

The Failure of Federal Animal Welfare Regulations to Promote the Well-Being of Nonhuman Primates Used in Biomedical Research

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The Animal Welfare Act (AWA)¹ was first passed by Congress in 1966, and was amended in 1970, 1976, 1985, and 1990. The Animal Welfare Act regulations set forth in the Code of Federal Regulations (specifically, Title 9 CFR) set forth minimum standards for the care and treatment of some nonhuman animals used in certain types of businesses and enterprises, including breeding, dealing, exhibition and traveling acts, and research. The AWA and 9 CFR apply only to dogs, cats, nonhuman primates, guinea pigs, hamsters, rabbits, and other warm-blooded animals, except for birds, mice, and rats. Cold-blooded animals, such as reptiles and amphibians are also not protected by the AWA and 9 CFR. The Animal and Plant Health Inspection Service (APHIS) of the US Department of Agriculture (USDA) is charged with inspecting facilities that must adhere to the AWA and 9 CFR, and implementing and enforcing the federal regulations.

LPAG believes that the regulations set forth in 9 CFR provides inadequate standards for the care and treatment of nonhuman primates, and fails to recognize the needs of nonhuman primates. Too often, research facilities questioned about their standard of care for nonhuman primates use 9 CFR to justify the suffering that goes on behind the closed doors of the institution, as former Director Tom Gordon of Yerkes National Primate Research Center did in a recent article: "The animals at the Yerkes Center, including the chimps – of which we have 200 – and including the HIV chimps, of which here are about a dozen, they are housed entirely consistent with current and applicable law."² But current and applicable law is simply not enough – a fact that the USDA itself acknowledges: "Although Federal requirements establish acceptable standards, they are not ideal. Regulated businesses are encouraged to exceed the specified minimum standards."³

¹ 7 U.S.C. §§ 2131 et seq.

² Jenni Laidman, Work in Lab Turns Woman Against Tests on Primates, The Toledo Blade, February 18, 2001.

³ Animal Care, Animal and Plant Health Inspection Service, US Department of Agriculture, The Animal Welfare Act Fact Sheet, January 2002, available at <<http://www.aphis.usda.gov/oa/pubs/awact.html>>.

Limits to Public Access of Information on Animal Welfare

Unfortunately for a taxpayer concerned about the welfare of the nonhuman primates at Yerkes Regional Primate Research Center and other private institutions that receive public funding, access to records is very limited. Because government employees conduct APHIS inspections, these records are open to the public under the Freedom of Information Act (FOIA). However, APHIS inspections at best last a few days. Institutional Animal Care and Use Committees (IACUC), mandated by the AWA to help ensure adherence to federal regulations, are more intimately involved in the operations of a research facility.⁴ IACUCs approve research protocols and some exemptions from USDA regulations, and conduct twice yearly inspections. All research institutions that use nonhuman primates, including pharmaceutical companies, private research firms, and regional primate research centers, must have an IACUC. (Only institutions that do not receive Public Health Service (PHS) funds such as NIH grants, and use only rats, mice, and birds, do not have IACUCs.) However, unless the institution is a state or federally owned and operated facility, the records maintained by the IACUC are not open to the public. Ideally, because IACUCs are federally mandated committees, and are required to ensure institutional adherence to federal animal welfare regulations, all records of their activities should be open to public scrutiny regardless of the public or private nature of the research institution. However, this is not currently a provision of animal welfare regulations. IACUCs do submit an annual report to the USDA that summarizes any IACUC-approved exemptions from animal welfare standards. These annual reports are available to the public through the FOIA.

The Life of a Laboratory Primate Allowed Under Federal Regulations

Under current and applicable law, it is acceptable for a nonhuman primate to live by herself in a small cage (for a 'typical' 6.6-22 lb rhesus monkey, a cage approximately 2x2x2 feet is acceptable, specifically 4.3 square feet floor space, and 30 inches of height).⁵ A facility that 'exceeds' minimum standards may provide this monkey a cage that is 3x2x2 feet, provide an automatic watering system, and feed her and the other monkeys twice per day. The monkey can see and hear other monkeys, but she has no physical contact with them. It is acceptable under current and applicable law to feed the monkey dry, tasteless biscuits once daily, and provide water twice daily for an hour each time. The cage may have a perch a few inches off the floor. There may be a single rubber toy in the cage. The monkey may get a single food treat, such as a piece of fruit, a few times per week. Once a day a human comes into the room, turns on a hose, and washes her feces away. Perhaps several times a day a human will come into the room and draw her blood from a surgically implanted catheter. The rest of the time, the monkey may sit still, bored, perhaps turning around occasionally, 24 hours per day, 7 days per week. As the years go by, the monkey may be driven mad by the loneliness, fear, and boredom. She may pull out her own hair. She may pace

⁴ 7 U.S.C. § 2143 (b)(1).

