a Greek whose military expedition included 20 Indian elephants. (1) When Roman soldiers faced these strange beasts for the first time, they retreated in terror. However they ultimately defeated Pyrrhus in 275 B.C., and their commander exhibited the captured elephants at Rome in the parade which celebrated his victory. This display gave residents the pleasure not only of viewing exotic and astonishingly large animals, but also of being reminded that their army had prevailed over these dreadful beasts and saved Italy from subjugation by a foreign ruler. (2)

In 264 B.C., the Romans became embroiled in a war with the north African city of Carthage, which also employed elephants. In 250 B.C., a

Roman general shipped about 140 Carthaginian elephants to Rome. Our sources record either that the elephants were paraded around the Circus while being prodded with spears, or that they were killed in the Circus with javelins. (3) They had been brought there as exhibits of equipment used by the hated Carthaginian military, and their abuse was a method of recreating for the spectators the defeat of the Carthaginians.

Before long, the Romans were again drawn into war with Carthage, which had a brilliant general, named Hannibal, stationed in Spain. In 218 B.C., Hannibal, his soldiers, and 37 elephants, made the arduous march from Spain into northern Italy, where they overwhelmed Roman forces. (4) Hannibal is then reported to have ridden an elephant at the head of his army as it moved southward. The image of the odious Hannibal riding an elephant firmly impressed on Roman minds the association of elephants with enemies.

When Hannibal was eventually defeated in north Africa in 202 B.C., the Roman commander took many of the Carthaginian elephants to Rome for display in his triumphal procession. (5) As residents of Rome watched them lumber along, they felt relief, knowing that their legions had crushed the Carthaginians and reduced, to the status of parade exhibits, the animals which had once threatened them as war machines.

In the decades following these wars, Roman military prowess brought most of the Mediterranean world under Roman control. In 81 B.C., a young general named Pompey conducted a successful campaign in Africa,

confiscated his enemies' war elephants, and shipped them to Rome. However he delayed his own departure from Africa in order to spend several days hunting lions and wild elephants because, he declared, the wild animals of Africa must appreciate the strength of the Romans. Upon his return to Rome, Pompey planned to enter the city triumphantly in a chariot drawn by four elephants, but his scheme was thwarted by the narrowness of the city gates. (6)

Like military leaders who preceded him, Pompey capitalized on the symbolic significance of elephants and exploited them in ways designed to emphasize his own ability to subdue military, political and natural forces that resisted the relentless expansion of Roman control. For example, the elephants he shipped to Rome were presented to the urban crowd as examples of a formidable, but nonetheless vulnerable military opponent. Also significant is the reason provided for his hunting expedition. Both hunting and warfare are processes of destroying things that are perceived to threaten one's security. Pompey had strengthened Rome's political and military control over the humans of north Africa. His hunting expedition was undertaken to force the wild animals of this area to recognize the irresistible might of the Romans. Thus, when he left north Africa, Pompey could boast that he had proved the dominance of Roman civilization not only over other civilizations, but also over Nature. And when he desired to ride into Rome in a chariot pulled by elephants, he hoped that the appearance of the elephants would reinforce on-lookers' respect for his ability to subdue hostile forces – both political and natural -- in Africa. The Latin word *subiugare*, from which the English word “subjugate” is derived, means literally “to put a yoke or harness on something”. The harnessing of an elephant to a chariot both demonstrates a real subjugation of the natural world and also symbolizes the subjugation of the people in the territory inhabited by elephants.

Twenty-six years after his African triumph, Pompey again utilized elephants to win popu-

lar acclaim. In 55 B.C., he arranged for public entertainments in which exotic animals, including 600 lions, 400 leopards, some baboons, and perhaps even a rhinoceros, were killed in the Circus to provide enjoyment for the audience of city residents. On the last day of the entertainments, about 20 elephants were presented for slaughter. (7) Elephants were a crowd-pleaser for several reasons. As the largest land mammal, they were an impressive sight. In addition, Pompey undoubtedly hoped that the elephant killings would remind the Roman populace of his military achievements in Africa 26 years earlier. Elephants possess several attributes that made them ideal representatives of the victims of Roman ascendancy. They were, like many of the people the Romans had subjugated, strange-looking (“strange”, that is, from a Roman point of view). In addition, the elephants' enormous size and strength conveyed an impression of almost invincible power -- “almost” because the Romans had, of course, vanquished military forces which employed elephants. Elephants represented the most intimidating of Rome's opponents, and yet, because they are bulky and have large floppy ears, long, flexible trunks, and a lumbering gait, they can appear comical. What a perfect combination of qualities for the amusement of the Roman mob! The spectacle begins as a terrifying reenactment of war, but, in the end, the audience is reassured that an apparently formidable enemy was not just inferior, but absurdly inferior.

The slaughter of animals as a public, urban spectacle developed from rural activities. In rural areas, people killed animals that preyed on their livestock or consumed their food plants. To celebrate their success and to thank the gods for their assistance, the agricultural community gathered together annually at festivals where animals, such as foxes, were killed. These festivals were celebrated also in urban areas, where town-dwellers, too, understood the symbolic dimensions of the events. The publicly-witnessed destruction of pest species provided reassurance that the orderly civilization that the Romans had cre-

ated could subdue a chaotic and irrational Nature. Spectators had no moral reservations about causing pain to the animals because the animals were “enemies”, and their suffering was the penalty they paid for threatening human welfare.

A second origin of the spectacles was the sport hunting enjoyed by wealthy men, who believed that hunting developed the qualities necessary in a leader. Among town-dwellers, only the wealthy could afford to travel to hunting areas. However politically ambitious men, who wanted to win the support of lower-class voters, could bring the hunting experience to the town by arranging staged hunts. These events allowed even the poorest residents to be involved, at least as spectators, in an activity which was otherwise well beyond their means.

As the Romans expanded their imperial territory, they began to import to Italy animals from the most remote regions of their empire. The capture and transport of these animals entailed enormous expense and careful planning. Thus, the apparent ease with which the Romans brought vast numbers of animals to their city offered proof that their state was powerful and prosperous. The spectacles demonstrated that the Roman people could gain control over savage elements of their environment and impose order on the rest of the world. And residents of the city, whatever their class or rank or economic status, came together to watch the infliction of pain and death on something alien and hostile to their community.

During the period in which Pompey lived, competition was intense among politicians to eclipse the spectacles produced by their rivals. Pompey arranged the staged "hunts" of 55 B.C. in order to win the affection of the urban crowd. The slaughter of elephants was the grand finale. However, despite the money and attention he devoted to it, Pompey's elephant “hunt” was not a success. Cicero, who was an eye-witness, wrote:

“On the final day, at the elephant "hunt", the crowd experienced great wonder, but no

pleasure. In fact, compassion arose, and an opinion that this huge animal has a kinship with the human race.” (8)

Unfortunately, in the long history of “hunts” in the Roman world, this is the only documented occasion on which the spectators expressed moral concern about harming animals. Elephant hunts continued to be commissioned by politicians who were seeking public approval. Nine years later, for example, in 46 B.C., Julius Caesar, commissioned “hunts” involving 40 elephants, 400 lions, an unknown number of bulls, and a giraffe. (9) There are no reports that the spectators were displeased by these events.

Pliny, who wrote about 100 years after Pompey's “hunt”, provides information about the spectators' unusual response.

“Twenty elephants fought in the Circus against men armed with javelins. The battle waged by one elephant was remarkable. When its feet had been pierced through, it crawled on its knees against its human opponents, snatched their shields, and threw them in the air. The spectators experienced pleasure when the shields, as they fell to the ground, made a loop, as if thrown by design, not by the rage of the huge animal. ... The elephants attempted to break out from the iron barricades which surrounded them, and this caused anxiety among the people. But when the elephants had lost hope of escape, they sought the compassion of the crowd and supplicated it with an indescribable gesture and bewailed their fate with a kind of lamentation. [In contradiction to Pompey's plan, the wounded elephants were pitied by the people when they stopped fighting and walked around and stretched their trunks toward heaven. (10)] In fact, there was so much grief among the people that they forgot the generosity lavished in their honor by Pompey and, bursting into tears, all arose together and invoked curses on Pompey for which he soon paid the penalty.” (11) (“The penalty” here means his ignominious death seven year later.)

