

*How Animals Are Collected and Killed for
Dissection and the Alternatives You Can Choose*

Thistle's Story

This is the true story of a tiny kitten who was rescued from a biological supply company and spared the horror that millions of animals suffer each year for science classes.

In many ways, Thistle is like any other young cat: He loves games and attention. He races madly around the room, ending with a flying leap onto someone's lap. He pounces on his human companions' fingers as they wiggle between the cushions. He even plays with the dogs in his house. But you could also say he is an especially charmed cat. That's because Thistle was rescued from a biological supply company by an undercover investigator.



The PETA investigator who saved Thistle was working undercover at one of the nation's largest biological supply companies, where thousands of animals a week are embalmed for dissection. Thistle came from "the cat man"—a dealer who delivered live cats jam-

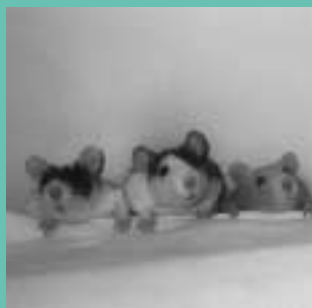
packed in crates too small for them to stand up in. The cats' origins remain unknown, but they had all spent time in a dealer's shed, and some were sick or dying.

Here's what the investigator wrote: "When they arrive ..., frightened cats come face to face with a worker who jabs violently at them with a metal hook, forcing them from two or three already cramped crates into one. Then it's on to the gas chamber. Many of the cats are still moving when workers pump formaldehyde into their veins. They clench their paws as the chemicals surge through their bodies. They are then stored and eventually packaged and shipped to schools all around the country."

The PETA investigator who observed these conditions managed to save two cats. One, Oliver, was so sick that he died six days later despite intensive veterinary care. But Thistle escaped the dissection table and found a home where he is happy, safe, and well loved.

“Biology, as it is now conducted, stands to alienate potential students in increasing numbers if instructional methods are not altered or amended. This alienation could result in the loss of talent to scientific fields ... since some students may elect to drop out of basic biology rather than dissect.”

LARRY M. BROWN, M.ED.



Lessons in Disrespect

Dissection was introduced into education in the 1920s as a way of studying anatomy, biology, physiology, and the theory of evolution. Each discarded animal represents not only a life lost, but a less enlightened time when people were not so aware of the issues involving animal cruelty and environmental destruction.

Today, many countries, including Argentina, Switzerland, Norway, the Netherlands, and Denmark, have enacted legislation to prohibit dissection below the university level, and most other countries do not require it. In the U.S., some states, including Pennsylvania, California, Florida, Illinois, and New York, have enacted legislation designed to protect the rights of students who do not want to dissect, and many school districts and colleges are passing policies giving all students the right to choose alternatives to dissection.

Most animals used for dissection have fully developed nervous systems, which make them capable of experiencing pain and fear. Yet information about how living beings become “tools” in education is generally withheld from students, even though the process frequently involves the trauma of removal from natural habitats, stress from shipping and handling, dehydration, food deprivation, illnesses and injuries caused by close confinement and proximity to diseased

animals, and outright abuse.

Dissection teaches a profound disrespect for the life it purports to study. It fosters conflict and confusion in impressionable young people, and we now know that stimulating any tendency toward cruelty to animals in childhood can correlate with dangerous, anti-social behavior in adulthood. Science itself is often a casualty of dissection, as thoughtful, intelligent, and talented students are repulsed from the study of science by the first gratuitous exercise in cruelty.

“Taking into account that biology is the science of life, and that it is not coherent to base the teaching of such a science on the death of other beings ... [and] giving priority to creation and not to destruction ... the ministry resolves to ban vivisection and dissection of animals in teaching establishments ...” ARGENTINE
MINISTRY OF EDUCATION AND JUSTICE, 1987

“It is inconsistent and improper to require a sincere student to perform dissections when, to that student, doing so violates her principles based on a reverence for all life.”

DONALD EMMELUTH,
D.ED., FORMER
PRESIDENT, NATIONAL
ASSOCIATION OF BIOLOGY
TEACHERS



Where Do the Animals Come From?

