SOUTH CAROLINA RESEARCH ANIMALS

Research animals are used within many occupational and educational fields. The most well-known fields are probably biomedical research and consumer product testing. They are also used in aeronautic, military, agricultural, behavioral and cognitive testing as well as educational instruction and training. Incomplete reporting methods make it difficult to ascertain numbers with certainty, but it is estimated that 115 million vertebrates are tested on worldwide each year.¹

The Animal and Plant Health Inspection Service (APHIS) Animal Care program is the agency within the Department of Agriculture responsible for regulating animal research facilities, dealers and carriers, as required by the Animal Welfare Act of 1966 (AWA). In South Carolina, currently there are fourteen entities registered with APHIS as animal research facilities². In 2016, APHIS reported 3,849 animals subjected to testing in South Carolina.³ The species reported included dogs, cats, nonhuman primates, pigs, rabbits, guinea pigs, hamsters and "other" farm animals. In addition to the animals used for testing, another 2,997 lab animals were held at the testing facilities, but not used for testing that year.⁴

¹ Humane Society International, *Animal Use Statistics*, Oct. 21, 2012, http://www.hsi.org/campaigns/end_animal_testing/facts/statistics.html.

² U.S.D.A. Animal and Plant Health Inspection Service, *Listing of Certificate Holders for the Web*, Aug. 1, 2018, https://www.aphis.usda.gov/animal welfare/downloads/List-of-Active-Licensees-and-Registrants.pdf.

³ U.S.D.A. Animal and Plant Health Inspection Service, *Annual Report for Research Facility, 56-R-0002, 56-R-0109, 56-R-0110, 56-R-0001, 56-R-0115, 56-R-0004, 56-R-0003, 56-R-0155, 5-R-0003, 56-R-0155, 56-R-0117, 56-V-0002, 56-V-0003* (2016).

⁴ Ibid.

These numbers, however, do not include birds, rats of the genus Rattus, mice of the genus Mus, fish, reptiles, amphibians, invertebrates, or farm animals used for agricultural purposes, as none of these species are protected by the AWA.⁵ It is believed that unprotected animals make up 85 to 95% of all animals used for testing purposes in the United States.⁶ In other words, the total number of animals used for research and testing in South Carolina is much higher than the total number reported by APHIS as required.

GOVERNING LAWS

I. Protecting Research Animals

The AWA is the principle federal law that creates regulations of research animal facilities. The law excludes elementary and secondary schools⁷ and federal research facilities⁸. Its purpose is set minimum standards for housing, care, basic needs, transportation and treatment of animals covered by the act.⁹ The AWA requires annual inspections of research facilities covered and provides for a fine of up to \$10,000 for a violation of its terms.¹⁰ APHIS will also perform inspections of regulated facilities in response to public concerns for their conditions.¹¹ Unlike other federal laws like the Endangered Species Act and the Environmental Protection Act, the AWA does *not* contain a private citizen suit provision for violations.

⁵ 7 U.S.C. § 2132(g) (2015).

⁶ Animal Legal Defense Fund, *Overview: The Horrors of Animal Testing*, https://aldf.org/focus_area/animals-used-in-research/ (last visited Aug. 12, 2018).

⁷ 7 U.S.C. 54 § 2132(e)

^{8 9} C.F.R. § 2.30(a)(1) (2016).

⁹ 7 U.S.C. 54 § 2131 (2015).

¹⁰ 7 U.S.C. 54 § 2419(b) (2015).

¹¹ U.S.D.A. Animal and Plant Health Inspection Service, *The Animal Welfare Act, An Overview*, May 2006. http://www.aphis.usda.gov/publications/animal_welfare/content/printable_version/Animal_Care_Prog_6-08.pdf, (last visited Aug. 20, 2018).

The AWA does not prohibit states from enacting laws that add protections for research animals. ¹² Although South Carolina law does not provide specific protection for research animals, the animal cruelty statute also does not contain any exception for them as it does for many other categories of animals. ¹³ As such, there is room for potential prosecution of research animal abuse in South Carolina, particularly those animals not covered by the AWA.

II. Protecting Research Animal Facilities

The South Carolina Farm Animal and Research Facilities Protection Act, also known as the South Carolina Ecoterrorism Act, provides penalties for a person who exercises control over an animal facility or the animals or property located there,¹⁴ or if a person damages the facility, its animals or property.¹⁵ Violation for control or damage is a misdemeanor and carries a fine of up to \$10,000 and/or 3 years imprisonment.¹⁶ A person also violates the law if he or she enters an animal facility without the owner's consent and remains concealed with the intent to disrupt or damage the business conducted at the facility.¹⁷ Violation for illegal entry is a misdemeanor with a fine up to \$5,000 and/or one year imprisonment.¹⁸ The statute also provides a civil cause of action for any person who suffers damages from an act prohibited by this law. It provides for recovery up to three times the monetary value of the actual damage caused to the facility.¹⁹

¹² 7 U.S.C. §2143(A)(8) (2015).

