trouble coping with the fact that we are vulnerable; that life can hurt us and that we will eventually die; and that no amount of power and attempted control over life (a force that so often does violence to the rights of others less powerful, as well as to animals and the environment) can help us.

The Reverend Philip Zwerling (Washington Post, March 16, 1983) urges us not to blame communism or other foreign devils, but rather to assume responsibility for our own lives, and on that basis to build an egalitarian society. He states: "Who are the demons? Let us ask questions. Who built and used the first atomic weapon? Who built the first hydrogen bomb? The answer, we did. Let us not be distracted any more by theories but rather to assume responsibility, beyond the barren sphere of corporate competitive and individualism, totalitarian economic and religion, philosophy, ecology, and science.

The truth is that we can still do what we were created us as much in His image, as in His likeness. And to stand in moral judgment of others is un-Christian arrogance. Yet when the ethical fabric of society is being frayed by the supposed forces of "evil" (ignorance, sensitiveness, and indifference) and we begin to feel threatened by such political ideologies as totalitarian communism and corporate socialism or, on the other hand, by the potentially atheistic, amoral, and secular mindset of pure scientific empiricism and technologically based imperialism, then all religious and spiritually enlightened people of the world should feel morally impelled to act responsibly and with enlightened self-interest to oppose such forces. Not by casting stones, or by judging others, but by living courageous, lovingly, and ethically serving the greater good of society only when such good is consonant with the rights of other peoples, nations, and animals, as well as the environment as a whole. But when the good of any nation (or interest group) violates such rights, its claim to unquestioned righteousness under the "one nation under God" principle is invalidated. Those persons who purport to be religious are surely right only when they use religion to further the politics of an ecological, racial, and species egalitarianism that is based upon cooperation, a sharing of resources and respect for each other's interests and rights; and a reverence for the sanctity and dignity of all life, animal and human alike; in brief, a co-creative stewardship of the planet Earth.

Sex Roles, Companion Animals — and Something More

D.H. Murphy

One of the fundamental convictions that motivates our publication of the Journal is that science, and the scientific method, can furnish animal welfare advocates and activists with the exact kind of testable, empirical data that remain the primary tools of persuasion in a rational society. Precisely because animals cannot speak for themselves, and cannot tell us whether, for example, they prefer a solid concrete or a slatted floor, we can make good use of the carefully controlled techniques of classical science to derive "best guesses" about what kinds of environments foster their well-being. These may include direct methods such as structured observation and choice tests, or indirect methods such as monitoring of blood levels of stress-induced hormones like adrenocorticoids.

What's fascinating about these kinds of well-controlled scientific studies is that more than our preconceptions about animals may fall by the wayside once we peruse the results; other standardized myths about, for example, sex roles, may come into question as well.

As a case in point, several recent articles about how men and women relate to dogs and cats furnish us with some basic lessons about how we interact with our animal companions. But, in the process, they also shed some interesting light on the precariousness of our beliefs about differences in the sexes. Finally, they provide vital instruction concerning some of the classic foibles that are inherent in the use of some kinds of scientific methods.

First, let's take a look at one way two researchers looked at how people think about dogs and cats. An earlier issue of the Journal (4(1):17, 1983) reported on the survey results compiled by two Missouri researchers, who queried over 900 individuals on their opinions on companion animals. Their analysis of the data showed that, among other things, "women become more emotionally involved with their animals and derive a greater sense of security from pet ownership (with both dogs and cats) than do men." Now, this is the sort of result that you might have expected yourself, if you simply walked around the room at a party and queried the attendees about their emotions vis-a-vis dogs and cats. In either case, this method, self-reporting, is well recognized as unavoidably incorporating a sizeable dose of the interviewer's own bias; in other words, people tend to an-
swear in the way they think the survey-taker would like them to respond.

But a second group of researchers, A.H. Katcher et al. (Cal Vet 2:14, 1983) used a different approach to find out whether there were significant differences in the way men and women interacted with their dogs, specifically, as a source of contact for their dog. Two methods were utilized: a questionnaire of 10 items that provided an index of attachment to animals (typical statements: “dog sleeps in bedroom”; “owner confides in dog”), and a study of 110 subjects (veterinary clinic clients) chosen at random, who were observed for 5 minutes each. Unbeknownst to these clients, an observer recorded the percentage of time (for the 5-minute interval) spent touching, stroking, and patting their dog.