According to this account, the spectators in-

terpreted the actions of the tormented elephants as an appeal for mercy. They responded by assuming the role of a conqueror being supplicated by an abject opponent. They, who had come to this event to demonstrate their power over the lives of others, believed that they were now being asked directly by the victims to use their power to end the torture. The audience's sympathy was therefore really another way of demonstrating power.

The first part of Pliny's account gives us clues about why Roman audiences generally found "hunts" entertaining. The spectators took pleasure, as Pompey expected they would, in watching a wounded elephant's attempts to defend itself, and they were delighted when it crawled on its knees toward its tormentors and flung their shields into the air -- delighted because they chose to misconstrue the animal's desperate actions as the clever tricks of a trained performer. Of course, here the wounded elephant was not a performer; it was fighting for its life. But the spectators preferred to ignore its distress. In their minds, the animal was simply an object whose purpose was to provide amusement.

The attitude of the spectators may be explained partially by the fact that elephants used in non-lethal performances -- that is, in events other than "hunts" -- were, in fact, taught to toss shields into the air, and to crawl on their knees. (12) At these events, Romans were particularly amused by tricks designed to emphasize the humiliation of the elephants. Seneca, writing in the first-century A.D., describes the spectacle of an elephant that obeyed the commands of a small person to kneel and to walk a tightrope. (13) The pleasure of the audience derived presumably from the assurance the action provided that even the largest land mammal and the mighty symbol of Africa could be brought to its knees by the Romans.

We have other reports of elephants trained to walk tightropes. (14) Pliny mentions an exhibition in which elephants walked on tightropes, carrying a litter bearing another elephant pretending to be a woman in childbirth.

(15) The fact that this stunt did not deliberately cause the death of the animals does not mean that it was harmless. The mimicking of labor surely involves giving indications of pain. It is possible, of course, that the elephants were trained to cry out *as if* feeling pain, but it is more likely -- because easier for a trainer to accomplish -- that the sounds of the elephants mimicking labor were provoked by causing them real pain. Methods of training elephants were harsh. One report tells of a Circus elephant who was slow in understanding instructions and who therefore received frequent beatings. He was discovered practicing his lessons, all alone, at night, in order to avoid the beatings. (16)

Audiences were amused by the sight of elephants walking tightropes because of the contrast between the animal's large body and the narrowness of the ropes. The tricks were designed moreover to elicit the audience's admiration not for the animals' natural talents, but for the skill of the human trainers. Thus the actions performed were very un-natural and could be produced only in the context of human domination. At one event, elephants wearing flowered dresses danced in the arena. At another event, the music was provided by an elephant with cymbals attached to its trunk and front legs. As it made a rhythmic sound by beating its trunk against its legs, the other elephants danced in a circle. (17) On still another occasion, pairs of costumed elephants entered the arena and took their places at a banquet. They used their trunks as hands to take food with great delicacy. (18)

The humor in such stunts lies not only in the incongruity of a huge animal being graceful. More significantly, the audience enjoyed the illusion that a wild and dangerous animal had been civilized, that is, that it had been forced to learn the behaviors that are the hallmarks of human progress from savagery to civilization, such as wearing clothes, appreciating music and dance, and adopting dining etiquette. The audience realizes, of course, that the apparently civilized behavior of the elephants is just a performance extracted from powerful beasts by much smaller, but much

more clever humans. It was essential to the success of the displays that the audience viewed the elephants as performing human-like actions, but as possessing no understanding of the cultural significance of their actions. If the spectators ever believed that animals were truly capable of understanding and adopting human behavior, they would then also have to conclude that they were akin to humans and -- the unthinkable -- that they deserved moral consideration. I say "unthinkable" in the sense that the spectators could not allow themselves to think that the elephants had moral standing because such thoughts ruined the fun of the event. This is what seems to have happened at Pompey's "hunt". In one extraordinary moment in the Roman Circus, the audience interpreted the movements and vocalizations of the elephants as a plea for mercy. They responded with sympathy -- but nonetheless blamed Pompey for bringing them dis-pleasure, rather than pleasure, and ruining their day. On all other occasions that we know of, spectators at both the lethal and non-lethal displays, chose to objectify and even demonize the elephants, and they were thus able to find enjoyment in their distress. The displays were designed to ridicule, torment or destroy what was exotic and alien, and, in so doing, to demonstrate the superiority of Roman civilization.

Notes

1. The most thorough examination of the exploitation of elephants in the Classical world, particularly in military contexts, is found in H. H. Scullard, *The Elephant in the Greek and Roman World* (Ithaca, N.Y., 1973). See also J. M. C. Toynbee, *Animals in Roman Life and Art* (Ithaca, N.Y., 1973).
2. Plutarch, *Pyrrhus* 15-21; Dionysius 19 and 20; Zonaras 8.3; Seneca, *De Brevitate Vitae* 13.3; Eutropius 2.14; Pliny *NH* 8.6.
3. Polybius 1.32.9, 38.2, 40.15; Pliny *NH* 8.6; Seneca, *De Brevitate Vitae* 13.8; Diodorus Siculus 23.21.
4. Polybius 3. 42, 46, 47, 53, 54, 72, 74, 79; Livy 21. 28, 34, 35, 37, 47, 55, 56, 58, and 22.2..
5. Zonaras 9.14; Appian *Lib.* 66; Polybius 16.23; Livy 30.45.
6. Plutarch, *Pompey* 11,12, 14; Pliny *NH* 8. 2.
7. Pliny *NH* 8.7, 20, 24, 28, 29.
8. Cicero, *Ad Fam.* 7.1.
9. Pliny *NH* 8. 7, 20, 70; Suetonius, *Julius* 39.3; Dio 43.22.3 to 23.3; Appian *BC* 2.102.
10. The sentence in square brackets is not from Pliny's account, but from the account by Dio Cassius (39.38), a second-century A.D. historian, whose report on Pompey's "hunts" closely matches that of Pliny.
11. Pliny *NH* 8.7.
12. Pliny *NH* 8.2.
13. Seneca, *Ep.* 85.41.
14. Dio 61.17; Suetonius, *Nero* 11.2; also Pliny *NH* 8.3.
15. Pliny *NH* 8.2.
16. Pliny *NH* 8. 3; Plutarch *DSA* 12 (968 C).
17. Aelian, *DNA* 2.11; Arrian, *Ind.* 13 ff. See also Martial 1.104. 9 and 10, and Pliny *NH* 8. 2.
18. Aelian, *DNA* 2.11.9; Pliny *NH* 8. 2.



CULTURAL DIVERSITY AND ATTITUDES TOWARD MARINE WILDLIFE IN SOUTHERN CALIFORNIA

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Introduction

Marine wildlife is increasingly threatened by human activities. Although threats to this wildlife and associated coastal environments is largely due to society-wide patterns of production and consumption, some problems may result from culturally distinct understandings of marine wildlife, and a failure on the part of marine educators to provide culturally appropriate programs. For example, people from cultures where coastal seafood gathering is commonplace, may collect endangered tide pool animals for consumption, despite its illegality. In addition, marine education programs may fail to account for sharply different attitudes toward and baseline knowledge of marine wildlife.