Millions of animals are dissected in schools every year, including frogs, cats, dogs, pigs, mice, rabbits, fish, worms, and insects. Frogs are snatched from the wild. Others come from animal dealers, breeding facilities, slaughterhouses, pet stores, pounds and shelters, thieves, and even "free to a good home" advertisements.

Dealers obtain animals, alive and dead, from suppliers worldwide. Some suppliers, such as slaughterhouses, pet stores, and fishing enterprises, sell animals and their body parts to biological supply companies as a sideline. Some city and county pounds provide suppliers with dead and still-living dogs and cats.

Federal law under the Animal Welfare Act (AWA) requires that animal dealers be licensed and inspected by the U.S.

Department of Agriculture (USDA). The AWA requires that dealers maintain accurate and complete records on each animal and hold each animal for a specific period of time in order to allow people to identify missing companion animals. The division of the USDA that is responsible for inspecting nearly 8,000 facilities, the Animal and Plant Health Inspection Service (APHIS), is woefully understaffed. The USDA has a poor record of enforcing the AWA, and prosecution of facilities found in violation of the AWA is extremely rare.

"If every teacher and student considering dissection were to first witness the capture, handling, and death of each animal they were about to dissect, dissection would fast become an endangered classroom exercise."

JONATHAN P. BALCOMBE,
PH.D., ETHOLOGIST

"APHIS cannot ensure the humane care and treatment of animals at all dealer facilities with reliable frequency, and it did not enforce timely corrections of violations found during inspections." OFFICE OF INSPECTOR GENERAL, AUDIT, MARCH 1992

PETA's undercover investigation of one major biological supply company exposed gross cruelties to live animals received and killed at the facility. As many as 275 live cats were delivered twice weekly, as well as live frogs, birds, rats, and rabbits.

Video footage taken by our investigator shows cats so tightly packed in transport cages that their flesh protruded through the wire mesh. Many animals crammed into the gas chamber to be killed came out alive. Cats are seen moving their paws (which are tied down) and clenching their teeth on the sponges stuffed into their mouths as employees prepare them for embalming. Rats kick furiously even after skin is pulled back from their necks to their mid-sections. Live frogs and crabs are painfully injected with formaldehyde.

There were many other cruelties recorded by our investigator. Employees cursed and jeered at a dog who crawled out from under a pile of dead dogs and was sent back to be gassed again. When a rabbit, still alive after being gassed, tried to crawl out of a wheelbarrow full of water and dead rabbits, employees laughed as a coworker held the rabbit's head under the water, pulling him out just as death seemed near, repeating the process over and over until, bored with the "game," the employee held the animal's head under long enough to drown him. One rat, still alive after being gassed, was thrown from employee to employee.



“I know of several biological supply houses in Louisiana and Mississippi which are notorious for finding a pond and collecting every living thing to be found within it ... many of our states’ ponds and bogs are devoid of herpetofauna because of this practice.”

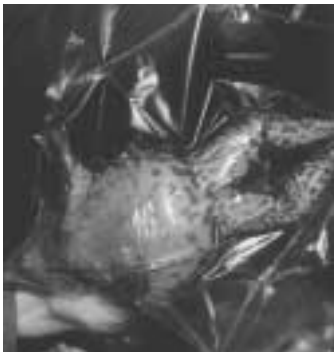
DEZ R. CRAWFORD,
HERPETOLOGIST



It Ain't Easy Being Green

Frogs—the most commonly dissected animals—are among the first species to succumb to environmental pollution and habitat destruction. All species of frogs are disappearing from the Earth at an alarming rate with a devastating and not-yet-fully understood environmental impact. The removal of frogs from ecosystems disrupts nature’s delicate balance—populations of waterborne insects skyrocket, resulting in increased crop destruction and the spread of diseases such as malaria. For example, at the height of its frog trade, India earned \$9.6 million from frog exports but had to spend \$23.53 million to import insecticides.

All over the world, populations of frogs have declined drastically over the past 20 years and in some areas, disappeared completely. Populations of grass frogs and bullfrogs, the most common victims of high school dissection, are imperiled by mass collection and environmental hazards.



What's That Smell?

“*O*ne must question the wisdom of using formaldehyde-preserved specimens for children’s anatomy lessons, since formaldehyde is considered carcinogenic.”