Surprisingly, in this study, both methods revealed that there were virtually no differences in the ways men and women deal with companion animals. There were slightly more positive responses to the questionnaire items among women, but these differences were not statistically significant. Similarly, the groups of men and women spent almost equal amounts of time in contact with their dogs, although there was considerable variance from one individual to another.

Is it possible to state categorically that one of these studies has provided us with unbreachable truth, appropriate for chiseling in stone, while the other is merely balderdash? Alas, no; things, as usual, aren't that simple. But we can say, other things being equal, that the techniques used in the second study (a questionnaire that assessed opinion indirectly, and the use of an objective observer making quantifiable observations) are more likely to be reliable than those of the Missouri opinion-pollers described in the first. So it is possible to feel some confidence that Katcher et al. are onto something important—that men and women alike get tremendous emotional satisfaction out of touching and loving animals. And the Journal's belief that the results from well-planned and executed science are crucial to understanding the exact nature of our relationships with animals has been supported yet once more.

The State of the Economy and Animal Welfare

Michael W. Fox

The economic depression affects more than just the human population. Unemployed people find it harder to feed their pets, and so animal shelters in depressed areas must take in more than their usual burden of dogs for adoption and destruction. Cases of animal neglect and cruelty increase as families disintegrate emotionally. The increased incidence of animal and child abuse is one tragic consequence of economic and psychological depression.

The hungry and disemployed in the cities have, at least, their soup lines, but not so for those in the depressed rural areas. Here, trapping of furbearers, such as muskrat and raccoon, is on the upswing, as is the hunting and poaching of deer. The negative impact on the environment of this trend is further intensified by recently formed “survivalist” organizations, make up of people who spend their weekends kids learning to live off the land by hunting, fishing, and trapping, a pastime that furnishes them with an outlet for coping with the angst of possible nuclear war.

And down on the “factory” farm, animals are being subjected to even greater stress and distress, as they are crowded together even more “intensively” to offset farmers’ shrinking profits and rising debts. In some instances, poultry have starved because farmers have not been able to pay their feed bills; cattle in Texas have been allowed to starve to death, too, but their demise is summarily written off as a tax loss.

The affluent continue to cling to the entropy-accelerating lifestyle and consumer habits that they so cherish, and have come to perceive as inalienable rights: for example, the right to wear furs and to eat meat, regardless of the extent of animal suffering involved and the waste of non-renewable environmental resources. An economic depression inevitably means that the under-privileged are compelled to suffer, but the plight of animals during “hard times” is often overlooked. Further, the present administration’s budget cuts, and the pro-industry policies expressed by the Environmental Protection Agency and the Department of the Interior, in conjunction with the attempted financial emasculation of the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service (responsible for enforcing the Animal Welfare Act), all add insult to injury. Clearly, in such difficult economic times, the needs of people will inevitably take precedence over those of animals. But a society that unconditionally places the rights and interests of humans over those of animals and the quality of the environment, on the grounds of a short-term (near-sighted) version of economic necessity, not only lacks enlightened self-interest, but is also providing the critical impetus for its own eventual nemesis. Hence, there is an even greater need today for humane education and the promulgation of animal welfare principles and the animal and environmental rights philosophies. However, we see that “economic recovery,” improved farm and laboratory animal welfare, and environmental quality are considered as exclusive and even contradictory goals under the present administration. But can we continue to pay the ever-higher costs of sacrificing environmental quality and animals’ welfare in order to promote the tunnel-vision goal of industrial “recovery”?

The United States’ aggressive competition in the world agricultural market can mean a further decrement in farm animal welfare and environmental protection standards, just so we can gain a competitive edge over other countries. Similar economic incentives also mean that more animals are being trapped for their fur for export; more are used in biomedical research to find profitable “cures;” and more deadly pesticides are being developed for sale abroad. The State Department is even considering lifting restrictions on the export of some human drugs and agrichemicals that have been judged too hazardous to have been used in this country.

In conclusion, the present economic situation is eroding the ethical principles of egalitarian democracy. But at the same time, its sad effect on animals is also stimulating greater concern for animal rights and welfare, and environmental protection. People are coming to realize that animal, human, and environmental well-being are inseparable and interconnected. An economy and industrial system that ignores these spiritual, ethical, and ecological interconnections will suffer the consequence: industrial self-destruction.