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Randall Lockwood

American Society for the Prevention of Cruelty to Animals

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Tracking the “State of the Animals”: Challenges and Opportunities in Assessing Change

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CHAPTER

Randall Lockwood

There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact.

—Mark Twain
Life on the Mississippi (1874)

The original concept behind the State of the Animals series, as defined by Paul G. Irwin, president emeritus of The Humane Society of the United States (HSUS), in the first edition (2001, 1) was “to evaluate the position of animals in society at the dawn of the twenty-first century.” As we embark on the third volume in this series, and as we view the state of the animals from a perspective midway through the first decade of the new century, it is helpful to examine some of the tools we have at our disposal to assess the situation and provide some suggestions for measuring our progress, or lack thereof, in improving the treatment of animals. Careful reflection on what we actually mean by “improving the state of the animals” is an important part of the process for planning and assessing present and future actions.

An increasing demand has been placed on advocacy groups of all

kinds to develop ways of planning and evaluating their activities (Wandersman et al. 2000). There has been an erosion of support for well-meaning people engaged in activities that seem to be helpful to animals or people in need, if this support is to be given simply because the activities seemed to be the right thing to do. Advocacy groups of all kinds are seeing more demand for accountability from funders and other sponsors such as United Way (Hatry et al. 1996). Some have described the current situation for nonprofit organizations as a “perfect storm,” a collision of a declining economy, reduced government support, and state and local budget crises (Boice 2003). Individual donors, government agencies, foundations, and other supporters of advocates for change want to see meaningful assessments of results. They demand—and deserve—valid and accurate measures of impact before they provide new or continuing support for a program or organization.

We, as animal advocates, also have a basic need to see “how we’re doing” and why we are being effective or ineffective. If we are not progressing in the way we had

hoped, if we are not improving the state of the animals, then we need to try to identify the social, psychological, cultural, economic, political, and other obstacles to progress and develop new strategies and tactics that may be more effective. We also can benefit from clarification of the “trajectories of change,” the processes that lead people and organizations to develop attitudes and behavior that are consistent with those we wish them to adopt and the attitudes or experiences that serve as “entry points” for concern about the issues that are important to us.

In this chapter we:

1. Review some of the measures that have been used in the past to attempt to assess the state of the animals and the extent to which we can continue to apply these measures to track future changes.
2. Review some of the emerging tools and developing technologies that can improve our tracking of the state of the animals and provide some quantitative measures of our progress.
3. Explore some examples of general measures of human interaction with animals that

might prove useful in predicting and tracking changes in how they are treated.

Tools for Assessment

Tools for tracking changes in the state of the animals fall into a few broad categories:

1. Animal Demographic/ Geographic Measures

One important measure is simply the number of animals of a particular kind, or the number kept under certain conditions. The goal of particular actions on behalf of animals may be to increase certain numbers (e.g., the number of individuals of a given species living in protected habitats) or it may be to decrease the numbers (e.g., the number of sows being kept in confinement-rearing situations). These measures may be somewhat different from measures of animal use, described below, since animals kept under similar conditions (e.g., in the laboratory), may be subjected to different treatments with differing effects on their overall welfare.

The most basic demographic measure of the state of the animals that has been applied for decades is the assessment of population levels of threatened or endangered species. Such measures are also closely linked to assessments of the extent of appropriate habitat, for example, number of acres protected in land trusts or measures of acreage of rainforest protected or lost to development. Such population estimates of wildlife numbers are also commonly applied at the national, state, and local levels. However, population estimates of hunted species are frequently the subject of debate since the underlying assumptions behind such estimates are always open to criticism from differing groups. For

example, estimates of black bear populations may be interpreted by some to imply that the population is stable, growing, or even a nuisance and thus is “harvestable,” while others may interpret the same data to show that the population is at best “recovering” or potentially fragile.

Demographic measures have frequently been applied to the assessment of farm animal issues. Fraser, Mench, and Millman (2001) and Trent et al. (2003) use worldwide inventories of common farm animals as one significant measure as well as changes in the numbers being kept under different systems or on facilities of different sizes. The same approach has been applied to tracking the state of animals kept in laboratory settings (Rowan and Loew 2001) and the growing proportion of horses being kept primarily for recreational purposes (Haupt and Waran 2003).

Demographic variables have also been key to the assessment of progress on companion animal issues (Clancy and Rowan 2003). Reliable data on the numbers of companion animals sharing the lives of people in different demographic categories (by region, age, family composition, ethnicity, etc.) are important for planning programs that seek to enhance those relationships. Although several groups, including the American Veterinary Medical Association (AVMA 2002) or the American Pet Products Manufacturers Association (APPMA 2004), routinely survey patterns of pet ownership and care, these surveys focus primarily on consumer expenditures or the delivery of veterinary care and do not attempt to specifically track broader aspects of human-animal interactions.