SUSAN M. PERSICO, D.V.M.

Animals used for dissection are often embalmed with formaldehyde or chemicals derived from formaldehyde, a preservative linked to cancers of the throat, lungs, and nasal passages. Formaldehyde can also damage the eyes, cause asthma attacks and bronchitis, and severely irritate the skin.

It’s impossible to ignore the long-term health risks for people who handle and inhale fumes from formaldehyde-treated animal carcasses. Schools may be held liable for illnesses and injuries sustained by students or teachers who have contact with toxic chemicals during dissection exercises, and they can face stiff fines for violating U.S. Occupational Safety and Health Administration (OSHA) regulations regarding levels of hazardous materials in school science laboratories.

The way animal corpses and toxic chemicals are disposed of in some schools and supply houses is also of public concern. PETA investigators observed employees at one biological supply company pouring various chemicals, including phenol, isopropanol, and formaldehyde, onto the ground and into open drains. Careless disposal of toxic substances can contaminate groundwater and soil, threatening food supplies and endangering wildlife, and dumping dead animal bodies preserved with toxic chemicals may be illegal in communities that have strict regulations governing the disposal of hazardous materials.



Jody Boyman



Barry Soorenko



Peter Diggs

Rats: Often misunderstood, rats and mice are frequently used for live experiments, sometimes by children as young as those at the fifth-grade level. Like dogs and cats, these small but gentle and inquisitive animals feel pain and fear.

Pigs: Fetal pigs used in dissection are removed from the bodies of their mothers, who are killed in slaughterhouses so people can eat their flesh.

Rabbits: Rabbits are frequently killed by drowning large numbers of them together in barrels of water. Drowning is not a pleasant way to die, and animals struggle to survive.

Cats: Cats used in dissection can be lost or stolen animal companions. Thousands of cats have been caught in Mexico, then drowned, embalmed, and shipped to the U.S. for classroom dissections.

Frogs: Every year, millions of frogs are taken from the wild for dissection and other uses. As a result, some frog populations have crashed, wiping out entire species.

Dogs: Most dogs used for dissection are lost or abandoned companion animals. They may be stolen or come from pounds or shelters.

Turtles: After being trapped, live turtles are shipped to biological supply companies in burlap sacks labeled "seafood." There, they are warehoused in overcrowded concrete ponds or stacked 10 to 15 feet deep in aluminum tubs and hosed off once a month or so.

Starfish: Starfish are left to die slowly from suffocation. They are often included in basic survey sets, along with earthworms, grasshoppers, crayfish, perch, frogs, mussels, and sponges. "Sets" can include as many as 58 preserved animals.

Minks: Minks and other wild animals raised for their fur are kept in small cages until they are gassed, electrocuted, or poisoned and then skinned. Their bodies are then embalmed and shipped to schools.

Fish: Sharks are taken from their ocean home, often while pregnant, then killed and "processed" for dissection labs. Many other fish used for dissection are also wild-caught.





What Students Think About Dissection

In 1989, Larry Morris Brown of Wright State University polled ninth-grade students in Ohio for their opinions on dissection and discovered the following:

- 33% were bothered by dissection.
- 90% felt that they should be allowed to choose an alternative.
- 50% said that given the choice, they would choose an alternative.
- More than 80% said that teachers should encourage students to share their feelings about dissection and that animal rights should be a part of biology class.
- Some were not studying biology at all because of the dissection requirement.

Another study, conducted in 1985 by Michael Lieb at a Chicago high school, found *“no significant difference in test scores or comprehension between classes that used the traditional dissection laboratories and those that did no dissections.”* He did find evidence that *“dissection can have a negative psychological impact on some students.”* Several studies, such as one done by McCollum in 1988 and another done by More and Ralph in 1992, have shown that student test scores and biology knowledge are significantly higher when they are taught by nondissection methods.

“Destructive work in the classroom impairs a young person’s emotional development by teaching him to rationalize and condone the unjustified inflicting of pain. The ordinary student who is not continuing into a medical or biological career is hardened and made less humane if his high school studies harm animals. The prospective biologist or medical researcher is impoverished by his lack of sensitivity.”