¹³ S.C. Code Ann. § 47-1-40(C) (2002).

¹⁴ S.C. Code Ann. §47-21-30 (2002).

¹⁵ S.C. Code Ann. §47-21-40 (2002).

¹⁶ S.C. Code Ann. §47-21-80 (A) (2002).

¹⁷ S.C. Code Ann. §47-21-50 (2) (2002).

¹⁸ S.C. Code Ann. §47-21-80 (B) (2002).

¹⁹ S.C. Code Ann. §47-21-90 (2002).

SOUTH CAROLINA RESEARCH FACILITES and DEALERS

I. Research Animal Facilities

In South Carolina, the fourteen reported animal research facilities include nine colleges or universities, three privately owned businesses and two Veterans' Administration Hospitals.²⁰ Technical Services Specialists of Walterboro has reported using dogs and guinea pigs for testing.²¹ SPF North America of Hodges uses animals in research to improve the palatability, or taste, of pet foods. Alpha Genesis in Yemassee is a primate research facility, calling itself "one of the largest and most comprehensive nonhuman primate facilities, designed specifically for monkeys, in the United States."²² Notwithstanding numerous animal deaths, injuries, escapes, citations and fines over the years,²³ Alpha Genesis manages to expand while securing considerable grants and contracts. Chief Executive Officer, Greg Westergaard, states that at any given time, Alpha Genesis is "responsible for roughly 6,000 monkeys."²⁴

II. Research Animal Dealers

In addition to research facilities, the AWA regulates anyone who sells animals, called "dealers". South Carolina does not allow "pound seizure" which is the direct transfer of animals from pounds to research facilities, and making it necessary for animal labs to rely on dealers for

²⁰ U.S.D.A. Animal and Plant Health Inspection Service, *Listing of Certificate Holders* (July 2, 2018).

²¹ U.S.D.A. Animal and Plant Inspection Service, *Inspection Report 56-R-0110* (2013-2016).

²² Alpha Genesis Incorporated, *Primates for Biomedical Research*, http://www.alphagenesisinc.com/#primates (last visited Aug. 29, 2018).

²³ Michael Majchrowicz, *South Carolina Research Group Fined after Animal Mishaps*, The Post and Courier, June 14, 2018, https://www.postandcourier.com/news/yemassee-animal-research-group-alpha-genesis-fined-after-monkey-mishaps/article_ee2f1a70-6f30-11e8-a807-03c4809eb338.html (last visited August 1, 2018).

²⁵ 7 C.F.R. 9 §1.1 (2016).

²⁶ S.C. Code Ann. §47-3-60 (2002).

supply of research animals. A "Class A" dealer is anyone who sells animals bred at their facility while "Class B" dealers also buy and sell animals who were not bred at their facility, but obtained from an outside source.²⁷ When it comes to research animals, Class B dealers may obtain animals from the wild, from auctions, small breeders, or rehoming ads.

Alpha Genesis and Technical Services Specialists are not only research facilities as named above, but also Class B dealers. Technical Services Specialists deals monkeys, groundhogs, rabbits, and sheep. Violations in one inspection report of Technical Services Specialists includes rabbits with splayed legs and a monkey with "total fur loss in every area he can reach, 30 a common sign of psychological distress. Mhale Branch of Seabrook is a Class B dealer that is not registered as a research facility. Whale Branch deals primates, dogs including beagles, and pigs. Finally, Ham Bone Farm doing business as Division of Palmetto Research Swine in Reevesville is a Class A dealer breeding pigs for sale to research facilities.

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²⁷ Ibid.

²⁸ U.S.D.A. Animal and Plant Health Inspection Service, *Listing of Certificate Holders*, July 2, 2018.

²⁹ U.S.D.A. Animal and Plant Inspection Service, *Inspection Report*, March 22, 2018, https://acis.aphis.edc.usda.gov/ords/f?p=118:21:::NO::RXQIZAVXA:2016082569092388&cs=18B5D41C8F393A580 352BB71470812A28.