Tracking companion animal issues through demographic analysis of the population of companion animals entering and exiting animal shelters has been difficult. The 1994–1997 Shelter Statistics Sur-

vey conducted by the National Council on Pet Population Study and Policy (NCPSP 2000) attempted to collect such information via survey cards sent to more than five thousand shelters. Although fewer than 20 percent of shelters responded, information was gathered on the handling of about four million animals for each year of the study. Because the responding shelters could not be assumed to represent a random sampling of facilities, the Council notes that “it is not possible to use these statistics to estimate the number of animals entering animal shelters in the United States, or the numbers euthanized on an annual basis.” Other projects undertaken with a smaller number of shelters have attempted to get a clearer picture of the dynamics of the relinquishment of animals to shelters (Salman et al. 1998, 2000; New et al. 1999; Scarlett 1999; New 2000; Kass 2001).

2. Organizational, Individual, and Institutional Measures

Another approach to assessing the state of the animals has been to quantify and describe the number and nature of organizations and individuals involved in or supportive of animal protection. Irwin (2003) offered the number of animal-protection organizations per one million human population as one measure of the relative support for animal-protection causes in a cross section of foreign countries. Such organizations routinely use the number of donors and/or supporters as one of the most significant measures of their success, public support, and potential political strength.

Individual demographics can also be revealing in tracking the changing relationships between people and animals. One important demographic that has frequently been tracked to assess the

state of the animals is the proportion of the population holding a hunting license, which has declined from 7.18 percent of the U.S. population in 1980 to 5.35 percent in 2000 (Grandy, Stallman, and Macdonald 2003).

Within any demographic measure, changes in the structure of the demographics can reflect important changes in the nature of support or opposition that should be tracked. Is support for animal-protection ideas and behaviors expanding into demographic groups where it has traditionally been lower (e.g., Hispanic, Asian)? Is the population of those who hold hunting licenses aging? Is the median education level of those employed in animal control rising? Is the purchase of fur by women under thirty years of age rising or falling? Questions like these are important in providing significant dimensions for the assessment of changes in the state of the animals.

In addition to tracking changing demographics of people and organizations, it is meaningful to quantify changes in programs. Recent indicators of progress have included the rising number of law schools offering some instruction in animal law (Davis 2003; Wise 2003); the growing number of communities with “Safe Havens” programs to protect the pets of women leaving situations of domestic violence (Lerner 1999; Lerner and Zorza 1999); and an increasing proportion of animal shelters sponsoring humane education programs (Unti and DeRosa 2003). The existence of such programs is clearly a significant step, but more direct measures of program outcomes are ultimately needed to assess their benefits to animals.

3. Financial Measures

One of the most basic techniques used to assess social, political, or organizational change is to “follow the money.” Comparing expenditures, donations, budget alloca-

tions, and other monetary measures offers a precise way of comparing different programs over time. Previous *State of the Animals* essays have examined such financial measures as U.S. fur sales (Irwin 2001) and funding from the National Institutes of Health for research involving animal use (Rowan and Loew 2001). The AVMA uses veterinary expenditures for a variety of companion animals as a key measure of trends in the delivery of veterinary care and as a way of understanding the reasons clients give for choosing a veterinarian (AVMA 2002). Because financial expenditures can be adjusted to some standardized unit (e.g., year 2000 dollars), they provide a powerful tool for assessing changes over a relatively long time frame. However, detailed analyses have been used far more often by trade and professional associations like the AVMA and the APPMA than by advocacy groups.

4. Measures of Human-Animal Interaction

Efforts to improve the state of the animals must ultimately rely on assessing changes in how human beliefs and actions affect the lives of animals—how people and animals interact. If we want to improve this interaction and measure the extent to which we are making the desired changes, we need to be able to go beyond the measures we have already outlined and assess the three dimensions of interaction: thoughts, words, and deeds.

Thoughts

Knowing what people think and know about animal issues is an essential component of “social marketing,” the use of marketing principles to influence an audience to accept, reject, or modify behaviors for the benefit of others (Kotler, Roberto, and Lee 2002; Ginsberg 2004). Many animal-protection professionals are recognizing the importance of applying the

theories, tools, and techniques of marketing science to the social change arena. Green (2004, 1) notes: “Marketing research provides an excellent starting point for identifying effective approaches to animal advocacy.” In animal protection, the “commodity” to be marketed is compassion and concern about animal issues. As in any marketing activity, it is essential to assess the attitudes of various segments of the “target audience” toward the product—in this case, concern about animal welfare. The principal tool for this assessment is opinion surveys.