Very little is known about the attitudes of diverse metropolitan populations toward marine wildlife, however. Nor do we have a clear understanding of how, or if, attitudes change when people move from farm to city or emigrate from one world-region to another. Moreover, past research suggests that animal practices may be used as cultural markers of outsider status, furthering the marginalization of minority groups in society. But we know little about the tolerance of diverse urban populations toward animal practices often perceived of as controversial, nor do we know if people from different cultural groups feel looked down upon because of their customary interactions with animals.

Preliminary findings from research on the attitudes of Los Angeles County residents toward marine wildlife and ecosystems, funded by the US Sea Grant Program, suggests that cultural background is indeed vitally important in attitude formation. Our telephone survey for approximately 1,000 Los Angeles

County residents, designed to discern from respondents how their demographic traits, socio-economic status, personal background features, and past or present geographic and cultural context might shape attitudes toward marine wildlife in the Los Angeles coastal zone. This survey, administered by Responsive Management Incorporated, was done by telephoning randomly selected Los Angeles residents over 18 years of age. Certain groups were over-sampled to allow group-specific statistical analysis; ultimately, our sample included about 300 Whites, 300 Latinos, 100 African Americans, and 100 Asian-Pacific Islanders. The 100-question survey was translated into Spanish, Chinese, and Korean, and administered by bilingual telephone interviewers.

Preliminary Results

The survey data are still being modeled, but basic findings about cultural diversity and attitudes reveal strong differences across urban subpopulations when it comes to ideas about marine and coastal wildlife issues, and more generally about human-animal relations.

First, attitudinal responses varied by race/ethnicity, with Asians more apt to express anthropocentric attitudes, valuing animals primarily for the benefits they provide to humans. Latinos, in contrast, were more likely to display biocentric attitudes than other groups, valuing animals as part of nature and for their intrinsic value, without reference to human benefits. Whites and African Americans tended fall in the middle ranges of anthropocentrism and biocentrism.

For example, over half of the Asian respondents either moderately or strongly agreed

that the use of mile-wide fishing nets was acceptable, despite negative ecological consequences, because they were efficient, compared to between 14-17 percent for the other groups. Similarly, Asian respondents were more apt to strongly agree that recreational fishing was acceptable whether or not the fish were eaten than were other groups, especially compared with Latinos.

Turning to biocentric attitudes, over three-quarters of Latinos strongly agreed that the fate of individual animals mattered to them, compared to only 43 percent of Asians. Latinos were also far more likely than any other group to strongly support the statement that marine animals should not be kept in aquariums because they have a right to be free. Their biocentrism did not fully embrace an animal rights perspective, however; Latinos were more apt to strongly agree that it was absurd to think that animals could have legal rights, although combined shares of Whites and Latinos in moderate or strong disagreement with the 'animals having rights is absurd' notion were similar and higher than Asians. Latinos also more strongly emphasized the importance of people managing the environment on behalf of the ecosystem (not people). And Latinos were more supportive than others of biocentric statements emphasizing the need for humans to coexist with animals. For instance, most Latino respondents strongly agreed that it was OK for pelicans to steal fish from commercial fishers because pelicans have to eat also (regardless of consequences for fishers), compared to only a third of Asian respondents.

Second, we found race/ethnic variation in the extent of tolerance for controversial human practices toward animals that are typically linked to specific cultural groups, e.g., dog eating by Asians. Latinos were typically less tolerant than other groups. When asked if it was acceptable for people to engage in a specific practice, Whites tended to be most tolerant when it came to whale hunting, animal sacrifices for religious purposes, veal calf crating, spending money on pets, calf roping, and ear cropping/tail docking. Asians and Af-

rican Americans were most tolerance of several practices also, although in most cases the share of any group that expressed tolerance was low. Asians, for example, were most likely to be tolerant of eating dogs, participating in dogfights, cockfights, factory farming, and horse tripping. African Americans were similar to Asians in tolerating participating in dog fighting and considering factory farming acceptable. They approached Whites in being tolerant of ear cropping and tail docking, but were more apt to tolerate collection of tide-pool animals, keeping animals alive until just before killing/eating, eating turtles, or going to a bullfight.

It is important to note that tolerance for some practices was extremely low. A majority in all groups were intolerant of whale hunting, animal sacrifices, eating turtles or dogs, bullfights, dogfights, cockfights, veal crates, horse tripping, calf roping and ear cropping/tail docking. But Latinos were uniformly less tolerant. Moreover, while Asians were most tolerant of certain practices associated with Asian cultures (e.g., eating turtles and dogs, dog fighting and cockfighting), Latinos were more apt to reject animal practices associated with Latino culture, such as bullfights, dog and cockfighting (popular in some quarters of LA's Latino community), and horse tripping, a staple of Mexican-style rodeo.

Third, more than 40 percent of respondents indicated feeling stigmatized – namely, looked down upon or perceived to be strange – because of their interactions with animals, for example, which animals they ate or kept as pets, whether they hunted, etc. This response did not vary significantly by race/ethnicity. However, although levels of perceived stigma were relatively low overall, on six of eight questions concerning the specific reasons for being looked down upon, there were significant differences. And on five of these six questions, African Americans were most likely to say they felt stigmatized by their animal practices.

Conclusions

The preliminary results from our survey of

attitudes toward marine wildlife suggest, first and foremost that cultural diversity plays an important role in the formation of attitudes toward animals. Latinos were more apt to be biocentric, whereas Asian respondents scored the most highly on measures of anthropocentrism, especially utilitarianism. This suggests that these groups may have very different responses to policy-related issues associated with marine wildlife protection or restoration, such as coastal development, bans on tide-pool animal collecting, dolphin-safe fishing regulations, or requirements for turtle-protection devices. A corollary is that marine wildlife educators and coastal conservation groups working with culturally diverse audiences need to be aware of cultural differences in attitudes, and design their curricula and outreach programs accordingly. Second, certain subgroups within the population are more apt to be tolerant of controversial animal practices than are others. Latino respondents were the least tolerant – despite their own marginalization in society, which might have encouraged them to defend culture-

based animal practices in general (either their own or those of other marginalized groups) against attacks by the American mainstream. Third, African Americans were most apt to feel looked down upon or stigmatized by their animal practices – a finding that may be linked to more generalized experiences of oppression in U.S. society. Lastly, taken together, these findings – some quite unexpected – highlight the importance of further research on cultural diversity and attitudes toward animals and animal practices.

Acknowledgements

The author would like to thank the U.S. Sea Grant Program for financial support of this research, and her research collaborators, Dr. Unna Lassiter, Marcie Griffith, Lyndell Whitely, Jin Zhang, and Mark Duda of Responsive Management, for their vital contributions to this study.

FACTORS AFFECTING THE WELFARE AND ADOPTION RATE OF CATS IN AN ANIMAL SHELTER

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Introduction

Salman et al. (1998) report that only 14% of owned cats are acquired from shelters. Kittens being most popular, people are less inclined to adopt adult or elderly cats. The latter also commonly spend several months in shelters awaiting adoption because of policies that eliminate or minimize euthanasia. Furthermore, Miller-Dowling & Stitely (1997) report that adult cats are more likely to be euthanized due to the onset of disease. The focus on disease prevention, meanwhile, has led to the use of barren, individual cages with only basic items necessary for self-maintenance. Such living conditions evoke fear, anxiety (Holmes, 1993) stress (Kessler

& Turner, 1997, 1999; McCune, 1992, 1994; Rochlitz, 1997) and boredom (Dantzer, 1986; Broom and Johnson, 1993; Wemelsfelder, 1993). This study explored factors that influence the rate of adoption of shelter cats, the selection of individual cats by adopters, the length of time they spend awaiting adoption, as well as the animals' health and psychological well-being during their stay at the shelter.

