Should the AWA Cover Rats, Mice, and Birds? The Results of an IACUC Survey

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As part of a recent survey of IACUC members, the authors questioned respondents about their attitudes concerning including rats, mice, and birds under the AWA definition of "warm blooded animals," and present the results of this survey.

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Recently, there has been much debate over the inclusion of rats, mice, and birds under the Animal Welfare Act (AWA; *see* April "Newsfronts"), and the degree to which the research community supports such an amendment. As part of a greater National Science Foundation (NSF)-funded survey on IACUC members' decision-making and protocol review process, we asked IACUC members (sampled from the Office for Protection from Research Risk's master list) which animals should be covered under the AWA. We present below an analysis of that data, as well as the data from another NSF-funded survey that posed the same question to psychologists.

Background

In the 1970 amendments to the AWA, a "warm-blooded animal" was described as: "any live or dead dog, cat, monkey (nonhuman primate mammal), guinea pig, hamster, rabbit, or such other warm-blooded animal, as the Secretary may determine is being used, or is intended for use, for research, testing, experimentation, or exhibition purposes or as a pet; but such term excludes horses not used for research purposes and other farm animals, such as, but not limited to livestock or poultry, used or intended for use as food or fiber, or livestock or poultry used or intended for improving animal nutrition, breeding, management or production efficiency, or for improving the quality of food or fiber. With respect to a dog, the term means all dogs including those used for hunting, security, or breeding purposes[1]."

This definition authorized the Secretary of Agriculture to determine which warm-blooded animals were to be included under AWA protection, and the Secretary subsequently excluded "[b]irds, rats of the genus *Rattus* and mice of the genus *Mus* bred for use in research[2]." This decision has since been challenged in court, and, in early 1998, the Alternatives Research and Development Foundation (ARDF) and other animal interest groups petitioned USDA to include these species under the AWA. On January 28 of this year, USDA called for a period of public comment on the petition, and, on March 9, the ARDF and co-complaintants filed suit against Secretary Daniel Glickman and USDA/APHIS Administrator W. Ron DeHaven in their official capacities.

Under the proposed redefinition, the Secretary would no longer determine which animals would be covered by the AWA. Instead, an "animal" would be "any live or dead dog, cat, nonhuman primate, guinea pig, hamster, rabbit, or any other warm-blooded animal, which is being used, or is intended for use for research, teaching, testing, experimentation, or exhibition purposes, or as a pet[3]."

The USDA has called for public comment. While this is an important means of obtaining feedback, we feel the end result is limited in several respects. First, the respondents are not selected randomly. Second, respondents are required to identify themselves by name, which often has the effect of biasing the opinions people express (survey researchers typically minimize such biases by making surveys anonymous). Third, the pool of comments contains relatively few reactions from members of the animal research or regulatory community. For example, most of the comments submitted to the USDA's "Electronic Reading Room" (http://comments.aphis.usda.gov/cgi-bin/public/ecomments/view_comments2.pl?1043) were not submitted by those affiliated with research institutions.

A Survey of IACUC Members

To provide a more systematic and comprehensive idea of what individual animal researchers believe about AWA coverage, we wish to share some preliminary results from a recent national survey of IACUC members. The NSF-funded study involved 50 randomly selected IACUCs from US colleges and universities. (The sample was drawn from OPRR's master list of 916 IACUCs, and constituted 71.4% of eligible IACUCs that were invited to participate in the study. To be eligible for participation, IACUCs had to have reviewed at least three animal behavior protocols in the previous two years.) In all, 494 of 566 IACUC members, or 87.3% of those approached, completed an anonymous survey between the study dates of September 1, 1998 and January 1, 1999. Only voting committee members took part in the study (the only exception was one committee Chair who played an administrative role, and did not typically vote).

Although the study concerned a variety of issues beyond the AWA (*e.g.*, an examination of IACUC decision-making and the protocol review process), all respondents were asked about AWA coverage (Fig. 1). Of the animals listed in Fig. 1, only primates, dogs, and cats are currently covered under the AWA. We wish to determine whether IACUC members believe that other animals should receive AWA protection when used for research.