Animal advocates are increasingly recognizing the importance of well-crafted, professional opinion surveys and focus groups to assess public opinion on a variety of issues. Questions on animal issues are now included routinely on a number of professional polls and surveys (see below). At least one professional organization, the Humane Research Council, has begun to apply advanced survey methods to a variety of issues on behalf of The HSUS, The Fund for Animals, and other organizations. Their recent projects have included studies of attitudes and behaviors relating to fur (Humane Research Council 2003) and motives, objections, and barriers to adopting vegetarian and vegan diets.

Animal issues have been the focus of or included in more than 250 polls and surveys since 1948. Summaries of many of these surveys are available through the Tufts University Center for Animals and Public Policy (Kossov n.d.) and the Humane Research Council (www.humanereseach.org). These studies have been conducted by many different industry, advocacy, and other groups, but few have been conducted in a way that asks the same kinds of questions in the same way over an extended period, thus making comparisons difficult. Most are polls about a single issue or opinion, rather than comprehensive surveys

designed to see how attitudes may interact. Future tracking of the state of the animals will require regular, professionally conducted surveys that attempt to trace the development of attitudes and opinions over time. These studies need to be supplemented with smaller focus groups to try to unravel the complexities of the decision-making processes that lead people to develop or resist the attitudes and opinions of concern.

Words

In addition to knowing what people are thinking about animal issues, an important measure of the state of the animals is what people are saying about animals. Public opinion is both shaped and reflected by media coverage. The proliferation of media outlets, from cable stations to satellite radio to websites and Internet “blogs,” makes it almost impossible to get systematic and comparative data on the changing depiction of animal issues in the media. Nearly every viewpoint, no matter how extreme, enjoys some representation in today’s media universe. However, it is still valuable to track the attention given to animal issues in “mainstream” media (daily newspapers, network and basic cable television and radio, widely distributed movies, etc.) as one measure of the zeitgeist.

Clearly there is a steady stream of progressive media attention given to animal protection, as is recognized each year in the Genesis Awards, formerly presented by the Ark Trust and now coordinated through The HSUS’s Hollywood office. A more in-depth analysis of the media picture that is presented will require tracking the content and tone of media coverage over time. Such analysis is time consuming, but it can be useful in detecting important shifts in thinking or obstacles to change. For example, Arluke et al. (2002) examined press reports concerning

cases that involved hoarding large numbers of animals in unsanitary conditions. They identified a variety of themes, ranging from humor to revulsion, that potentially confounded communicating the seriousness of this problem as both an animal protection and human mental health concern. A repeat of this kind of analysis in the future would offer insight into the extent to which humane groups have been able to educate the public and professionals about these issues.

It is difficult to take the pulse of the media and the public even with the most comprehensive quantitative analysis of media coverage and content. Some change in attitudes, opinions, and policy is driven by constant media repetition, even when the problem may not have changed. The widespread attention given to “road rage” by American, Australian, and European media in the late 1990s, for example, was viewed largely as an inappropriate response to extremely rare criminal acts (Elliot 1999). Likewise, the widespread media coverage of dog-bite-related human fatalities attributed to a small number of breeds (mainly pit bulls and Rottweilers) has been criticized as an inappropriate application of an extremely rare event (less than .001 percent of dog attacks) to the formation of public policy (Sacks et al. 2000; AVMA Task Force 2001). Since media in a competitive commercial environment look to each other to get a sense of what they should be covering, any coverage of high-profile issues can quickly escalate, so simple counts of media articles can give very misleading impressions of the depth and breadth of public interest and concern.

Although the sheer volume of coverage of an issue can affect public and professional thinking, major changes can often come about through a timely, well-crafted publication that resonates with public interest and concern. This has clearly been the case with such

influential works as *Animal Liberation* (Singer 1975) and *Dominion* (Scully 2002). Certain issues and approaches strike what media expert Tony Schwartz (1974) describes as “the responsive chord.” He notes that some of the most successful political and public information campaigns are those that don’t necessarily tell people anything new but rather tell them something they already know in a new and useful way that they are prepared to accept and act on. This has certainly contributed to the success of The HSUS’s First Strike™ Campaign, which makes the connection between cruelty to animals and human violence (Ascione and Lockwood 2001). This campaign provided research validation for the generally held concern about individuals who engage in cruelty to animals. It also provided professionals in diverse fields with the tools to apply this information. In 2004 an independently conducted survey (described below) noted that 85 percent of respondents agreed with the statement, “It has been demonstrated that people who repeatedly and intentionally harm animals are more likely to show violence to people.” Only 4 percent disagreed with the statement, suggesting that this is an issue that is reaching almost complete public acceptance and agreement and has entered into a phase of shaping public policy and programs.

Deeds

The ultimate goal of social marketing is to change how people behave—the choices they make. Thus the best measure of outcome can be to look not at what people think or say, but at what they actually do. What do people buy? What do they choose to wear? What do they eat? How do they vote? How do they treat the animals in their homes?