Method

The fate (length of time spent waiting for adoption, rates of adoption, sickness and euthanasia) and stress level of 165 cats placed in one of four treatments was monitored and compared over a period of four months. Adopters of these cats were asked to com-

plete a questionnaire at the time of adoption, its aim being to identify reasons for adoption of a shelter cat and the criteria used for the selection of a chosen cat. With the usual (Standard Treatment) method of housing and handling cats in shelters as a control, three alternative methods were applied. Cats in the Standard Treatment were housed singly in stainless-steel cages measuring (length by width by height) 70 x 70 x 55 cm, and equipped with a plastic dish for dry and wet food, a stainless-steel water bowl and a litter box.

North American shelters do not formally teach staff how to handle non-dangerous animals. As a result, the way that staff and/or volunteers treat adoption cats varies according to the personality and level of expertise of the handler on any given day. In the three alternative treatments, an experimenter and/or one of two research assistants performed routine care by utilizing a similar technique. Their method aimed to provide cats with the opportunity to become familiar with at least one person and increase the predictability of routine events.

Cats in the Enriched Single Treatment were housed in single stainless-steel cages measuring 72 x 55 x 70 cm, and equipped with a wooden shelf. For cats scoring level 3 or higher on the Cat-Stress-Score (Kessler & Turner, 1997), a hiding area was created by placing a towel over the shelf. The aim of this cage design was to provide cats with a perching area from which to view the whole adoption room, a place to hide when stressed, a separate sleeping area and some separation between eating and elimination areas.

The eight cages used for the Standard and Enriched Single Treatments were located in the adoption room and exposed to the same environmental conditions such as noise, odours, light and level of human activity. Both the Basic and Enriched Communal Treatment were converted dog kennels, each measuring 2.30 x 1.60 x 2.40 m high, that could accommodate a maximum of eight cats per cage. The basic cage was equipped with ten square wooden shelves, sized to accom-



modate one cat at a time, and included five hiding areas created with plastic bins, as well as towels on every shelf. Two large litter-boxes and several food and water dishes were placed along opposite walls. A small patio chair was placed in each cage to facilitate interaction between the cats; shelter visitors also enabled the cats to hide.

The enriched cage was equipped with a plastic cat playhouse (The Cat Tower, Dorskocil manufacturing) featuring several carpeted walkways. Three large hiding areas allowed for access on either side to shelves sized to fit several cats. Food and water dishes were located on communal shelves, and the two litter-boxes were close together along the back wall. A variety of hanging and floor toys and a scratching post were placed at the center of the cage.

The basic cage provided ample personal space and single size hiding areas for each cat. Cats would not be able to approach each other from behind, as high corner perches provided a safe space from which to observe each other. The enriched cage actually aimed to maximize the socialization between cats with communal hiding and perching areas, and to increase the level of activity with the use of toys and a scratching post. This treatment afforded cats little opportunity to withdraw from each other.

Procedure

Demographic information (physical characteristics, age and spay/neuter status, origin, and medical condition) was recorded on the day of a cat's arrival and outcome information was added for each cat upon leaving the study. There were four possible outcome categories: (1) "Adopted" when a visitor took the cat home after completing the adoption process; (2) "Sent to isolation" when the Animal Health Technologist (AHT) classified the cat as sick but treatable; (3) "Euthanized" when the AHT assessed the cat as sick with complicating factors, and (4) "Time-up" when a cat had not been adopted after 21 days of exposure.

A representative sub-sample of 117 cats was assessed daily using the Cat-Stress-Score (Kessler & Turner, 1997). At time of adoption, each adopter was asked to complete the "Adoption Questionnaire".

Results

Fate of cats

Only 45% of the cats in the Standard Treatment were adopted, whereas 76%, 74% and 68% were adopted in the Enriched Single, Basic Communal and Enriched Communal, respectively. Euthanasia rate in the Standard Treatment was 16%, while it was 6%, 2% and 6% for the Enriched Single, Basic Communal and Enriched Communal, respectively. The rate of sickness (sent to isolation for treatment) for cats in Standard Treatment was 26%, while it was 12% in the Enriched Single, 22% in the Basic Communal and 22% in the Enriched Communal. The rate of cats not adopted after 21 days (Time up) was 13% in the Standard Treatment, 6% in the Enriched Single, 2% in the Basic Communal and 2% in the Enriched Communal Treatments. Cats in the Standard Treatment waited a median of 12.5 days whereas those in the three alternative treatments waited a median of approximately 5 days.

Stress

The stress scores were similar for all four treatments on day 1, but scores were higher on average for cats in the Standard Treatment compared to the three alternative treatments until day 9. The stress scores of cats that were eventually euthanized for health reasons were higher on average than for cats in the other three outcome categories (Isolation, Adopted, Time-up). For 71 cats, stress scores were recorded at time of departure from the study. Of these, the majority of the animals that were adopted (69%), or sent to isolation (64%) had scores of 2 (Weakly Relaxed) while only 21% of adopted cats and 21% of cats sent to isolation scored 3 (Weakly Tense) or higher. In contrast, 25% of cats euthanized, and 40% of cats removed because time was up, scored 2, while 75% and 60%, respectively, scored 3 or higher.

**Cat-Stress-Score: Level 1
Fully Relaxed**



**Cat-Stress-Score: Level 5
Fearful/Stiff**



Selection criteria

The majority of respondents cited companionship (88%) as the main reason for adopting a cat. Although 81% of respondent quoted, “to save it from death” as the reason for adopting a shelter cat, most mentioned a preference for those perceived as friendly (100%), playful (86%) and happy (73%), not as sad (44%) nor fearful (38%). Physical characteristics most influential in the selection of a cat were coat length and neuter status, while eye colour, breed type, sex and size were deemed as important less often. Being able to enter the cage and watch cats interact with each other was cited as an important factor in selection, while seeing the cat alone in the cage or attempting to hide in the litter-box was influential for fewer than 23% of adopters.

Discussion

To summarize, compared to the three other treatments, the Standard Treatment yielded the lowest adoption rate, longest length of time awaiting adoption and the highest percentage of cats not adopted after 21 days. As well, while a similar number of cats became sick in all treatments, more of those in the Standard Treatment were euthanized. Finally, cats in the Standard Treatment displayed behaviour cited as desirable by adopters less often than cats in the three other treatments.

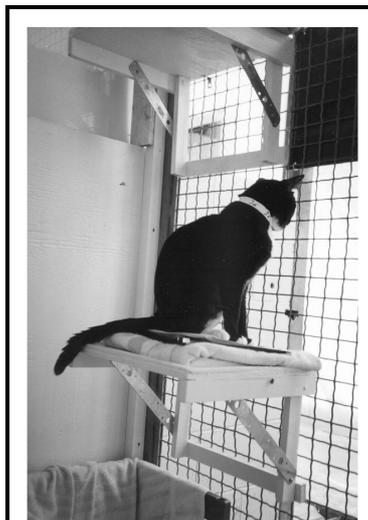
The three alternative treatments, which provided consistent handling and varying degrees of environmental complexity, did not differ greatly from each other, so the results give little guidance on exactly which aspects of the three experimental treatments led to the beneficial effect. The results are consistent, however, with a reduction in stress in the experimental treatments being involved in the higher adoption rate.

Results from the “Adoption

Questionnaire” indicated that most people preferred to adopt cats they perceived as “friendly”, “playful” and “happy.” To be perceived as having these attributes a cat must display some level of activity, be somewhat interactive, show interest in the visitors (expected of a relaxed cat), and not show signs of fear or aggression (expected of a stressed cat).

Conditions found by other researchers to be stressful for cats include unpredictable events, lack of control over the amount and timing of exposure to people, proximity between feeding and elimination areas, lack of opportunity for familiarization with at least one caretaker, and (for some cats) proximity to other cats (McCune, 1994; Rochlitz, 1997; Roy, 1992; Smith et al., 1994).

