# Factsheet

# **Dissection:** Lesson in Cruelty

Each year in the U.S., an estimated 20 million thinking, feeling animals are caught in the wild, bred, or sold by pounds and killed for "educational" purposes.' Roughly half of these animals are used for classroom animal dissections, which involve cutting into and studying dead animals. Each animal

cut open and discarded represents not only a life lost but also just a small part of a trail of animal abuse and environmental havoc.

#### Where Do Suppliers Get the Animals?

Frogs are the most commonly dissected animals below the university level. Other animals who are dissected include cats, mice, rats, worms, squid, rabbits, fetal pigs, and fish. The animals may come from breeding facilities that cater to institutions and businesses that use animals in experiments. They may also have been caught in the wild, or they could be abandoned animal companions who have been sold by an animal shelter.

#### **Depleting the Ecosystem**

A Washington Post article discussed the declining frog populations worldwide, noting that leopard frogs may have disappeared completely from British Columbia.<sup>2</sup> The U.S. Department of the Interior's (DOI) Task Force on Amphibian Declines and Deformities (TADD) has stated that amphibian populations have declined because of a complex intersection of factors, including habitat loss, pollution, climate change—and the use of amphibians in dissection.<sup>3</sup>

#### **Killing Compassion Along With the Frog**

Researchers have found that exposing young people to animal dissection can foster callousness and insensitivity toward animals and nature and may even dissuade some from pursuing careers in science.<sup>4,5</sup>

Students who are planning on pursuing a career in biology or medicine would do better to use some of the

sophisticated alternatives, such as computer models and humanlike simulators; studying humans in a controlled, supervised setting; or studying human cadavers. More than 90 percent of the medical schools in the U.S.—including prestigious institutions such as Harvard and Yale—do not use any live animals in their medical training.<sup>6</sup>

#### **Students Speak Up**

More and more students—from elementary schools on up to veterinary schools and medical schools—are taking a stand against dissection before it takes place in their classes. In 1987, a student named Jenifer Graham objected to dissection and was threatened with a lower grade. Jenifer went to court to plead her case and later testified before the California legislature, which responded by passing the first-ever law giving students in the state the right not to dissect. As of 2009, 15 U.S. states have dissection-choice laws or policies, as do many schools and school districts.<sup>7</sup>

#### **Non-Animal Learning Methods**

Students and teachers can choose from a wide range of sophisticated alternatives, such as virtual dissection software, that have been shown to teach biology as well as, or better than, cutting up dead animals and that have other economic and environmental benefits as well.<sup>8,9,10</sup> The typical science "lab" at many schools now emphasizes computers rather than animal cadavers. In 2008, the National Science Teachers Association amended its official position statement to support the use of non-animal learning methods as replacements for dissection.<sup>11</sup>

Software-based non-animal methods are widely available and easy to incorporate into school curricula. For instance, Digital Frog 2.5, which is available from Digital Frog International (www.digitalfrog.com), features a simulation of a full, interactive frog dissection and can be used year after year for little cost. Digital Frog 2.5 includes all major body systems, an in-depth anatomy section with more than 70 detailed screens, and an ecology section that examines the diversity of frogs. Educators can purchase Digital Frog from the PETA Mall at a 30 percent discount and can buy any of Digital Frog International's products at a 30 percent

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discount directly from the company's Web site using the code "PETA30."

DissectionWorks, available from ScienceWorks (www.scienceclass.com), is an interactive dissection simulation featuring images of various animals, including a perch, a crawfish, a fetal pig, a cat, a frog, and an earthworm. Each CD contains printable files of tests, worksheets, puzzles, graphics, text, and a glossary.

The Anatomy in Clay® learning system, available from Zahourek Systems, Inc. (www.anatomyinclay.com), allows students to build nonhardening clay onto specially designed, durable scale models of skeletons. All model lines are hand-cast in polyurethane and hand-finished, providing a standing skeleton designed with unique insights into the vertebrate skeleton, and they vary in scale for easy comparison among the various species of animals. A study recently showed that students who learned anatomy using this system scored higher on tests than those who dissected animals.<sup>12</sup>

PETA has also launched an online dissection alternatives resource center designed especially for educators. The new site contains information on the many benefits of non-animal learning methods (with references to peerreviewed educational research), physician-narrated video demonstrations of two leading virtual dissection software programs, PETA-specific discount codes for educational software products, comprehensive resource lists, and more. You can visit our site at PETA.org/dissection.

#### **Every Student's Choice**

Whether you are a student, a parent, or a concerned taxpayer, you can act to end dissection in your town's school system. If you are expected to perform or observe a dissection, talk to your teacher as early as possible about alternative projects. Contact TeachKind at Info@teachkind.org for tips on what to say and how to proceed. If there is an animal rights group at your school or in your community, ask for help. Parents can urge their local parent-teacher association to ask the area superintendent of schools or the school board to consider a proposal to ban dissections in public schools or at least give all students the option of doing a non-animal project. It may help to collect signatures on a petition and to present the school board with information on the cruelty and environmental destruction caused by animal dissection as well as information on readily available alternatives.

Get your school to drop dissection-it's deadly.

#### References

<sup>1</sup>L.A. Hart *et al.*, *Why Dissection? Animal Use in Education* (Westport, Conn.: Greenwood, 2007).

<sup>2</sup>W. Souder, "Evidence Grows, Suspects Elusive in Frogs' Disappearance," *Washington Post*, 6 July 1998, A3.

<sup>3</sup>B. Baker, "New Federal Task Force Tackles Amphibian Troubles," *BioScience*, Vol. 49, No. 5, 5 May 1999 <http://caliber.ucpress.net/doi/pdf/10.1525/bisi.1999.49.5.366 ?cookieSet=1>.

<sup>4</sup>G. Russell, "Biology: The Study of Life," *AV Magazine* 1996, 105(3): 2–7.

<sup>5</sup>D. Solot and A. Arluke, "Learning the Scientist's Role: Animal Dissection in Middle School," *Journal of Contemporary Ethnography* 1997, 26(1):28–54.

<sup>6</sup> Physicians Committee for Responsible Medicine, "Medical School Curricula With Live Animal Laboratories"

<http://www.pcrm.org/resch/meded/ethics\_medlab\_list.html>.

<sup>7</sup>The Humane Society of the United States, "States With Dissection Choice Laws"

<http://www.hsus.org/animals\_in\_research/animals\_in\_educat ion/dissection\_laws.html>.

<sup>8</sup>L.A. Hart et al.

<sup>9</sup>G.J. Patronek and A. Rauch, "Systematic Review of Comparative Studies Examining Alternatives to the Harmful Use of Animals in Biomedical Education," *Journal of the American Veterinary Medical Association* 230.1 (2007): 37–43. <sup>10</sup>The Humane Society of the United States, "Comparative Studies of Dissection and Other Animal Uses in Education" <http://www.hsus.org/animals\_in\_research/animals\_in\_educat ion/comparative\_studies\_of\_dissection\_and\_other\_animal\_us es.html>.

<sup>11</sup> Physicians Committee for Responsible Medicine,

"Dissection Alternatives Victory," 2008 Autumn

<http://www.pcrm.org/Magazine/gm08autumn/dissection\_vict ory.html>.

<sup>12</sup> H.K. Motoike *et al.*, "Clay Modeling as a Method to Learn Human Muscles: A Community College Study," *Anatomical Science Education* 2009, 2(1):19–23.

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