This is one of the problems inherent in public opinion research. Thoughts, words, and deeds are not

always consistent. For example, Braithwaite and Braithwaite (1982) surveyed college undergraduates about their attitudes and behaviors on many actions that potentially involved animal suffering. They point out a major “disconnect” between opinions and actions. As an example, they note that 73 percent of those surveyed disapproved of force-feeding geese to produce pâté, but only 46 percent disapproved of actually eating pâté produced this way.

Even with sophisticated survey techniques, it is often difficult to reconcile what people do with what they have said they would do or said they have done. The recent controversy surrounding the inaccuracy of exit polls in the 2004 presidential election raised questions about the polling techniques that have been used worldwide. Polling firms for the National Election Pool, which surveyed voters in 1,480 randomly chosen precincts, delivered exit poll results that overstated Sen. John Kerry’s support in twenty-six states and President George Bush’s in four. In reviewing the errors, they concluded that Kerry supporters were more likely to participate in exit polls for “motivational reasons that were impossible to quantify” (CNN 2005). Freeman (2004), however, notes that the conclusion that Kerry supporters were more likely to participate lacks independent evidence. Such discrepancies illustrate the need for detailed analysis of the many motivational factors that transform ideas and opinions into actions.

For years, many advocacy groups and government agencies measured their productivity in terms of output rather than outcomes. It is usually far easier to measure the number of reports distributed, workshops held, dollars raised or spent, bills introduced, or signatures obtained than it is to demonstrate that efforts have actually proven to be a benefit to those to be helped. Even when the desired

goal is clearly defined and the outcome has clear potential benefits to animals, these benefits may be hard to demonstrate. For example, an important objective of animal advocates is to increase the penalties for serious cruelty to animals to felony level. Although it is essential to have the strongest possible laws available to those who must respond to cruelty to animals, many other variables affect the ultimate impact on animals. Does the public report such crimes? Do police respond and investigate? Do prosecutors move the cases forward? Do judges issue appropriate sentences? For many reasons, simply passing good laws is not necessarily a good predictor that conditions will improve for those protected by the laws (see Rosen and Rowan, this volume).

The gap between action and benefit may exist for other reasons. Popular yet unproductive programs may continue for decades, as illustrated by the persistence of drug abuse prevention programs with no significant effect on drug use among the target audience (Lyman et al. 1999) and Texas abstinence-only sex education programs that resulted in a greater number of participants having sex (Anonymous 2005). Good science is easily obscured by conflicting social and political agendas.

Partly in response to dissatisfaction with conventional evaluation of drug abuse programs, the model for program evaluation adopted by the Substance Abuse and Mental Health Services Administration (SAMHSA) and many other agencies and organizations is the Getting to Outcomes (GTO) approach (Wandersman et al. 2000). This approach stresses accountability for the various elements of successful programming, including:

1. attention to specific needs and resources;
2. clearly defined goals, target populations, and desired outcomes;

3. science-based models for practices and programs that can be useful in reaching those goals;
4. fitting programs to the community context;
5. evaluating specific program outcomes; and
6. planning for sustaining successful programs.

This renewed interest in using well-documented “best practices” to generate desired results for the target audience and sustaining successful programs offers refreshing promise for a wide variety of programs that seek to improve conditions for people and animals.

Tracking and Analyzing Opinions: A Preliminary Study

Tracking and understanding changing attitudes and behaviors will require repeated measures of the same, or at least similar, attitudes. Despite hundreds of surveys and polls, there have been few such repeated measures.

One of the deterrents to effective use of repeated survey or polling techniques has been their high cost. The inclusion of questions on national polls such as the Harris, Gallup, or Roper polls can cost more than one thousand dollars per question. The growth and acceptance of the Internet as a primary means of communication for many activists and private citizens opens the door to Internet survey methods as a potential tool for rapid and inexpensive collection of such information but raises new questions about the applicability of such data to the general public. As Internet use grows, the differences between the universe of Internet-savvy people and the general public will shrink.

The HSUS reviewed data obtained from a July 2004 Internet poll of 1,031 U.S. adults conducted

for The HSUS by Edge Research Inc. (“Omnibus Survey”). This was the first HSUS use of an Internet-based polling resource to assess various attitudes and activities regarding animals and animal protection. In addition to a detailed cross-tabulation analysis of the survey results, The HSUS has compared these findings to those generated by an Internet poll of more than 1,600 respondents solicited during April 2004 via invitations posted on the *hsus.org* website (termed “HSUS Website Survey”) and a traditional telephone poll of a representative sample of the U.S. population conducted in January of 2003 by Penn, Schoen, and Berland (termed “PSB Survey”). The HSUS expected the HSUS website survey to be non-representative of the population as a whole, since it sampled a motivated, self-selected population of visitors to the website. However, since one of the goals of this analysis was to determine the characteristics of these highly committed supporters, it was felt that identifying differences between them and the general public would help identify the pathway along which The HSUS would like to move the general public.

