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Special Report on the Use of Animals in School Science Projects

The Humane Society of the United States

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**The Humane Society
of the United States**

**Special Report on
The Use of Animals
In School Science Projects**

SEPTEMBER 1974

When 28 students are rewarded in national competition for projects that caused pain to animals, it is clear that humanitarians still have a great deal of work ahead of them.

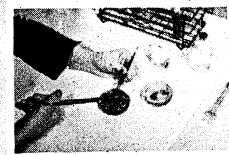
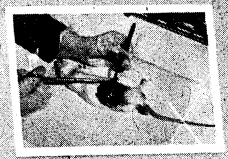
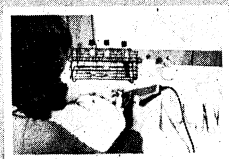
A 17-year-old Iowa girl won a trip to the 1974 International Science and Engineering Fair by grafting skin onto 12 mice in the basement of her home after only talking with a veterinarian. One mouse died, one sloughed off the graft, and the others were killed by the student with an overdose of ether.

A 15-year-old Kentucky boy won a trip to the same fair by trapping three squirrels in a park, confining them to cages in his basement, and giving them electric shocks over a period of several months to learn if they would respond to visual tests. At the conclusion of the experiment he sold two of the squirrels to a research laboratory.


This is the type of relationship with animals that some school systems in the United States are encouraging. It is a far cry from the "respect for all life" that The Humane Society of the United States is attempting to teach young people through ambitious projects aimed at incorporating kindness into the curriculum of the nation's schools. (See HSUS Special Report on Teaching Children to be Kind, issued in June 1974.)

Because taxpayers are underwriting science projects through the schools, and because a

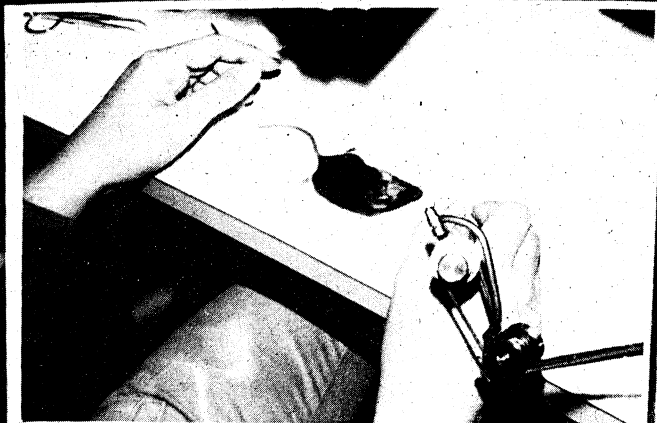
TUMOR REMOVAL AND TRANSPLANT



TUMOR TRANSPLANT WINS NATIONAL RECOGNITION—A 17 year-old Illinois girl won an expense-paid trip to the 1974 International Science and Engineering Fair by transplanting cancerous tumors into 35 animals. The Humane Society believes such projects serve no constructive purpose for teenagers' and are unlikely to teach them respect for animal life.



DRILLING THROUGH SKULL



AMATEUR SURGERY—A 16-year-old Wisconsin boy was recognized in national science fair competition for drilling through the skulls of mice, as illustrated above in his project notebook, and transplanting brain cells from one animal to another. He boasted of having begun animal surgery at age 13.

gional Director Herbert N. Martin said:

"What concerns us, when children who have barely attained the age of reason are encouraged to experiment on living animals, is the kind of attitude that is being cultivated. Students may learn from specific classroom experience things that are entirely different from what the teacher had in mind. It is not often realized that the

Several years before, in 1968, HSUS member Richard K. Morris, Ph.D., a professor of education at Trinity College, had been instrumental in getting the Connecticut Board of Education to adopt a policy urging all school systems in the state to avoid using animals in any way that could cause pain.

In some cases the person listed as supervisor didn't see the animals even once during the entire course of the project.

The most recent development was the improvement in projects accepted for competition in the 1974 International Science and Engineering Fair (ISEF), the final stage of competition for about 90% of the state and local science fairs in the nation. HSUS representatives who attended the Fair, held at Notre Dame University last May, reported there were no projects involving experiments on monkeys, a popular subject at previous Fairs, and a reduction in the number of projects involving home surgery on animals. They also found a greater awareness by student exhibitors that rules did exist governing the humane use of animals.