C. STEVENS,
“ATTITUDES TOWARD ANIMALS,”
AMERICAN BIOLOGY TEACHER,
32:77-79

Putting the Life Back Into Biology

Growing numbers of educators would like to end dissection completely. They say it is irrelevant to science education as we enter the 21st century. In fact, students often learn more from using more relevant methods. Dissection labs are also expensive because of the necessity of buying dead animals each year. Alternatives can be used for many years by an unlimited number of students—the hundreds of dollars saved can help fund other student programs and activities.

Life science and biology classes should focus on current and significant topics like genetics, microbiology, and biotechnology. An emphasis on dissection robs students of the opportunity to learn about pertinent issues and questions that face them in a modern world. Today's

challenge is to teach students to respect and understand nature's intricate connections and to value and nurture all forms of life.

“Year after year, animals are used to demonstrate the same well-known principles—although sophisticated models, videotapes, and computer simulations have many advantages, including reusability and durability. ... Biology should be the study of life. Dissection ... teaches only death.”

ERIC DUNAYER, V.M.D.

“[Dissection] not only fails to promote reverence for life, but encourages the tendency to blaspheme it. Instead of increasing empathy, it destroys it. Instead of enlarging our sympathy, it hardens the heart.”

JOSEPH WOOD CRUTCH, NATURALIST

Alternatives to Dissection

Students and teachers can choose from a wide range of exciting and humane alternatives to dissection. Here are just a few examples:

Computer and CD-ROM Programs

DissectionWorks (ScienceWorks, Inc., 808 Retford Cir., Winston-Salem, NC 27104; 800-478-8476; www.scienceclass.com) is comprised of five interactive computer dissection simulations, including the frog, crayfish, perch, and fetal pig. (Also available from ScienceWorks: CatWorks, a digital cat dissection with stunning graphics and accurate information.)

The Digital Frog (Digital Frog International, Trillium Place, RR#2, Puslinch, ON N0B 2J0; 519-766-1097) is a fully interactive CD-ROM that allows students to explore the frog through three seamlessly linked modules: dissection, anatomy, and ecology.

Cambridge Development Laboratory (86 West St., Waltham, MA 02154; 800-637-0047, 617-890-4640) has a large selection of educational software programs available for general biology, biochemistry, genetics, physiology, and anatomy.

Body Works (Softkey International, 1 Athenaeum St., Cambridge, MA 02142; 800-227-5609) is a fascinating computer program that explores the body's systems, structure, and functions.

Sniffy the Virtual Rat (Brooks/Cole Publishing Co., 511 Forest Lodge Rd., Pacific Grove, CA 93950; 800-487-3575) is a unique computer program that allows students to explore the principles of operant psychology using a "virtual rat."

CatLab (Interactive Technology Group, 541 Willamette St., Ste. 414, Eugene, OR 97401; 800-448-4008) is a fully interactive, multimedia dissection of the cat.

Models, Charts, and Other Media

Anamods (Redco Science, 11 Robinson Ln., Oxford, CT 06483; 800-289-9299; 715-723-4427) are accurate representations of nine anatomically correct human organs.

Great American Bullfrog (Denoyer-Geppert, 5225 Ravenswood Ave., Chicago, IL 60640; 800-621-1014; 312-561-9200) is a large-scale model with numbered parts and key card. Circulatory, reproductive, and other systems can be separately dissected.

Biology Chart Series (Denoyer-Geppert, 5225 Ravenswood Ave., Chicago, IL 60640; 800-621-1014; 312-561-9200) includes detailed charts of a dissected frog, perch, crayfish, grasshopper, earthworm, etc.

Cellserv (The Center for Advanced Training in Cell and Molecular Biology, The Catholic University of America, 103 McCort-Ward Bldg., 620 Michigan Ave. N.E., Washington, DC 20064; 202-319-6161) enables students to compare various cell types, watch cell fusion, and observe the effects of cytotoxins through the use of human cell cultures.

Contact the companies listed for catalogs and up-to-date prices. For more information about educational materials and methods, write to PETA. You may also wish to contact the Ethical Science Education Coalition (167 Milk St., #423, Boston, MA 02109-4315; 617-367-9143), which offers *Beyond Dissection: Innovative Teaching Tools for Biology Education*, an excellent catalog with information on hundreds of humane alternatives to dissection.