In addition to assessing the opinions surveyed, The HSUS was interested in reviewing the utility of Internet polling methods, which can be much faster and less expensive but may have built-in biases due to possible demographic differences among respondents with access to Internet technology, HSUS members and constituents, and the general U.S. population.

These surveys addressed many different issues (see appendix A for a summary of responses and comparisons of the survey population demographics to those of the U.S. population). The HSUS focuses on just a few of them to demonstrate how different approaches vary in what they reveal about the opinions of the general public and animal advocates.

Support for Animal Protection

Protecting animals from cruelty and abuse was clearly a high priority for this representative sample, as it was for all the groups surveyed. These results are identical to those of the PSB phone survey. It is not surprising that the HSUS website survey showed even higher concern for protecting animals, with 97.2 percent considering it “very important” or “important.”

It is also not surprising that those rating protecting animals from abuse as a high priority were significantly more likely to have made a contribution to an animal-protection or animal rights group in the last year (Question 22)—88 percent—than were those who rated it a low priority (56 percent). The same was true of the HSUS website survey, in which contributions had been made by 85 percent of those who considered animal protection important, as opposed to contributions by only 33–38 percent of those who consider it only “somewhat important” or “not important.” The high proportion of the general population that considers this a significant priority suggests that there is a large and untapped pool of potential financial support for such efforts.

More than half of the respondents in the Omnibus survey said they had reported the cruelty to animals they witnessed. This was comparable to the 60 percent of the PSB survey who reported abuse and significantly less than the 77 percent of the HSUS website survey who said they had reported it. In this survey, reporting was significantly more likely among those who rated animal protection a top priority (77 percent) than those who did not (22 percent). Reporting was also significantly more likely among those with dogs and cats (58 percent vs. 33 percent), those with a favorable opinion of The HSUS (60 percent vs. 42 per-

cent), those who donate to animal protection (66 percent vs. 39 percent), women (64 percent vs. 44 percent in men), and those over age 65 (75 percent vs. 37 percent in those under 35).

Pet Ownership

In the Omnibus sample, 96 percent of those who rated protecting animals as a “top priority” had at least one pet. Those who reported they had no pets in the last ten years were significantly more likely to be unfamiliar with The HSUS or to rate The HSUS unfavorably. Only 5.2 percent of those with no pets in the last ten years were animal-protection donors. Animal protection donors were twice as likely to have had five or more pets as were non-donors (39.2 percent vs. 21.2 percent). The highest levels of past pet ownership (seven pets or more) were significantly associated with having children in the home.

Financial Support of Animal-Protection Efforts

Overall, approximately one-third of the Omnibus sample identified themselves as donors to animal protection or animal rights organizations. It is not surprising that donors were significantly more likely to have rated animal protection as very important and a top or high priority. About 42 percent of donors currently had a dog or cat, but 56 percent of those with a dog or cat were not identified as donors, again suggesting a large potential pool of support. Nearly 95 percent of donors reported having had at least one pet over the last ten years. Of those who did not currently have a dog or cat, 78 percent were non-donors. Of those who had not had any dogs or cats over the previous ten years, only 5 percent had donated to animal protection or animal rights.

Pet—specifically, dog or cat—

ownership is clearly a major driving force of concern about animal issues and making financial contributions. Experience with and caring for companion animals is often the portal for compassion and concern that extends to a wide range of issues involving many different species of animals. These results confirm the notion that the large segment of dog and cat owners in the United States, and even in international populations, represents a significant potential audience for outreach on issues beyond those affecting companion animals.

Donations to Non-Animal Charities

Those ranking animal protection as a low priority (46.4 percent) were significantly more likely to support United Way than were those ranking animal protection highly (36 percent), although this shows that more than a third of animal protection donors support United Way or social service charities. Similarly, those who rated animal protection as a low priority were significantly more likely to make contributions to churches or religious organizations (56.3 percent vs. 46.8 percent), but once again this finding shows that nearly half of animal-protection donors also support religious charities. There were no differences in the likelihood of donations to educational institutions associated with the pattern of giving to animal protection. Donations to health-related charities increased with age (19.5 percent of <35, 25.8 of 35–49; 29.5 percent of 50–64; 47.7 percent of 65+). Obviously, older cohorts are more likely to be concerned about and supportive of health-related issues.