HSUS officials believe that projects involving pain to animals will be eliminated only when the following ISEF Fair regulations and practices are changed:

- ① Weak Fair rules that explicitly sanction all surgical procedures, use of anaesthetic drugs, ionizing radiation, disease causing organisms, and carcinogens. (Furthermore, since there is no restriction on the infliction of pain, students often perform experiments involving the induction of cancer, use of chemicals at toxic levels, drugs producing

② Lack of enforcement of the good Fair rules urging the use of microscopic animals, worms, and insects instead of vertebrate animals.

“Humanitarians must now focus their efforts on getting science fair officials to do away with these problem areas,” said Dr. Orland, a physiologist with the National Institutes of Health and a longtime crusader against cruelty to animals in classrooms and laboratories. “Adoption of the HSUS Guiding Principles by local and state science fairs instead of the widely used ISEF rules would completely eliminate all projects involving pain to animals.”

● Transplanting brain cells from one living mouse to another by a 16-year-old Wisconsin boy. Photos showed the youth drilling through the skull of a mouse. Five weeks later, he sacrificed the mice with the transplants and sliced brain specimens for microscopic study. This exhibitor boasted in his report of beginning animal surgery at the age of 13 and took credit for startling scientific revelations that have long been known to the scientific world.

- Feeding DDT to 16 mice to determine reactions and lethal doses by a 16-year-old South Dakota girl.

Her conclusions: it took 2 to 3 weeks for the animals to die.

- Subjecting three hamsters to repeated intervals of loud noise for 6 weeks and then exposing them to bacteria to see if they would die more quickly than hamsters that

[illegible]

UNSCIENTIFIC CRUELTY—A hamster was treated cruelly by a 16-year-old Texas exhibitor at the International Science and Engineering Fair for a project with no scientific basis. An HSUS observer reported that neither the student nor his supervisor knew that hamsters metabolize their own vitamin C. Fair rules require that supervisors be qualified in the field under investigation.

had not been subjected to noise, by a 17-year-old Oklahoma girl.

Her conclusion: the three hamsters, which lost half of their weight by the end of the 6-week period, died from disease in only 1 week, whereas three hamsters that had not been exposed to the noise took 4 weeks to die after being exposed to similar bacteria.

- Subjecting two mice to cigarette smoke daily for 3 months by a 17-year-old Washington, D.C., youth.

The results, known for many years by the entire U.S. scientific community: gross abnormalities developed in the lungs.

- Injection of toxic doses of aspirin solution into pregnant rats daily for 2 weeks by a 15-year-old Colorado girl.

Lumps developed in the mothers. The babies, which were killed and dissected 4 hours after birth, developed brain and lung damage.

- Feeding a diet deficient in vitamin C to hamsters by a 16-year-old Texas boy.

Results: weakness, rough coat, watery eyes. Commented Dr. Orlans: "These symptoms must have resulted from some factor other than diet because it is a well-known scientific fact that hamsters can metabolize their own vitamin C." Dr. Orlans criticized the veterinarian who supervised the project because he obviously wasn't "skilled and qualified in the field under investigation," as required by Fair rules. "A completely unscientific project," Dr. Orlans said.

- Cancerous tumors grafted into the bodies of 35 mice by a 17-year-old Illinois girl.

- Rat housed in a cage so small it could hardly move to determine the



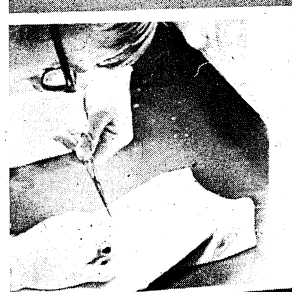
1. INSTRUMENT USED FOR A SPLENECTOMY.



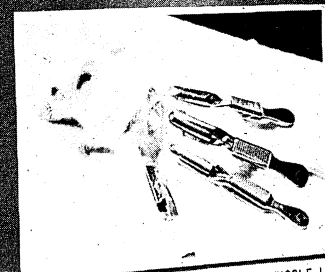
2. ANAESTHETIZING THE MOUSE.



3. HOW THE MOUSE IS HELD FOR SURGERY.



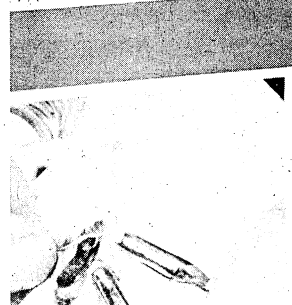
4. CUTTING THROUGH THE SKIN.