⁵ 9 C.F.R. § 3.80 (2)(i).

around and around, or bounce up and down, or do back flips non-stop. The monkey may bite herself, drawing blood, tearing flesh. The term for these behaviors is 'stereotypies' – repetitive, abnormal behaviors often seen in captive animals that are the result of stress, fear, frustration, boredom, anger, and depression. Stereotypies are a direct result of the needs of nonhuman primates not being met in captivity.

Compare this to a wild rhesus monkey who lives in a troop of 10-90 individuals who are mothers, fathers, sisters, brothers, playmates, and grooming partners. A wild rhesus monkey spends its day traveling throughout her range of up to 400 hectares, searching and foraging for her food, which includes a wide variety of fruit, seeds, leaves, grasses, roots, and invertebrates. As she chooses, she can climb a tree, relax under bushes, groom her mother, or nurse her infant. The life of a wild rhesus monkey is challenging and often difficult – predators, locating food or water, conflict with other monkey troops are a part of a wild monkey's life – but it is a full and varied life, not the barren existence of a laboratory monkey. Nonhuman primates have the intelligence as well as strong social bonds to cope with a challenging and often unpredictable existence – 9 CFR fails to demand that they be provided with the companionship and daily challenges that are vital for their well-being. Monkeys desperately need social companionship, space in which to travel, environmental complexity, challenging opportunities to search and forage for food, and a varied diet. The AWA and 9 CFR may hint at these needs, but do not require that research institutions meet these needs.

Rhesus monkeys are only one of many nonhuman primate species that suffer in biomedical research institutions because the federal government refuses to acknowledge their needs. Long-tailed macaques sit with their tails soaking in pans of their own urine and feces because cage size regulations do not take into account the length of the animal, including the tails. The active, intelligent tufted capuchin, whose wild counterparts range several miles through the treetops on any given day, is confined to a 1.5x1.5x2.5 ft cage with no opportunity to climb. Chimpanzees, one of humankind's closest relatives, are permitted to live alone in 5x5x7 ft cages, a fate that not even the most heinous of human criminals suffers. Many nonhuman primate species are used in biomedical research, and all have special needs that simply are not being met.

Regulations Regarding Environmental Enrichment for Nonhuman Primates

Where does the federal government hint at the needs of nonhuman primates? Section 3.81 of 9 CFR is entitled "Environment enhancement to promote psychological well-being." Section 3.81 requires that research institutions have a plan for environment enhancement (commonly called 'enrichment'), but does not clearly state what constitutes an acceptable plan. The requirements for the plan are vague at best, and demand only that it address issues such as social grouping, environmental enrichment, special considerations, and restraint devices. The USDA itself recognized that the criteria were vague, and in 1999 attempted to develop clearer, more detailed policies

for environmental enhancement.⁶ However, the considerable resistance from the biomedical research community to some provisions of the draft policy, including stricter social housing requirements, consideration of tail length in cage size, and requiring that infants remain with their mothers until an age of independence⁷ immobilized the agency. USDA inspectors were asking for clarification of the environmental enhancement policy so that they could better do their job, yet the agency bowed to pressure from the regulated labs, and bailed on the draft policy. The policy had been open for public comment in the Federal Register for nearly five years, until the Animal Legal Defense Fund sued the USDA in federal district court for failure to make a final decision.⁸ ALDF's case was dismissed as moot, and is currently on appeal in the Ninth Circuit.⁹