Demographic Variations in Survey Methods

One purpose of this study was to evaluate the effectiveness of the Edge Research Internet polling methodology as a way of generating useful information in a cost effective way. All of our surveys (Omnibus, website, PSB) focused on adult respondents (over age eighteen) in assessing opinions as well as patterns of giving. Some of the differences between survey populations and U.S. population are shown in appendix A.

Age

A large proportion (25 percent) of the U.S. population is under age eighteen and was not included in this survey. The HSUS website sample matched the adult U.S. population surprisingly well for age distribution. The Omnibus survey seems to have significantly underrepresented the 65+ age group (<2 percent of the sample and >12 percent of the population), perhaps due to demographic differences in web access that were not reflected in website visitors to The HSUS. Conversely, the PSB telephone survey overrepresented older respondents (21 percent vs. 12 percent), perhaps due to older respondents' greater willingness to participate in a phone survey.

Gender

The Omnibus and PSB surveys closely matched the gender division of the U.S. population. The HSUS website survey was strongly skewed to female respondents (90 percent), reflecting greater support for animal organizations by women. This suggests a need to balance this gender discrepancy if this approach is used for future surveys, since gender strongly affects many of the other attitudinal measures we have assessed.

Race

The Omnibus internet survey undersampled African Americans (2 percent vs. 13 percent in the population) and Hispanic/Latinos (1 percent vs. 13.4 percent). The same was true of the HSUS website survey. The PSB phone survey accurately sampled African Americans, but undersampled Hispanic/Latino populations. If animal protection advocates are seeking detailed attitude and behavior information from these populations, special efforts have to be made to specifically sample these populations. A further confound in the Omnibus survey was that the non-Caucasian group was significantly younger; only 12 percent were over age fifty, compared to 40 percent of the Caucasian segment of the sample.

Income

The Omnibus, HSUS website, and PSB surveys were generally comparable in the income breakdown of those sampled, except that the PSB phone survey methodology was less likely to capture the highest income levels.

The Edge Research Omnibus survey method generated a large amount of data rapidly and in a form that allowed easy access to the kind of detailed analysis presented here. With some minor exceptions noted above, the sample did seem to be representative of the U.S. population. However, since much of the support for animal protection issues seems to be strong in the older (50–64 and 65+) cohorts, special effort should be made to sample this group adequately in future surveys. None of the methods used in the past seems to sample African-American or Hispanic/Latino populations adequately. Any efforts to specifically assess attitudes and opinions as part of outreach to these populations will require special sampling and survey methods.

A “Pet Lover’s Index”

Large amounts of attitudinal data can be collected by means of the survey methods described. It will be important to have some standardized approaches for simplifying some of these data in a way that allows more rapid analysis and prediction of attitudes and behavior.

Numerous studies have proposed a variety of scales that would assess the degree of attachment people have to their animal companions. One of the most widely used is the Lexington Attachment to Pets Scale or LAPS (Johnson, Garrity, and Stallones 1992). Most existing scales are theory based and tend to measure emotional responses to pets. Others, such as Poresky’s (1989) try to add behavioral dimensions such as “how often do you pet/stroke your companion animal?” Berryman, Howells, and Lloyd-Evans (1985) concluded that two types of pet owners emerged from their survey, one in which the pet-owner relationship was most similar to a relationship to the individual’s own child and a second in which the relationship was valued for “fun/play” and “relaxation based on absence of demands.” Holcomb, Williams, and Richards (1985) used the Pet Attachment Survey (PAS), a twenty-seven-item Likert-type scale with both behavioral and emotional aspects of attachment. Wilson, Netting, and New (1987) advocated the Pet Attachment Index, a fifty-item scale measuring owner characteristics, attachment, and attitudes toward pets. This was used by Kidd and Kidd (1989), who reported that women, children, and childless couples were more attached to their pets than others were.

Few studies examine these attitudes in relation to specific owner behaviors that might benefit the pets. A study is currently underway to analyze the connection between various measures of pet attachment and the well-being of pets (Douglas 2004).

None of the pet attachment studies attempted to relate the level of attachment to the larger issue of attitudes and behaviors in connection with overall support for other animal-related issues. Since the results of the Omnibus survey suggested that pet ownership was significantly correlated with concern for animal protection in general, and concern about a variety of specific issues relating to noncompanion animals, the attempt was made to devise a simplified measure of pet attachment that might be predictive of attitudes and behaviors related to animal welfare (see appendix B for the variables used to create this measure).

This composite score was cross-tabulated with other Omnibus survey measures, including reporting of cruelty to animals, keeping cats indoors, opposing confinement rearing of sows, supporting bans on the use of chimpanzees in research, opposing canned hunts, and donating to animal charities. In every case a high score on the “Pet Lover’s Index” was significantly associated with high support for the animal protection position (all chi-square values significant at $p < .001$). This confirms that caring for and about dogs and cats is a primary portal to compassion and concern about a wide array of animal protection issues.