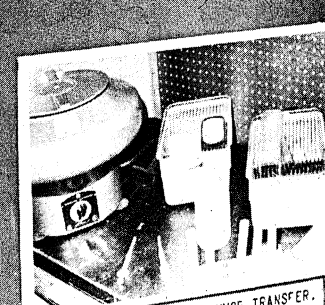
5. GETTING READY TO CUT THROUGH THE MUSCLE LAYER.



6. BRINGING THE SPLEEN THROUGH THE INCISION.



7. WITHDRAWING THE SPLEEN.



8. TRANSFER.



9. WITHDRAWING THE SPLEEN.

HIGH SCHOOL SURGERY—A 17-year-old Iowa youth was admitted to national science fair competition by introducing cancer cells into mice, killing them, and removing their spleens. An improper technique of killing caused intense irritation to the animals' skin.

effects of lack of exercise, by a 17-year-old Missouri youth.

Result: the rat lost interest in everything, became paranoid, mean, and hostile. This rat and another one, which was housed in larger quarters, were killed and dissected. The student told Dr. Orlans that the veterinarian who acted as supervisor for the project never saw the animals and that he was too busy

to give much advice on procedures. Dr. Orlans condemned the project as inhumane and criticized the fact that the student knew nothing about brain histology, which was the sole purpose for having killed the animals.

- Two rats placed in a heat chamber to determine disrupting chemical homeostasis of rat urine, by a 17-year-old Indiana girl.

The heat chamber was so crude that the temperature went to 134°F. instead of the planned 97°F. and had no observation panel. Consequently, two animals died.

Dr. Orlans and Inman concluded that many of the new animal regulations were not implemented or enforced. For instance, the rule that requires that euthanasia be administered by an adult super-

"Adoption of the HSUS Guiding Principles by local and state science fairs would completely eliminate all projects involving pain to animals."

“We have been able to convince thousands of biology teachers of the importance of the humane treatment of animals.”

visor was frequently violated, as evidence by number of students that reported personally killing animals. The rule that requires that supervisors be experienced, qualified, and actively engaged in the field under investigation was frequently ignored.

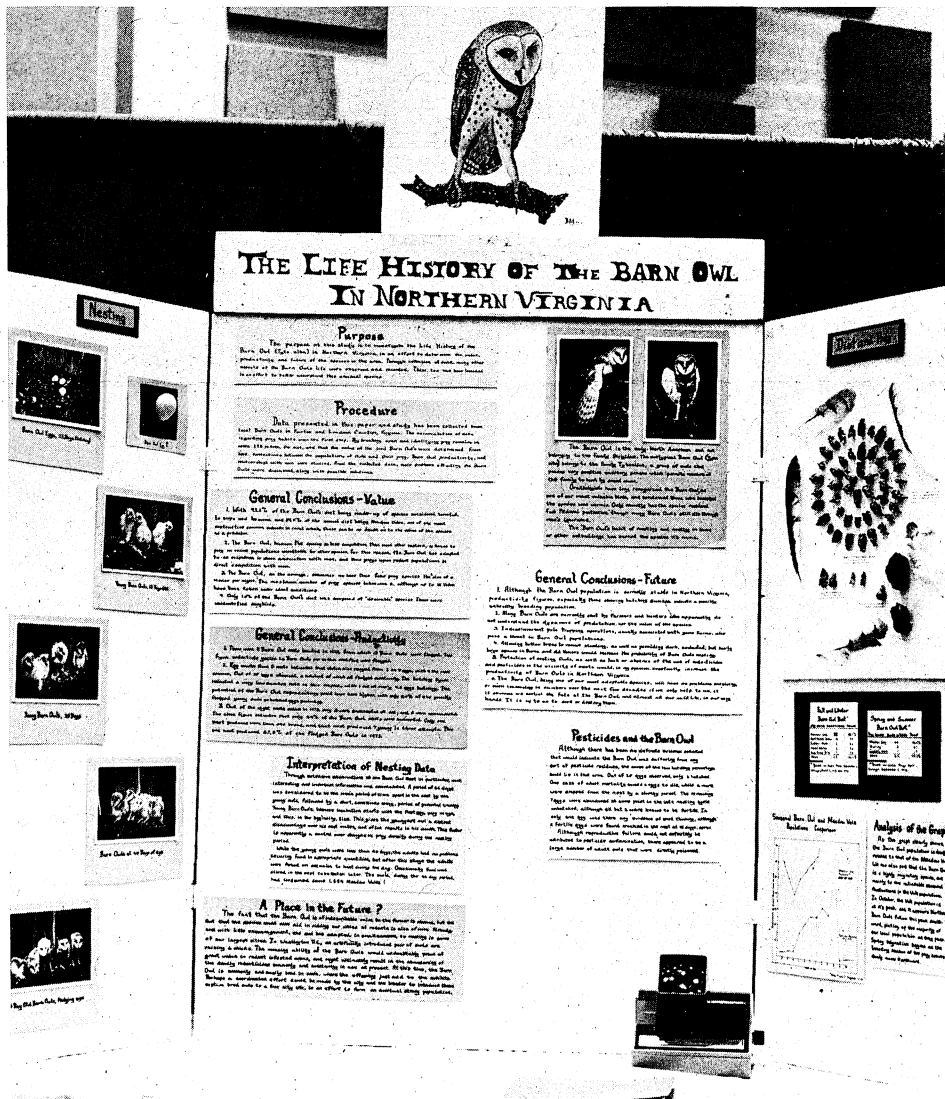
It was obvious from student reports that many project supervisors failed to provide the “continuing or on-the-spot supervision” required for projects conducted in students’ homes. In some cases, the person listed as supervisor didn’t see the animals even once during the entire course of the project. The prerequisite that the proposed project be submitted in writing for approval prior to the beginning of experimentation was frequently violated. Some projects were totally unplanned and unapproved.