Cats in the Standard Treatment were not provided with a hiding area; and although some cats were found in the morning to be hiding under shredded newspaper, the practice of cleaning the cages every morning left them with no control over the amount and timing of exposure to visitors. In addition, standard cages did not provide separation between sleeping, feeding and elimination areas, thus cats were forced to eat and sleep in close proximity to the litter box. Finally, the lack of consistent handling and rotation on behalf of caretakers rendered routine events unpredictable and familiarization with one person unlikely.



Perching associated with lower stress

In contrast, cats in the Enriched Single Treatment were able to sit on a shelf and survey the whole room. Additionally, they had the option to retreat to the hiding area beneath the shelf at will. The small number of caretakers and consistent handling provided by these caretakers made procedures such as feeding and cleaning more predictable, and familiarization with at least one person was more likely. The Basic Communal treatment did not make provision for each cat to

acquire personal space; cats had less control over the amount and timing of contact with other cats. Several researchers have stated that proximity to other cats can be stressful in some cases (McCune, 1992; Smith et al., 1994).

The results of this study suggest that by increasing the complexity of housing, the welfare and adoption rates of shelter cats can be significantly improved. The focus of such an environment would increase choice, enable consistent handling, and provide cats with opportunity to familiarize with a caretaker. This study does not support the claim that disease is more likely to spread when cats are housed communally. Further research is needed to determine which aspect of the proposed sheltering practices may have the best potential to improve welfare and increase adoption rates.

References

- Broom, D. M., & Johnson, K. G. (1993). *Stress and animal welfare*. London, UK: Chapman & Hall.
- Dantzer, R. (1986). Behavioural, physiological and functional aspects of stereotyped behaviour. *Journal of Animal Science*, *62*, 1776-1786.
- Holmes, R. J. (1993). Separation anxiety and grieving by dogs and cats. In *University of Sydney, Animal behaviour proceedings 214* (pp. 61-64). Sydney, Australia: post graduate committee in veterinary science.
- Kessler, M. R., & Turner, D. C. (1997). Stress and adaptation of cats (*Felis silvestris catus*) housed singly in pairs and in groups in boarding catteries. *Animal Welfare*, *6*, 243-254.
- Kessler, M. R., & Turner D. C. (1999). Effects of density and cage size on stress in domestic cats (*Felis silvestris catus*) housed in animal shelters and boarding catteries. *Animal Welfare*, *8*, 259-267.
- McCune, S. (1992). *Temperament and welfare of caged cats*. Doctoral Dissertation, University of Cambridge, Cambridge, U.K.
- McCune, S. (1994). Caged cats: avoiding problems and providing solutions. *Companion Animal Behaviour Therapy Study Group Newsletter*, *7*, 33-40.
- Miller-Dowling, J., & Stitely, C. (1997). Killing ourselves over the euthanasia debate. *Shelter Sense*, *20*, 4-15.
- Rochlitz, I. (1997). *The welfare of cats kept in confined environments*. Doctoral Dissertation, University of Cambridge: Cambridge, U.K.
- Roy, D. (1992). *Environment enrichment for cats in rescue centers*. Undergraduate Thesis, University of Southampton: Southampton, U.K.
- Salman, M. D., New, Jr. J. G., Scarlet, J. M., & Kass, P. H. (1998). Human and animal factors related to the relinquishment of dogs and cats in 12 selected animal shelters in the United States. *Journal of Applied Animal Welfare Science*, *1*, 207-226.
- Smith, D. F. E., Durman, K. J., Roy, D. B., & Bradshaw, J. W. S. (1994). Behavioural aspects of the welfare of rescued cats. *Journal of Feline Advisory Bureau*, *31*, 25-28, 39.
- Wemelsfelder, F. (1993). The concept of animal boredom. In A. B. Lawrence & J. Rushen (Eds.). *Stereotypic animal behaviour: fundamentals and applications to welfare*. Wallingford: CAB International.



Anthrozoological Visions

An Interview with **ERIKA FRIEDMANN**

Jo Swabe

In this issue, Anthrozoological Visions features an interview with Erika Friedmann, one of the founding members and the original president of the International Society for Anthrozoology.

Erika Friedmann's office at the Department of Health and Nutrition Sciences, Brooklyn College in New York will probably be a familiar sight to most over-worked academics. Every available space is stacked high with papers and journals, reminders of the never-ending stream of work left to do. While we chat, a colleague who is on sabbatical puts her head round the door to say hello. When she leaves, Friedmann laments that during the past twenty years in academia she has never actually got round to taking sabbatical leave. Perhaps, she smiles, it may be high time to do so. That, she says, would finally give her the opportunity to actually be able to write up a lot of the great research data that she and her colleagues have collected throughout the past few years. As Friedmann points out, it is quite unfortunate that one of her last joint publications on the enhancement of patient interaction through pet therapy, which appeared in *Anthrozoös* last year, was based upon data that was about fifteen years old. Fortunately, such clinical data are still as valid today as they were when the study was conducted, but it is a great shame that it was not available for public consumption earlier. This is also probably a familiar tale to all of us out there with stacks of data to publish, but no time to analyse or write it up!

The burning question is, of course, how did Erika Friedmann originally get into the field of human-animal relations? Friedmann's academic career began in the early 1970s at The University of Pennsylvania, where she studied behavioural biology. It was here that she enrolled in a course given by neurobiologist,

Ingrid Waldron, on the relationship between stress and health, which introduced her to the then still novel idea that social and psychological factors may well have bearing on physiological health. This more interdisciplinary approach greatly appealed to Friedmann, who was turned off by laboratory research.

As she continued with her doctoral research, she began to explore the interaction between physiological, social and psychological factors in coronary heart disease patient survival. As someone that had always grown up with animals and at that time a dog owner herself, it seemed perfectly logical to her that pet animals could also act as a social support factor in people's lives, so she decided to include them in her doctoral research study. Pet ownership was, however, just one of many psycho-social influences that were considered in this research and, as Friedmann points out, the pet data that she collected along with her colleagues played a fairly minor role in the finished work.

In this interview, Friedmann was keen to emphasise that many other people have been involved in her groundbreaking research. For example, the success of the original research she in part attributes to the efforts of her colleagues, including Aaron Katcher, James Lynch, and Sue Thomas who facilitated the opportunity to study patients in a Coronary Care Unit. Aaron Katcher encouraged her interest by involving her in the formative meetings of the Center on the Interaction of Animals and Society at the University of Pennsylvania. Later research was facilitated by clinical psychologist James Lynch, who succeeded in commandeering a blood pressure monitor for the project. At the time, this was an innovative research tool, through which they could get a handle on what was going on physiologically with patients as they, for ex-

ample, interacted with pets. In this way they were able to measure just how pets may have a moderating effect on blood pressure and stress levels.

Her doctoral research proved to be the first epidemiological study to indicate that there may well be health benefits involved in pet-keeping. Given that the pet factor played a fairly minor role in this work as an entirety, Friedmann consequently produced a more extensive paper dealing specifically with the pet related data she had collected in the course of her doctoral research. This paper captured the interest of her peers, leading to an opportunity to address the American Heart Association in November 1978. The cardiologists whom she addressed at this meeting found the epidemiological data 'cute', but being so physiologically oriented they failed to take Friedmann's work seriously; the media however began to show a keen interest in the research, which she publicly presented there. The idea that keeping pets could actually have positive benefits for human health is something they latched onto eagerly, drawing much positive attention to the work of Friedmann and her colleagues - much to the chagrin of the cardiologists.