³⁰ U.S.D.A. Animal and Plant Inspection Service, *Inspection Report*, August 27, 2015, https://acis.aphis.edc.usda.gov/ords/f?p=118:21:::NO::RXQIZAVXA:239151627090993&cs=11A1D75CBA30221DB2 C8024015F3AE900

³¹ Identification of Technical Services Specialists as the subject facility of these reports is inferred from the location of the facility in the report in addition to the location of Technical Services Specialists as indicated in the List of Certificate Holders.

³² U.S.D.A. Animal and Plant Inspection Service, *Inspection Report Certificate Number 56-B-0109*, March 22, 2018.

³³ U.S.D.A. Animal and Plant Inspection Service, *Inspection Report Certificate Number 56-B-0109*, July 20, 2017.

³⁴ U.S.D.A. Animal and Plant Inspection Service, *Inspection Report Certificate Number 56-B-0109*, July 9, 2018.

³⁵ U.S.D.A. Animal and Plant Inspection Service, *Inspection Report Certificate Number 56-B-0109*, July 26, 2018.

³⁶ U.S.D.A. Animal and Plant Health Inspection Service, *Listing of Certificate Holders for the Web,* August 1, 2018, https://www.aphis.usda.gov/animal-welfare/downloads/List-of-Active-Licensees-and-Registrants.pdf (last visited August 3, 2018).

PUBLIC OPINION and ALTERNATIVES TO ANIMAL TESTING

According to a Gallup poll from 2017, just 51% of Americans find medical testing on animals to be morally acceptable, a record low.³⁷ An earlier poll by Gallup showed that 67% of Americans were "very concerned" or "somewhat concerned" about animals used in research.³⁸ States that have banned animal testing for cosmetics include California,³⁹ New Jersey,⁴⁰ New York⁴¹ and Virginia.⁴² Johns Hopkins Center for Alternatives to Animal Testing, the National Institutes of Health, the Department of Defense, the USDA and FDA are among numerous agencies and organizations that encourage alternatives to animal testing.

Disagreement about the reliability of animal testing is based largely in biological differences between human and nonhuman animals. According to the FDA, just 8% of drugs tested on animals are deemed safe for human clinical trials.⁴³ Of the drugs that test safe in animals, 30% fail because they are found to be toxic in humans.⁴⁴ Another 60% fail the human trials because they are found ineffective in humans,⁴⁵ totaling 90% of all drugs that pass the animal phase but fail in humans. Conversely, numerous drugs widely used today are toxic or

³⁷ Jeffrey M. Jones, *Americans Hold Record Liberal Views on Most Moral Issues*, May 11, 2017, https://news.gallup.com/poll/210542/americans-hold-record-liberal-views-moral-issues.aspx?g source=animal+testing&g medium=search&g campaign=tiles.

³⁸ Rebecca Rifkin, In U.S. More Say Animals Should Have Same Rights as People, May 8, 2015, https://news.gallup.com/poll/183275/say-animals-rights-people.aspx.

³⁹ Cal. Civ. Code § 1834.9 (2002)

⁴⁰ N.J. Rev. Stat. § 4:22-59 (2007).

⁴¹ N.Y. Pub Health Law § 505 (2014).

⁴² VA Code Ann. § 672 (2018).

⁴³ Anne Harding, *More Compounds Failing Phase 1*, The Scientist, August 6, 2004.

⁴⁴ See National Center for Advancing Translational Services, National Institutes of Health, *About Tissue Chip,* Aug. 28, 2018, https://ncats.nih.gov/tissuechip/about.

⁴⁵ See National Institutes of Health, NIH Awards \$15 Million to Support Development of Human Tissue Models, Sept. 12, 2017.

ineffective in animals,⁴⁶ raising the concern that beneficial drugs may never make the market while relying on animal testing methods.

Examples of alternatives to animal testing include in vitro testing, computer simulations, two- and three-dimensional models made of human cells, seeding cells on silicon chips to behave like human organs, robotic technology that can screen thousands of chemicals at once using cells grown in the lab, and using donated human organs.⁴⁷ While animal testing has been heavily relied on by biomedical and consumer industries in the past, legislative trends, technological advances and opposing public opinion present the possibility that the future of research may very well move away from the use of animals to more alternative methods of chemical and drug testing.

⁴⁶ See John J. Pippin, M.D., *Dangerous Medicine, Examples of Animal-Based "Safety" Tests Gone Wrong*, Physicians Committee for Responsible Medicine,

https://www.pcrm.org/sites/default/files/pdfs/research/testing/exp/dangerous_medicine.pdf, (last visited Aug. 29, 2018).

⁴⁷ Physicians Committee for Responsible Medicine, Nonanimal Testing Methods, https://www.pcrm.org/research/animaltestalt/tailtox/nonanimal-testing-methods, (last visited Aug. 16, 2018).