As seen in Table 1, 73.3% of IACUC members surveyed felt that rats and mice should be protected under the AWA; 72.7% felt that farm animals should be covered; and 69.0% felt that pigeons should be covered. Perhaps somewhat surprisingly, a majority of IACUC members also favored including reptiles, frogs, and fish (57.4%, 53.2%, and 50.9%, respectively). Indeed, the most common response was that all nine types of animals should receive protection under the AWA.

It is also worth noting that support for extending AWA coverage appeared to be quite broad: there were no significant group differences among IACUC Chairs, veterinarians, or other committee members (Table 1), and the number of animals a respondent suggested for AWA coverage did not depend on age, length of IACUC service, or status as an unaffiliated member. The only statistically significant demographic trend—a modest one at best—was that female respondents advocated a greater number of animal categories than male respondents (M=6.32 *vs.* 5.48; t=3.51; $P < .001$).

In additional analysis, we compared the responses of 287 self-identified animal researchers with 199 IACUC members who did not conduct animal research (Fig. 2). Here, too, the overall pattern was remarkably consistent. Animal researchers matched other respondents within 3% on AWA coverage for primates, dogs, cats, rats and mice, and pigeons. In the remaining cases (*e.g.*, farm animals), animal researchers were within 10% of other IACUC members, and in no instance was the difference statistically significant.

The Animal Welfare Act is a federal law that governs the use of animals in research. Regardless of the species now covered under the Animal Welfare Act, which of the following animals should, in your opinion, receive AWA protection when used for research? (Check all that apply.)

❑ **Primates** ❑ **Pigeons** ❑ **Fish**
❑ **Dogs** ❑ **Rats and mice** ❑ **Frogs and other amphibians**
❑ **Cats** ❑ **Reptiles** ❑ **Farm animals used in food research**

❑ **None of these animals should be covered.**

FIGURE 1. IACUC survey question on rats, mice, and birds.

TABLE 1. Percentage of IACUC members who felt a given animal should be protected under the Animal Welfare Act. [NB: 3 of 494 respondents failed to complete the AWA survey item.]

	Role on Animal Care Committee			
Animal	**Chair (*n*=50)**	**Veterinarian (*n*=92)**	**Other (*n*=349)**	**Total (*n*=491)**
Primates	100.0	100.0	98.6	99.0
Dogs	100.0	98.9	97.1	97.8
Cats	100.0	98.9	96.8	97.6
Rats/Mice	68.0	72.8	74.2	73.3
Farm Animals	70.0	68.5	74.2	72.7
Pigeons	66.0	69.9	69.3	69.0
Reptiles	52.0	58.7	57.9	57.4
Frogs	48.0	56.5	53.0	53.2
Fish	44.0	54.3	51.0	50.9

A Survey of Psychologists

Extended AWA coverage would, of course, have an impact on some disciplines more than others, so it may be misleading to treat all animal researchers as though they are in the same group. In our own discipline of psychology, for example, more than 90% of research animals are rats, mice, or pigeons, which means that USDA regulation of these animals would have a relatively dramatic effect. It is therefore worthwhile asking whether researchers in disciplines such as psychology would object to AWA coverage of rats, mice, and birds.

To address this question, we analyzed data from a 1996 national survey of American Psychology Association (APA) members[4]. In this NSF-funded study, a ran-

dom sample of 5,000 APA members were surveyed about the topic of animal research. Just over 80% of eligible psychologists completed a useable survey, including 158 psychologists who identified themselves as animal researchers.

Survey results concerning AWA coverage are presented in Table 2 (the survey item was nearly identical to the one in Fig. 1, except that frogs and fish were not included). As with the survey of IACUC members, a majority of psychologists favored the inclusion of rats, mice, pigeons, farm animals, and reptiles under the AWA. Moreover, the responses of animal researchers tended to be quite similar to the responses of other psychologists. The only significant difference concerned farm animals (75.3% of animal researchers favored AWA coverage for farm animals, compared with 86.8% of other respondents, a difference that was significant at the .001 level by Chi-square). In all other cases, the responses of animal researchers fell within 3% of the responses given by other psychologists.