There were, of course, those in the medical world who wished that they had been the first to have the idea to include interaction with pet animals. Friedmann recalls with some amusement the professional challenge that she encountered from a clinician when she was about to embark on a new research trial, the first to be funded by the National Institutes of Health. This clinician attempted to warn Friedmann and her colleagues off from using pets as a variable in their study, since he wanted them to wait until he had a chance to investigate whether pet ownership might have been important in another trial he had been involved in. He apparently felt that he could appropriate this novel idea as his own intellectual property. Naturally, he retreated with his tail between his legs when he was reminded that it was in fact Friedmann who had published the first research involving pets and heart disease, upon which he was

basing his hypotheses! Yet it actually took more than a decade before the idea that interacting with pets may have potential human health benefits were truly embraced by the medical community. For Friedmann, this was, of course, after several more grants, many more years research and an additional clinical trial. In 1995, the results of her study into pet ownership, social support and survival rates following acute myocardial infarction truly filtered into the mainstream of medical research, when a paper was published in the American Journal of Cardiology on the subject. This publication she regards as major step forward for research in this field. It marks the fact that the conventional medical world was starting to take her work seriously.

Since that time, the notion that pet-keeping may enhance human health has truly filtered into the mainstream. As Friedmann points out, questions about pet ownership now feature as a more or less standard variable in clinical trials relating to coronary health issues. Questions about pet ownership have even been included in major national health data surveys, such as the National Health and Nutrition Examination Survey . The media has also been keen to lap up the data on the benefits of pet-keeping garnered in such research, consequently the notion that keeping pets is good for people is now common knowledge. She comments on how deeply ingrained the idea now is in our psyche by citing an anecdotal case where an elderly person, who was under threat of being evicted for keeping a dog, was actually allowed to keep the animal due to the health benefits it would provide. This gives further weight to Friedmann's argument that for both the media and the general public, the idea of keeping a pet is not a scary, invasive or difficult way to take steps to enhance well-being. It is, therefore, easily promoted and taken on board.

However, although the media has been keen to repeatedly exploit the research data, what reaches the public is inevitably rather distorted. Friedmann argues that while the media is enthusiastic to promote this idea, there has

not yet been a single study that proves that giving a person a pet will actually improve their health. It is still not clear whether everyone would benefit equally from taking a pet on. There have, for example, not yet been enough women participating in long-term clinical trials, although they have been predominantly in studies dealing with the short-term effects of interacting with animals. Friedmann asserts that in the end the impact of pet ownership on a person's health may just be as simple as finding a good match between owner and animal. If you like an animal, it will have a positive effect on your life, certainly with regard to combating depression, anxiety and loneliness. She argues that much more scientific research is necessary before the generalised claims that the media makes about the benefits of pet-keeping for human health can be fully substantiated.

After she obtaining the first epidemiological evidence that interaction with pet animals could function as social support factors to improve the changes of survival for heart disease patients, she became interested in finding out how this might happen. She began investigating possible short-term mechanisms, such as stress response reduction, for these health benefits.

Alongside the mountains of data she still has to analyse write up and publish, amongst which data on cardiovascular effects on patients interacting with pets in nursing homes can be found, Friedmann has many ideas about the directions that future research may take. She is, for example, enthusiastic about the idea of using ambulatory blood pressure monitoring to investigate if the variability in stress levels while interacting with pet animals. She also currently has a grant from the National Institutes of Health with which, along with colleague Sue Thomas from Georgetown University, she may further investigate psycho-social factors in cardiovascular health. Friedmann also envisages many more opportunities to research the impact of the human-animal bond in areas, such as immunology, looking at other vulnerable groups such as AIDS patients.

One of the great aspects of conducting clinical trials involving pet animals, Friedmann observes, is the kind of response that one receives from the people who have the task of directly collecting the clinical data. For example, the nurses involved in amassing the data for one of her projects re-christened the project the 'puppy study'. They really got into the study and spontaneously began to learn the names of participant's pets, thus remembering details of both the animals and their owners. In the current clinical trial for which Friedmann is responsible, the nurses involved are similarly enthusiastic. This means that both the nurses and the participants are more motivated and participation in the study is rewarding for one and all. The animal variable thus distinguishes the research from the run of the mill clinical trial, which may be seen as more of an inconvenience to the nursing staff and participants than something to be enjoyed.

Aside from her own research, Erika Friedmann has been a major player in the anthrozoological research community. Indeed, she was one of the founding members of the International Society for Anthrozoology. Having joined ISAZ several years after its inception, I was curious - as perhaps are other members - about how our society actually came into being. Friedmann begins by outlining the situation for the pioneering researchers interested in human-animal relations at the end of the 1970s. At that time, the Delta Society was the only organisation serving the interests of those involved with pet-people research. With Leo Bustad at the helm, the Delta Society's original goals were to understand the quality of the relationship between pet owners, pets, and care givers (the name "delta" name derived from this triangular relationship). Yet as the Delta Society continued to develop and diversify throughout the 1980s, an uneasy relationship developed between them and the purely academic researchers.

Certainly by the 1990s, the Delta Society had shifted its emphasis almost entirely to animal assisted therapy, which was more oriented

towards practical activities than scientific research. Even the conferences that the society organised began to be directed exclusively at animal assisted therapy, rather than any other aspect of human-animal interactions.

IAHAIO, the International Association of Human-Animal Interaction Organizations, which was founded in 1990 to gather together national associations and related organisations interested in advancing the understanding and appreciation of the link between animals and humans, also did not meet the needs of scientific researchers. This was also due to the fact that IAHAIO's conferences were only held every three years and were fairly large scale. As Friedmann explains, there was a clear need for increased opportunities for intellectual exchange, to reduce the isolation of researchers working on the theme of human-animal relations. Researchers, including graduate students, needed the opportunity to present their work, especially the less mainstream discipline specific material, in a purely academic forum.

The idea of forming a new society thus took seed through the frustration that there was no organisation to serve purely scholarly and scientific research into the human-animal relationship. In 1990, Friedmann attended a conference in the Harrogate, UK, which was organised by the BSAVM and Waltham, the pet food manufacturer. The theme of this meeting was 'Pets, Benefits and Practice'. Together with James Serpell, Lynette Hart, Ben Hart, John Bradshaw, Dennis Turner and Ian Berger, who were also present at this meeting, informal discussions began about the prospect of founding an organisation, which would better suit the needs of researchers.

Just two years and a lot of correspondence later, this dream became reality as ISAZ was formed in 1991 at a conference hosted by Serpell in Cambridge, UK. It was at this meeting that the society's bye-laws and so forth were laid down. Friedmann was also elected the first president and was re-elected for the maximum term of 6 years (a role that she combined with the departmental chair that she took up the following year). Follow-

ing the Cambridge meeting, the founding members started to invite other researchers to become ISAZ members.

Since that time, the society has continued to grow and has taken on the interdisciplinary character that was intended by its founding members. Still, Friedmann argues, more interdisciplinary work is necessary for the future. More importantly still, funding is crucial to allow people to conduct the necessary work. As most ISAZ members will certainly appreciate, it is a luxury to have funding and certainly to have tenure. It is hard to find people to fund research. As she points out, Waltham, for example, have been very generous to researchers in the field throughout the past couple of decades. However, we need to find more ways of facilitating grants and funding for research. Perhaps, she suggests, that may be a future role for ISAZ. With the backing of a wealthier sponsor, the society may help facilitate and evaluate proposals and grants for research into human-animal relationships. Naturally, if anyone has any ideas on this front, then they should let ISAZ council members, such as Erika Friedmann, know!

Selected Publications

Friedmann, E., Thomas, S.A. & Eddy, T. (2000) 'Companion animals and human health: Physical and cardiovascular influences'. In Podberscek, A., Paul, E. & Serpell, J.A. (eds) *Companion Animals and Us: Exploring the relationships between people and pets*. Cambridge: Cambridge University Press. pp. 125-142.

Friedmann, E. (1995) 'The role of pets in enhancing human well-being: Physiological effects'. In Robinson, I. (ed) *Waltham Book of Human-Companion Animal Interactions*. Oxford: Pergamon. pp. 33-54.