In visits to several local fairs earlier this year, HSUS representatives discovered that guidelines for judges issued by some fairs made no mention of existing animal regulations. As a result, exhibitors were not disqualified or even penalized for ignoring them.

Nevertheless, HSUS officials have been encouraged by the fact that some progress has been made.

“I do think the dissemination of the forceful HSUS Guiding Principles has had an immense impact,” Dr. Orlans said. “We have been able to convince thousands of biology teachers of the importance of the humane treatment of animals.”

But, when 28 high school students are rewarded with prizes in a national science fair competition for projects that caused pain to animals, it is clear that humanitarians still have a great deal of educational work ahead of them.



A CONSTRUCTIVE EXPERIMENT—The Humane Society encourages the undertaking of projects that provide the student a constructive learning experience without harming animals. The student who conducted this project must have attained a much greater respect for barn owls.

It's Your Tax Money

Here is an agency-by-agency list of prize money provided by the government for the International Science and Engineering Fair: U.S. Atomic Energy Commission — 20 expense-paid trips; U.S. Air Force — 11 expense-paid trips and \$375 in cash awards; U.S. Navy — 11 expense-paid trips and \$150 cash; U.S. Patent Office — \$500 cash; U.S. Dept. of Agriculture — \$150 cash. In addition, the Army pays for a student to travel to Japan, and the Army, Navy and Air Force together pay for a student trip to Stockholm.

The military services also provide judges, who receive per diem expenses in addition to their salaries during the Fair. In 1973, the Army sent 26 judges, including 3 colonels, the Air Force, 16, and the Navy, 34.

Science Project

The Effects Of

PROTEINS = Sluggish then death

FATS = Restless and Chubby

CARBOHYDRATES = Thin and Weak Dead

On

TYPICAL SCIENCE FAIR CRUELTY—This entry in a local Maryland science fair is typical of experiments that students conduct on animals. The exhibitor, a junior high school student, reported that the mouse fed on protein died in 5 days and the one fed on carbohydrates died in 7.

You Can Help!

- 1 Send for free copies of (a) HSUS Guiding Principles for Use of Animals in Elementary and Secondary Schools and (b) HSUS's listing of recommended study projects and project books to distribute to members of your state and local boards of education, superintendents of schools, principals, school district science coordinators, and biology teachers.
- 2 Contact administrators of your local science fairs and find a means of involving yourself in preparations and formulation of rules.
- 3 Write to federal agencies cooperating with the International Science and Engineering Fair to protest the use of taxpayers' money on projects involving cruelty to animals. Enclose a copy of the HSUS Guiding Principles.
- 4 Have your state legislator send to HSUS headquarters for a copy of the HSUS Model State Law on Student Use of Animals in Schools. Have your local humane society make a project out of getting the law enacted.
- 5 Send a contribution to HSUS to continue its work of monitoring science fairs and educating educators about ways of teaching science to children without practicing cruelty to animals.

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