What Is PETA?

People for the Ethical Treatment of Animals (PETA) is an international nonprofit organization dedicated to exposing and eliminating animal abuse wherever it occurs. PETA uses public education, litigation, research & investigations, media campaigns, and grassroots organizing to accomplish its goal of protecting all animals from exploitation and abuse.

PETA is successful. In 1981, PETA's efforts in behalf of the Silver Spring monkeys resulted in the first-ever conviction of an animal experimenter on cruelty charges.

Since then, PETA has come to the rescue of animals suffering on fur farms and factory farms and in dealer kennels, slaughterhouses, laboratories, pet shops, zoos, and more. We have made countless people aware of the plight of animals they once related to as meat or clothing or did not consider at all. Operating under the credo, "Animals are not ours to eat, wear, experiment on, or use for entertainment," PETA supporters defend the right of all individuals, human and other-than-human, to be respected and live peacefully without fear of harm or persecution.

From Capitol Hill to community animal shelters, PETA strives to promote a world in which animal suffering is recognized, halted, and prevented.

PETA depends on members' donations to fund its vigorous and vital work. It also depends on the determination and dedication of all humane people to take action to ensure that the animal protection struggles of today become the victories of tomorrow.

What You Can Do

Students, parents, educators, and everyone can act to end dissection.

What Students Can Do

- At the beginning of the school year, find out whether you will be expected to perform or observe a dissection. If so, ask for an alternative project. Contact PETA for a free "Cut out dissection" pack that contains information and guidance for students who are faced with dissection, a sample student choice policy, sample letters to the editor, and a list of organizations that sell or lend alternatives.
- When talking to your teacher or professor, calmly explain that you cannot participate in dissection because of your "sincerely held religious and moral beliefs about the sanctity of all life." If he or she refuses your request for an alternative project, take your concerns to the department head or principal. Take detailed notes of what was said during each conversation.
- Be prepared to suggest alternatives that will enable you to gain the same knowledge as your classmates without harming animals. Most students do NOT accept watching another student dissect as an alternative. You should expect to do the same amount of work and be given the same test as other students, provided it does not include a dissected animal, and you should not receive a reduced grade for doing an alternative project.
- Seek out other students who oppose dissection. If your school has an animal rights group, ask members for help. Use any available student forum, such as the school newspaper or student government, to encourage awareness and discussion. Show PETA's video "Classroom Cut-Ups" to students or groups, and circulate a petition asking that the school implement a formal choice dissection policy.
- Contact the media in your community. Write a letter to the editor of your local newspaper about your situation, or send a copy of your signed

petition and suggest that the education writer do a story.

- Finally, if your school firmly resists your efforts, you may wish to obtain legal advice or assistance. The Dissection Hotline (NAVS) can be reached by calling 1-800-922-FROG.

College Students:

E-mail CollegeAction@peta-online.org for a free college action pack!

What Teachers and Others Can Do

- Meet with the principal to share your concerns about dissection. Ask him or her to implement a policy allowing students to choose a humane alternative. Make sure it requires written notice to students and parents informing them of a student's right not to dissect.
- Urge the superintendent of schools or the school board to consider a proposal to ban dissection in the public schools—or at least to adopt a formal choice policy for the entire district.
- If your state or school district already has a choice policy, find out how well it is enforced. Be sure that students and parents are being informed of the policy well before the dissection is scheduled to take place.
- Arrange to show PETA's video "Classroom Cut-Ups," and distribute copies of this brochure. Contact PETA for additional material, including factsheets, petitions, sample student choice policies, and sample school board resolutions supporting students' right to refuse to perform or observe dissection.
- Provide guidance and support to students who refuse to dissect. Advise them on the best way to approach instructors and ask for alternatives, and encourage them to write letters to the editors of the school and local newspapers, circulate petitions, and contact the media. If you are a biology teacher, evaluate and recommend non-animal alternatives that can replace the dissections taking place at your school.



For further information, contact: People for the Ethical Treatment of Animals
501 Front St., Norfolk, VA 23510; 757-622-PETA
PETA-online.org