Friedmann, E. & Thomas, S.A. (1995) 'Pet ownership, social support and one year survival after acute myocardial infarction in the Cardiac Arrhythmia Suppression Trial (CAST)' *American Journal of Cardiology*. 76:1213-1217.

Centres of Research

NETHERLANDS CENTRE ALTERNATIVES TO ANIMAL USE (NCA)

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<http://prex.las.vet.uu.nl>*

“The Commission and Member States should encourage research into the development and validation of alternative techniques, which could provide the same level of information as that obtained in experiments using animals but which involve fewer animals or which entail less painful procedures, and shall take such other steps as they consider appropriate to encourage research in this field”. *Article 23, I; 86/609/EEC*¹

This article in Council Directive 86/609/EEC requires the EC and its Member States to actively stimulate the development and subsequent acceptance of the so-called alternatives, or nowadays preferably named Three Rs models. Three Rs stands for models that replace, reduce or refine animal experiments. As a consequence, the Netherlands Centre Alternatives to Animal Use was established in 1994. Its objectives were defined as: “To stimulate the development, validation and application of alternatives to animal experiments in the Netherlands”. As such, the NCA has become the central point in the Netherlands for coordinating research and disseminating information on alternatives to animal experiments.

The NCA focuses on alternative models in education, in production and control of biologicals and the use of human tissue in research. For each area, experts groups were established with different stakeholders, to follow, discuss and react to new developments, to stimulate new initiatives and inform relevant parties.

ECVAM

As an example: the working group on alternatives in education organised a European workshop on this subject in collaboration with the European Centre for Validation of Alternative Methods (ECVAM). The workshop participants recommended the establishment of a Resource Centre that would enable teachers to obtain most relevant information on available alternatives. The NCA has now taken the initiative, in close collaboration with the University of Edinburgh, to establish the European Resource Centre on Alternatives in higher education (EURCA). EURCA will supply a virtual library of animal free educational models on the Internet, with reviews of users, a discussion list, etc. Furthermore, a physical library will be established, where teachers can get hands on experience with the models in order to make a better decision on the applicability of models for their practical. In addition, site visits will be carried out to demonstrate models.

Collaboration

The NCA collaborates closely with the Dutch Platform Alternatives to Animal Experiments (Platform) and the Programme Commission on alternatives to animal experiments of the Dutch Health and Research Council (PrAD). PrAD has succeeded the Platform as the financing organisation for the development of new Three Rs models. Between 1987 and 2000, 142 projects have been financed by the Platform. Of these, 33 projects are still in progress (for details, see ALTEX 17(3), 138-139, 2000). NCA and PrAD monitor the pro-

¹ Council Directive 86/609/EEC of 24 November 1986 on the approximation of laws, regulations and administrative provisions of the Member States regarding the protection of animals used for experimental and other scientific purposes *Official Journal L 358*, 18/12/1986 p. 0001 - 0028

gress of the different projects by carrying out site visits. Furthermore, NCA and PrAD monitor and support activities that lead to a wide implementation of newly developed Three Rs models.

Other activities

As an information centre, the NCA manages an Internet site (<http://prex.las.vet.uu.nl/nca>), publishes the NCA-Newsletter, takes part in courses on laboratory science and organises symposia, lectures and workshops. Further-

more, a database with models that have been developed in the Netherlands is managed.

Recently, the NCA has joined the newly established Department of Animals and Society, at the Faculty of Veterinary Medicine of the Utrecht University. The NCA is supported by the Faculty of Veterinary Medicine and PrAD. The NCA is home to the first Dutch Chair on Alternatives to Animal Experimentation, which is held by Prof. Dr. C. Hendriksen.

News from I.E.A.P. / I.E.T

Dennis C. Turner has been appointed "Invited Visiting Professor" for Animal-Assisted Therapy at Azabu University in Japan.

Beginning in April 2002 Azabu University will offer the first post-graduate course in Animal-Assisted Therapy and Animal Assisted Activities based upon the curriculum developed and operated by I.E.A.P. in Switzerland since 1999. Professor M. Ohta (PhD, DVM) is administrative director of the program, assisted by professors Turner (BS,ScD)

and K. Nakamura (MD, PhD) and a number of guest lecturers. Turner remains a "Private Faculty Member" (PD) at the University of Zurich, but will now travel twice yearly to Tokyo for lecturing and counselling purposes.

On March 16, 2001, I.E.A.P. was also certified as a recognized institution for continuing education by SQS (eduQuaprocedure) on commission by the Swiss federal office for continuing education.



Books *etc.*

Hot Off the Presses

Animal Rights

Political and Social Change in Britain since 1800

Hilda Kean (1998)

London: Reaktion Books. ISBN: 1861890613

Whilst this book is not strictly hot off the presses, it *is* now available in a more affordable paperback edition. Kean's work looks at the political, cultural and social history of animal rights activism from 1800 to the end of the 20th century.

Her work illustrates how the struggle for the rights of wild, farmed and domestic animals is not by any means a recent phenomenon: the present controversies around the issues of vivisection, zoos and hunting all have a long history. These are other related issues across a pe-

riod of more than two centuries are traced in this book, which places the debates on animal rights and welfare in a broader context, incorporating culture, art, literature and the history of science. Drawing on archive material, visual images and fictional narratives, the author looks at the political, cultural and social history of animal-rights activism from 1800 to the present, focusing on various examples ranging from rabies scares in the late-19th century to the growth of initiatives such as The Body Shop today.

The Postmodern Animal

Steve Baker (2000)

London: Reaktion Books. ISBN 1-86189-060-5

According to the blurb, in *The Postmodern Animal*, Steve Baker explores how animal imagery has been used in modern and contemporary art and performance, and in postmodern philosophy and literature, to suggest and shape ideas about identity and creativity. Baker cogently analyzes the work of such British and American artists as Olly and Suzi, Mark Dion, Paula Rego and Sue Coe, at the same time looking critically at the constructions, performances and installations of Robert Rauschenberg, Louise Bourgeois, Joseph Beuys and other significant late twentieth-century artists. Baker's book draws parallels between the animal's place in postmodern art and poststructuralist theory, drawing on works as diverse as Jacques Derrida's recent analysis of the role of animals in philosophical thought and Julian Barnes's best-selling *Flaubert's Parrot*.

Animal Wisdom

Jessica Dawn Palmer (2001)

London: Harper Collins. ISBN: 0-00-710218-6

Whilst this is not an academic book, this publication will undoubtedly appeal to those interested in animals and mythology. In this illustrated guide to the legends, rituals and magical powers of animals, Jessica Dawn Palmer explores over 70 of the Northern Hemisphere's most loved animals. For each animal she describes their physical details, their habitat and how they live, their traits and characteristics, the legends and mystical traditions that surround them, and the medicine and healing power associated with them. The animals range from the humble to the magnificent, from ant, cat and dog, through badger, beaver and bear, to eagle, frog, snake, vulture and wolf.

Animal Matters

Philip Steele (2000)

London: Evans Brothers ISBN: 0-237-52080-X

Here's one for the kids! *Animal Matters* is a text covering present day animal issues, which - unlike most of the academic books featured in this rubric - is targeted specifically at secondary school children.

This book is part of a 'Life Files' series put out by the publisher to tackle a wide range of social issues. The books in this series are designed not only to inform young people of the 'facts', but also to encourage them to consider the arguments for and against some controversial topics and to make up their own minds on such things as issues concerning animals.



News from the Net

ISAZ Website

Change of Address!

The ISAZ website has now moved from its old home at Southampton University to the University of California, Davis. Please be sure to update all of your links and visit the new improved site at:

<http://www.vetmed.ucdavis.edu/CCAB/ISAZ.htm>

Animal Hoarding Research

In recent years, *Tufts Center for Animals and Public Policy* has been conducting research into the phenomenon of animal hoarding. This behaviour, which is sometimes also known as collecting, has serious consequences for animal health and welfare, as well as for human health and welfare.