Conclusions and Recommendations

Efforts to improve the state of the animals can benefit from the systematic application of social marketing approaches that assess existing attitudes and behaviors in different segments of the population, properly design appropriate messages that target well-defined audiences, and apply “Getting to Outcomes”-style assessments that honestly assess the impact of program outcomes.

Future efforts to track these changes should include:

1. Clear definitions of desired goals and appropriate target audiences
2. Baseline information on current demographics, attitudes, and behavior that can be used to assess future trends. These data should be collected both nationally and locally and should carefully examine differences in meaningful subgroups (age, ethnicity, pet ownership, etc.)
3. Tools and techniques for cost-effective, repeated measures of the same attitudes and behaviors and analysis of relationships in the data that may reveal the pathways for change in the desired direction
4. Application of multiple measures of progress (examining people’s thoughts, words, and deeds) and multiple techniques (narrowed surveys, focus groups) to clarify uncertain connections when these techniques reveal inconsistencies
5. Careful review of success and failures to better understand the dynamics of changing attitudes and behavior involving animals.

Successful advocacy for animals must combine science, art, empathy, and a passion to improve the lives of others. Greater attention to all of these elements will produce outstanding outcomes. We can hope that the words of Mark Twain that opened this essay will need to be given a slight twist. We can hope that we will get enormous returns of progress out of a small investment of fact.

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APPENDIX A Comparison of Surveys

Number surveyed		U.S. National Sample (NA) Percent	Edge Research Sample (1,031) Percent	HSUS Web Sample (1,341) Percent	PSB 2003 Sample (1,000) Percent
1 Age	<18 18-24 25-34 35-49 (18-44 U.S.) 50-64 (45-64 U.S.) 65 plus	25.3 39.3 23.1 12.3	 7.0 19.0 34.0 18.8 1.8	13.8 28.8 37.0 26.0 11.0	11.0 12.0 28.0 25.0 21.0
2 Gender	Male Female	49.1 50.9	52.0 48.0	10.0 90.0	52.0 48.0
3 Race	African-American American Indian Asian Caucasian Hispanic/Latino	12.7 1.5 4.5 65.2 13.4	2.0 1.0 3.0 89.0 1.0	0.8 1.3 1.8 84.9 3.7	12.0 NA 1.0 77.0 3.0
4 Marital status	Single/Never married Married Widowed Divorced	28.1 54.2 6.4 9.3	21.0 60.0 4.0 11.0	36.9 46.3 1.3 10.5	24.0 55.0 9.0 10.0
5 Area of residence	Northeast South Midwest West	18.8 35.8 22.6 22.8	16.0 35.0 25.0 23.0	not asked not asked not asked not asked	22.0 33.0 20.0 20.0
6 Home ownership	Own Rent	67.9 28.1	69.0 27.0	not asked not asked	not asked not asked
7 Schooling	College grad and plus	26.7	43.0	47.8	37.0
8 Children under 18		35.7	32.0	22.6	28.0
9 Family income	Under \$20,000 \$21,000-50,000 \$51,000-75,000 \$76,000 plus	 	12.2 40.0 23.3 24.4	15.9 37.7 20.9 24.8	13.0 37.0 18.0 15.0
10 How important is it to you that animals are protected from cruelty and abuse?	Not important Somewhat important Important Very important Do not know	 	2.0 13.0 18.0 67.0 1.0	1.4 1.3 2.9 94.3 0.1	2.0 14.0 18.0 67.0 0
11 Have you seen anyone intentionally inflict pain or suffering on an animal during the last year?	Yes No Do not know	 	13.0 86.0 1.0	21.4 76.5 2.1	14.0 85.0 1.0
12 If yes to 11, did you report it?	Yes No Do not know	 	53.0 45.0 2.0	72.1 26.3 1.7	60.0 40.0 0
13 I keep a picture of my pet in my wallet or displayed at work.	Yes No	 	32.0 68.0	72.0 27.0	

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APPENDIX A Comparison of Surveys