The greatest weakness of section 3.81 lies not in its vague requirements, however. Paragraph 5(e) is called "Exemptions". Herein lies the ability for research institutions to fail to provide adequate enrichment to nonhuman primates. The attending veterinarian may exempt any individual animal for health reasons, or "in consideration of its well-being", a phrase which strikes LPAG as especially ironic. How can the absence of environmental enhancement promote the well-being of a monkey or ape? The attending veterinarian must record the basis for the exemption, and unless the basis of the exemption is permanent, the exemption must be reviewed every 30 days – by the attending veterinarian. There is no oversight, unless APHIS inspectors happen to request the documents, and unless the institution is a public facility subject to open records laws, there is no opportunity for public scrutiny of the exemption. In addition, 9 CFR allows nonhuman primates to be exempted from enrichment requirements for research purposes as set forth in a scientific proposal. Such exemptions must be approved by the Institutional Animal Care and Use Committee (IACUC), and reviewed annually; summaries of these exemptions are provided in the IACUC annual report to the USDA. It is disturbing that nonhuman primates who need the most consideration for their well-being – namely those being used in experiments that often cause illness, stress, and pain – could be exempt from enrichment protocols. This is wholly unacceptable. If a research protocol cannot be completed without providing for the complex psychological and environmental needs of a nonhuman primate, it simply should not be approved.

It is never, under any circumstance, acceptable to exempt a nonhuman primate from an enrichment plan. Every single nonhuman primate in captivity should receive enrichment daily, including, but not limited to, social interaction that includes

⁶ Animal and Plant Health Inspection Service, USDA, Animal Welfare; Draft Policy on Environment Enhancement for Nonhuman Primates, 9 C.F.R. Part 3, 64 Fed. Reg. 38145 (July 15, 1999), available at <<http://www.aphis.usda.gov/ac/ee.html>>. See Animal Care's Final Report on Environment Enhancement to Promote the Psychological Well-being of Nonhuman Primates (July 15, 1999), available at <<http://www.aphis.usda.gov/ac/eejuly15.html>>.

⁷ International Primate Protection League, Primate Welfare Proposals Upset Experimenters, available at <<http://www.ippl.org/primatewelfare.html>>.

⁸ Animal Legal Defense Fund et al. v. Ann Veneman, et al., Plaintiffs' Complaint for Declaratory and Injunctive Relief (N.D. Cal. 2003).

⁹ ALDF Appeals Lawsuit Dismissal, <<http://www.aldf.org>>, last visited February 8, 2005.

physical contact, a variety of foods, challenging foraging opportunities, and opportunities to manipulate interesting or destructible objects, and large, complex enclosures. Alternative forms of enrichment should be sought for individuals with legitimate health problems, not the absence of enrichment altogether. The attending veterinarian should not have sole power to reject or approve proposed enrichment techniques – instead a team of individuals, including caregivers, should make those determinations. Funds allocated specifically for environmental enrichment should be included in every research grant. Too often research institutions cite cost concerns as an excuse for not having enough foraging devices for all of the animals, not purchasing a wide variety of food items for the animals, or not socially housing all of the nonhuman primates used by the institution. The monkeys and apes are paying with their lives – research institutions should be required to pay for their every need.

Loopholes and Professional Standards: Who Really Decides What is Acceptable?

Title 9 CFR is riddled with loopholes such as the environmental enrichment exception that in effect allow research institutions to bypass federal regulations, as well as set the standards by which the research industry as a whole is judged. In general, a single person – the attending veterinarian of an institution – has an extraordinary amount of power over the animals' lives, despite the fact that a veterinarian's expertise is in medical management, and veterinarians receive little training in the behavioral, psychological, and environmental needs of nonhuman primates.

For example, Sections 3.76, 3.77, and 3.78 of 9 CFR allows for a wide range of 'acceptable' temperatures in which nonhuman primates are permitted to live, namely 45-85 degrees Fahrenheit, a range which is unacceptably broad given that nonhuman primates in captivity, particularly those confined in small cages, cannot seek relief from uncomfortable temperature extremes. If the temperature is uncomfortably cold (such as 45 or even 50 degrees), a singly-housed chimpanzee cannot huddle with a companion or in a nest of hay for warmth. If the temperature is uncomfortably warm, a rhesus monkey in a 3x2x2 cage cannot seek comfort in a cool pool of water or in the shade of a tree. In any case, 9 CFR requires that indoor housing facilities must always be within this range. Nonhuman primates living in indoor/outdoor facilities (called "sheltered facilities" in 9 CFR) are exempt from protection from the upper extreme – if approved by the attending veterinarian. Although most nonhuman primates prefer warm, humid temperatures, they seek relief from extremely high temperatures as humans do. Yet no cooling system is required for the indoor area of a "sheltered" facility to provide relief from temperatures above 85° degrees if the attending veterinarian says so. An attending veterinarian may also determine if a species can withstand temperature extremes in an outdoor-only environment; if the attending veterinarian states that a species can tolerate temperatures below 45 degrees without supplementary heat, it is acceptable under current law to keep nonhuman primates outdoors without relief from temperature extremes, including below-freezing temperatures.