The Tufts' site describes their hoarding research, containing links to published literature, and even a case report form for humane investigators and mental health professionals.

<http://www.tufts.edu/vet/cfa/hoarding.html>

Encyclopaedia of Farm Animal Behaviour

The Encyclopaedia of Farm Animal Behaviour (EFAB) is now available for use on-line. The encyclopaedia contains definitions paired with images and is useful for a variety of academic, professional, and research purposes.

The EFAB provides a standard for what actions compose a given behaviour and display a given behaviour in live-action video clips. Representatives of over 25 research institutions from North America are members of

NCR-131, a group of experts that reviews the images and encyclopaedia references. This review process assures the video clip representing the behaviour is acceptable and accurate.

At present, approximately 1,300 behaviour definitions are represented on the website. Currently, 43 definitions paired with images of cattle and swine are available. However, the encyclopaedia is updated with new definitions and clips frequently. The images are MPEG files ranging in size from 0.3 to 3.8 MB in size. Visit the site at:

<http://www.liru.asft.ttu.edu/EFAB/>

ALTWEB

Alternatives to Animal Testing

The 'Altweb' has been around for a while, but it just keeps on expanding. The aim of the site is to foster the development of scientifically acceptable in vitro and other alternatives to animal testing.

The site not only keeps visitors in touch with the news of latest research and developments, but also provides a historical background to the issue of animal use. It helps people to locate alternatives databases and funding sources, keeping them up to date with the latest software and other computer resources for education and research. Check out the site at:

<http://altweb.jhsph.edu/>



Recording Animal Advocacy (RAA)

Recording Animal Advocacy (RAA) is a non-profit educational group which encourages a deeper understanding in the history of animal protection through its “Animal Advocates Oral History Project” and “Archive Initiative”

Our purpose

RAA was formed in late 1998 by several academics and researchers. Our mission is to foster scholarly research and public education in the history of animal protection, advocacy and the modern animal rights movement. We fulfill this mission by encouraging the collection, preservation and study of relevant primary sources such as historically significant correspondence, minutes of meetings, photographs, and oral histories.

Our programs

I. Animal Advocates Oral History Project

At the center of RAA’s activities is an ongoing “Animal Advocates Oral History Project” guided by Columbia University’s Oral History Research Office and funded by grants that RAA raises. The project has completed 32 hours of interviews with ten individuals. Interviews with three individuals are currently in progress.

Every interview is transcribed professionally and includes a summary and a name / subject index. After the interviewee has signed the agreement form, the tapes and transcript are deposited permanently at Columbia University and made available to researchers.

The project is particularly interested in animal advocates who have been actively and directly involved with animal protection since the 1970s or earlier. It also seeks to cover different areas of animal protection and different types of effort.

II. Archive Initiative

The objective of our “Archive Initiative” is twofold:

1. Encourage animal protection groups and individual advocates to preserve their materials and make them accessible to researchers by offering them practical assistance and information.
2. Encourage researchers and students to take a serious interest in the history of animal protection. A “Preliminary guide to primary sources on the history of animal protection available in repositories” is now available on the RAA website.

Please participate in our short survey! We need and value your input!

Are you interested in some aspects of the history of animal protection? Have you conducted or considered doing research in this subject area? Can you tell us about your interest and any needs that you may have that are related to the use of primary sources?

Can you spare a few moments and visit our website to answer some simple questions?

www.recordinganimaladvocacy.org

This information is of critical importance to our effort to offer the best assistance to researchers through our “Archive Initiative”. We will share the results with all interested parties.

(If you prefer to receive the short survey via e-mail, fax or regular mail, please let us know.)

For more information please contact us at:

*P. O. Box 27022
Philadelphia PA 19118
tel / fax: 215-247-7753
raateam@cswebmail.com*

Meetings of Distinction

ISAZ 2001

The draft programme for the upcoming ISAZ annual conference to be held on 3rd & 4th August at UC Davis, California on the theme 'Addressing Challenges in Our Relationships with Animals' can now be viewed on the new ISAZ site:

<http://www.vetmed.ucdavis.edu/CCAB/isaz2001.htm>

Preliminary announcement

The Human-Animal Relationships Research Focus Group

at the University of California, Santa Barbara, is planning a two-day colloquium in March 2002. (Plans are contingent upon the securing of funding.) The format of the colloquium will be similar to that of previous colloquia; participants will make 15-20 minute presentations of their research.

For more information about dates and submission of abstracts, please contact Jo-Ann Shelton (jshelton@humanitas.ucsb.edu) AF-TER July 1, 2001.

4th World Congress on Alternatives to Animal Use in the Life Sciences, New Orleans, Louisiana, USA 15th-18th August 2002

This Congress will be organized around five themes:

- A. Replacement and Reduction Alternatives
- B. Policy and Ethics
- C. Refinement and Reduction Alternatives
- D. Education and Databases
- E. Test Development, Validation and Implementation

For more information and submission of abstracts, please visit the congress website at:

www.worldcongress.net

Animal Behavior Society 38th Annual Meeting

*Corvallis, Oregon State University
14th - 18th July, 2001*

This meeting, hosted by the Department of Zoology of Oregon State University, will, amongst other things, include symposia on 'Behavior genetics for the next decade: Beyond heritability' and sessions on 'Educating in Animal Behavior'. For more details:

<http://www.animalbehavior.org/ABS/Program/index.html>

XXVII International Ethological Conference

*Tübingen, Germany
22nd—29th August 2001*

The International Council of Ethologists will hold their 2001 meeting at *Eberhard-Karls-Universität*. For more information contact: Dept. of Zoology / Animal Physiology Auf der Morgenstelle 28 72076 Tübingen, Germany. *E-mail: ethology01@uni-tuebingen.de*

<http://homepages.uni-tuebingen.de/ethology01>

ASAB Summer 2001 Meeting

*Glasgow, UK
19th- 21st September 2001*

The summer meeting of the Association for the Study of Animal Behaviour will be held at the University of Glasgow, UK. The theme is 'Interfacing Behaviour with other disciplines.'

For further information, contact Felicity Huntingford (F.Huntingford@bio.gla.ac.uk) or Victoria Braithwaite (v.braithwaite@ed.ac.uk).

<http://www.societies.ncl.ac.uk/asab/asabconfs.html>

Official ISAZ Business

Members E-mail Addresses

The ISAZ council urgently requests that **all** members supply our membership secretary Debbie Wells with a current e-mail (and postal!) address.

It is likely that the ISAZ newsletter will be transformed into digital format in the very near future. This is partly due to the fact that we would like to reduce postage and printing costs, but also because we want to keep pace with the digital age. The exact format, which the newsletter will take has not yet been decided. Making it available in PDF format is one option. A second option will be to establish a more regular news digest, which could be sent to ISAZ members in E-mail form.

Please contact Jo Swabe (see address below) if you have any suggestions or comments about ISAZ going digital.

Unpaid Membership Fees

The following list contains the names of **all** members with outstanding *unpaid* membership fees.

If **your** name appears on this list and you wish to continue supporting ISAZ, receive our journal *Anthrozoös* and this newsletter, please get in touch urgently with:

Dr. Deborah L. Wells,
ISAZ Membership Secretary/Treasurer
School of Psychology
The Queen's University of Belfast,
Belfast, BT7 1NN, Northern Ireland, UK
E-mail: d.wells@qub.ac.uk

Needless to say, if your name appears on this list and you have **already** paid your dues, we apologise for any embarrassment caused! In that case, please also contact Debbie Wells a.s.a.p.

Copy Deadline

The ISAZ newsletter is published twice a year: May and November. The deadline for acceptance of material for inclusion in the November 2001 issue will be **15th October 2001**.

All material should be sent in electronic form to the editor, Dr. Jo Swabe

E-mail: j.swabe@las.vet.uu.nl