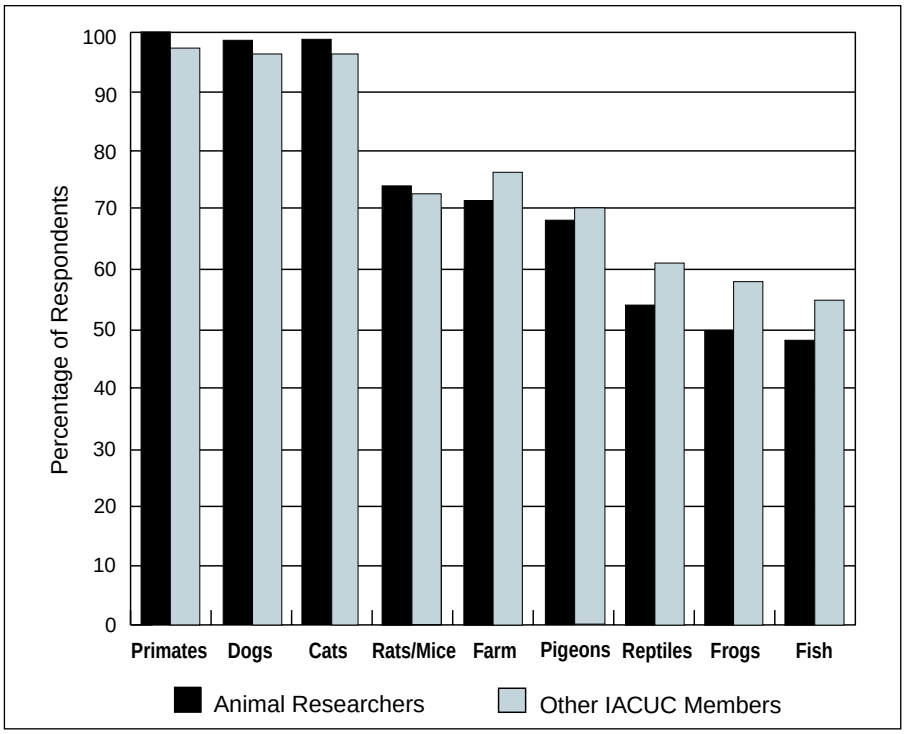

FIGURE 2. Percentage of IACUC members who believe particular animals should be covered by the AWA.

TABLE 2. Percentage of American Psychological Association members who felt a given animal should be protected under the Animal Welfare Act. [NB: 171 of 3,982 respondents failed to complete the AWA survey item.]

	Type of Psychologist		
Animal	**Animal Researcher (*n*=158)**	**Other Respondent (*n*=3,653)**	**Total (*n*=3,811)**
Primates	94.3	96.2	96.1
Dogs	91.1	93.9	93.8
Cats	91.1	92.9	92.9
Rats/Mice	72.8	73.6	73.6
Farm Animals	75.3	86.8	86.3
Pigeons	72.2	74.8	74.7
Reptiles	63.3	65.2	65.1

Conclusion

The results of our IACUC and APA surveys suggest that a majority of individual animal researchers favor the inclusion of rats, mice, and birds under the AWA. We base this conclusion on several observations. First, both surveys relied on large random samples drawn at the national level. Second, both surveys yielded return rates in the 80-90% range, thereby being highly representative. Third, both surveys encouraged the candid expression of opinion by allowing respondents to remain anonymous. Finally, both surveys generated similar results.

Not only did nearly all animal researchers support the current AWA coverage for primates, dogs, and cats, but 73.9% favored the inclusion of rats and mice, 70.7% favored the inclusion of farm animals, and 67.9% favored the inclusion of pigeons. Thus, it would be a distortion to present the debate over AWA coverage as a conflict between animal researchers and animal protectionists. While a major concern is whether USDA currently has the resources to extend regulation, the results from this IACUC survey indicate that expanded AWA coverage is supported in principle by a majority of individuals who participate in the institutional regulation of animal research. Likewise, results from the APA survey indicate that most psychologists support coverage of rats, mice, and birds, even though this increase in coverage would have an impact on more than 90% of laboratory animals used in psychological research.

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