Section 3.83 addresses availability of water for nonhuman primates. Ideally nonhuman primates should have access to water at all times through automatic watering systems. However, this is not required, and it is acceptable under the law to offer a nonhuman primate water only twice per day for an hour each time. However, the attending veterinarian may, under current law, exempt a nonhuman primate from the watering requirement as well! Furthermore, IACUCs may approve research protocols that restrict water intake even further, leaving nonhuman primates who are desperately, but legally, thirsty.

A common phrase found throughout 9 CFR is "in accordance with generally accepted professional and husbandry practices." The problem here is there are no "generally accepted" professional and husbandry practices for nonhuman primates beyond the recognition that they need to receive food, water, and have their waste removed from their enclosure. Nonhuman primates in captivity are found in private homes, small, unaccredited roadside zoos, pet stores, circuses, research institutions, breeding farms, sanctuaries, and large accredited zoos. The husbandry practices between these various facilities where captive nonhuman primates are found vary widely. Some places provide only hard concrete floors for the animals; others provide bales of soft hay. Some facilities feed a wide variety of fruits and vegetables to the animals daily; others feed only monkey chow biscuits. Some places force their monkeys and apes to wear clothing; other places have animals who have been overgroomed till they are bald. Some institutions provide water in bowls or buckets; others use automatic watering devices. Some facilities have one keeper for every ten primates; others have one keeper for every 100. Some facilities allow the animals access to boxes, paper, and other destructible items, others feel the paper is too difficult to clean up, or it makes the enclosure look trashy. Each facility takes care of their primates in their own way, by their own rules and their own standards. There is no such thing as "generally accepted professional and husbandry practices", and thus much of the federal regulations on animal welfare are in effect meaningless. The regulations do not set the standard, but the research industry does, and the research industry's first concern is not the prosimians, monkeys, and apes, whom research institutions consider to be supplies – not living beings with thoughts, emotions, and the capability to suffer.

Because there are no generally accepted professional and husbandry standards, the biomedical research industry has been able to set its own standards based on the needs and convenience of the research, not the needs and convenience of the animals. Research facilities look to the Guide for the Care and Use of Laboratory Animals ("the Guide")¹⁰ for husbandry standards not necessarily outlined in 9 CFR, and facilities receiving PHS funds must adhere to standards presented in the Guide. However, the Guide is not the standard used by non-research facilities, and is barely an improvement over AWA regulations.

¹⁰ Institute of Laboratory Animal Resources, National Research Council, Guide for the Care and Use of Laboratory Animals (National Academies Press, Washington DC 1996).

Because one facility rips newborn baby monkeys from their mothers' chests and isolates the baby from other monkeys, it is acceptable for another facility to do so — it is a generally accepted professional practice, and required for research. Because thousands of monkeys are singly housed at biomedical research facilities all over the country, it is a generally accepted professional practice, and required for research. It is generally accepted to isolate apes and monkeys and sicken them with AIDS. It is generally accepted to restrain a monkey in a chair for hours at a time. It is acceptable to cause pain in an animal and not offer pain relief. It is generally accepted to addict nonhuman primates to drugs, drill holes in their skulls, draw blood from them several times a day, and deprive them of food and water. It is not illegal to do these things to our primate cousins. Not only do federal regulations fail to prevent the suffering caused by research protocols, they fail to require without exception that measures be taken to meet the most basic and fundamental needs of nonhuman primates, such as the comfort of friends and family, and interesting and pleasant activities to occupy their bodies and their minds.

When research institutions claim that their practices fall under current and applicable law, do not be comforted, because individuals living in these institutions are not. They suffer, day in and day out, under current and applicable law.