No. surveyed		U.S. National Sample (NA) Percent	Edge Research Sample (1,031) Percent	HSUS Web Sample (1,341) Percent	PSB 2003 Sample (1,000) Percent
14 I give the animal gifts on holidays or special events.	Yes No		83.0 16.0	62.0 38.0	
15 The pet sleeps in/on my bed or the bed of a family member.	Yes No		80.0 19.0	69.0 31.0	
16 The pet accompanies me on vacations or overnight trips.	Yes No		59.0 39.0	42.0 58.0	
17 I consider the pet to be an important member of the household.	Yes No		95.0 5.0	98.0 1.0	
18 Please indicate how favorably you view the following organizations (V. Fav. = 2, Fav. = 1, Somewhat Unfav. = -1, V. Unfav. = -2; range is +200 to -200)	HSUS PETA ASPCA NWF WWF AKC PETS MART		127.0 5.0 134.0 111.0 86.0 88.0 90.0		
19 Please indicate how favorably you view... keeping a cat indoors all the time.	Strongly favor Somewhat favor Somewhat oppose Strongly oppose Do not know		47.0 27.0 15.0 5.0 7.0	65.0 21.0 8.0 3.0 4.0	
20 ...Letting a cat outside without supervision	Strongly favor Somewhat favor Somewhat oppose Strongly oppose Do not know		13.0 23.0 23.0 36.0 6.0	5.0 13.0 23.0 54.0 4.0	
21 ...Tethering a dog in the backyard for more than an hour	Strongly favor Somewhat favor Somewhat oppose Strongly oppose Do not know		3.0 16.0 34.0 40.0 7.0	2.0 5.0 19.0 72.0 2.0	
22 ...Keeping a dog outside all day while the owner is at work	Strongly favor Somewhat favor Somewhat oppose Strongly oppose Do not know		9.0 21.0 28.0 36.0 7.0	4.0 13.0 23.0 56.0 4.0	
23 ...Declawing a cat who has damaged drapes or upholstery	Strongly favor Somewhat favor Somewhat oppose Strongly oppose Do not know		24.0 32.0 18.0 19.0 8.0	5.0 13.0 21.0 53.0 7.0	

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APPENDIX A Comparison of Surveys

No. surveyed		U.S. National Sample (NA) Percent	Edge Research Sample (1,031) Percent	HSUS Web Sample (1,341) Percent	PSB 2003 Sample (1,000) Percent
24 ...Euthanizing a dog who has bitten a child without provocation	Strongly favor Somewhat favor Somewhat oppose Strongly oppose Do not know		24.0 32.0 23.0 9.0 12.0	9.0 15.0 27.0 32.0 17.0	
25 If The HSUS issued a report in which it argued that 95 percent of all chickens suffer greatly in agricultural facilities and the USDA then contradicted this assertion, which entity would you trust more?	The HSUS The USDA Trust neither Trust them equally Would not know		28.0 16.0 15.0 11.0 29.0	75.4 2.9 2.4 4.0 15.3	
26 How strongly do you feel about having wildlife such as birds and squirrels in your yard?	Strongly dislike Dislike Neutral Like Strongly like		2.0 4.0 19.0 35.0 41.0	0.5 0.4 5.9 22.6 70.6	
27 How often in the year have you had a conflict with, or damage caused by, wild birds and mammals in your yard or home?	None One to two Three plus I do not have a yard		62.0 18.0 11.0 10.0	69.2 21.4 7.9 1.6	
28 If you had a conflict, did you seek help from someone? Whom?	Yes No Local animal org. Hardware store, etc. Local wildlife rehab The HSUS State/federal agens. Business for wildlife problems		32.0 68.0 38.0 19.0 5.0 5.0 19.0 15.0	37.8 62.2 37.8 20.2 21.8 9.0 9.0 16.0	
29 In the past year, have you made a financial contribution to any animal protection or animal rights organization?	Yes No Do not know		34.0 63.0 3.0	76.0 18.7 5.3	
30 If yes, how much did you give in total?	< \$10 \$11-\$25 \$26-\$50 Over \$51 Not sure		11.0 37.0 20.0 24.0 8.0	3.9 18.9 17.7 50.3 9.2	

APPENDIX B

Components of the “Pet Lover’s Index”

The responses to several questions on the Omnibus Survey were recoded and combined into a composite score (POSUM-pet owner summation). This was then cross-tabulated with other responses from the survey to see if those rated high, medium, or low on this composite differed significantly from one another on their attitudes or behaviors relating to animals.

Variable PO1—Any cats? Yes = 1; ELSE = 0

Variable PO2—Any dogs? Yes = 1; ELSE = 0

Variable PO3—Any other pets? Yes = 1; ELSE = 0

Variable PO4—Total 10-year pets? 1–5 = 1; 6+ = 2; ELSE = 0

Variable PO5—Fate of last pet? Died of old age/Euth. = 2, Taken to shelter = 1; ELSE = 0

Variable PO6A—Consider the animal an important member of the household. Yes = 1; ELSE = 0

Variable P06B—Give the animal gifts on holidays or special events. Yes = 1; ELSE = 0

Variable PO6C—The animal accompanies me on some vacations or trips. Yes = 1; ELSE = 0

Variable PO6D—The pet sleeps in or on my bed or the bed of a family member. Yes = 1; ELSE = 0

Variable PO6E—I keep a picture of the animal in my wallet or displayed at work. Yes = 1; ELSE = 0

POSUM—Sum of all variables listed above