Lesson Number: MS.AI.1.4

Agriculture Issues in Animal Agriculture

Middle School Food and Agricultural Literacy Curriculum

Precepts

J. Communication

J6. Persuade others

National Standards

CS.09. Compare and contrast issues affecting the AFNR industry.

BS.01.03.01.c. Research, evaluate, and articulate the implications of an ethical, legal, social, or cultural biotechnology issue.

NL-ENG.K-12.4 – Communication Skills

NL-ENG.K-12.12 – Applying Language Skills

NS.5-8.3 – Life Science

NS.5-8.6 – Science in Personal and Social Perspectives

Student Learning Objectives

As a result of this **unit** the student will…

Evaluate current agriculture issues.

As a result of this **lesson** the student will…

Summarize thoughts for animal agriculture debate.

Debate a current issue associated with animal agriculture.

Content Outline

I. **Summarize thoughts for an animal agriculture debate** (Content taken directly from Focusing on Agriculture Issues.)

A. Why is this issue important now?

B. What is the nature of the issue?

C. Who is involved in the issue?

D. What is the historical background of the issue?

E. How can this issue be identified?

F. What are the risks?

G. Is there a strong disagreement as to how the issue should be solved?

Time

Instruction time for this lesson: 45 minutes

Resources

Archive Internet(2001). "Debate forma" Retrieved October 1, 2009, from http://web.archive.org/web/20060503194518/http://w3.tvi.edu/~cgulick/roles.htm#roles — National FFA Organization (2009). Retrieved October 1, 2009. From Team AgEd Learning Center website. http://www.agedlearning.org/files/scorm/Ag_Issues/HTML/issues/animal-examples.html

Tools, Equipment, and Supplies

Sticky notes of three different colors
MS.AI.1.4.AS.A– one per student
MS.AI.1.4.AS. B – one per student

Key Terms

The following terms are presented in this lesson and appear in ***bold italics:***

rebuttal

II. **Debate a current issue associated with animal agriculture.**

A. Opening statements for both sides

B. Arguments for both sides

C. ***Rebuttal*** conference

D. ***Rebuttals***

E. Closing statements for both sides

Interest Approach

Imagine you have a young neighbor that you love to hang out with. You play games together, spend the night at each other's house, and go to the pool together every day during the summer. One day you knock on his door and ask if he wants to go fishing. His mother answers and says he can't come today; he isn't feeling well. You come back the next day and the next but the response is the same each time. Finally, your mom sits you down one day and explains he has a rare disease that the doctors don't understand how to treat. You are furious because you don't understand how someone can get sick and nobody knows how to treat him. Why hasn't a drug, a vaccine, something been created to help your friend? Why don't they know what to do?

The sad reality is that there are many diseases that doctors know little to nothing about. These diseases can strike old people, babies, and even healthy kids like your friend. In order to find the answers to curing these diseases, or in order to better understand their effect on humans, scientists research the issues. Is this a good thing? Is it okay to use animals for such procedures? Today you are going to become detectives and learn more about this topic of using animals for scientific research.

Summary of Content and Teaching Strategies

Objective 1. Summarize thoughts for animal agriculture debate.

Distribute **MS.AI.1.4.AS.A** and select three students to distribute sticky notes of three different colors to each student. References to yellow, blue, and green sticky notes will be used throughout the lesson for clarification purposes. Time limits to complete each step using the sticky notes should be determined on students' level of completion or your own limitations. If some students are struggling to complete the process within the timeframe you determine, it might help to give the last minute of the suggested five minutes to compare sticky notes with a partner. Students will use this information to conduct a debate. Two options for the debate structure are given at the conclusion of objective 1

You have received some very important information on using animals for scientific research. At first glance, this information might seem overwhelming, but we are going to use these magical sticky notes to help organize our thoughts. You will receive three sticky notes, that's it, to collect your thoughts on.

On the yellow sticky note write the word WHAT at the top. As you glance over the article, notice the questions in bold face type that separate the topics into chunks of information. Which of these bold face questions will give you information to determine "what" this issue is about?

Students should say, "What is the nature of the issue?"

Right! When you hear WHAT, read through this section then record all the information you can on this sticky note. You must condense the information to fit on one sticky note.

Place that sticky note next to where you found your information. What questions are there? WHAT!

Observe students' level of completion before moving to the second step.

On the blue sticky note, you should write SO WHAT at the top. After you have determined the WHAT of the information, answer "SO WHAT does this information mean to me?" What is the effect for you, for the agriculture industry, for an individual person? Again, you may only use the space available on the sticky note and you should place it near information that helped you summarize your SO WHAT thoughts. This one will be a little more difficult, as it will require you to think outside of the text and use your own background knowledge. It might help to begin reading the section titled "What are the risks?" Will you find your answer for SO WHAT written word-for-word in the article? No, you will not. Right now let's pull those detective caps on tight to help us with this step! We will begin reading and then record our thoughts on our blue sticky notes now.

Observe students level of completion before moving to the third step.

On our green sticky note, write NOW WHAT. We have identified WHAT the article is about and we have listed SO WHAT does this information mean to us. NOW WHAT is the information that the audience listening to our debate should leave with. Think of this as the closing article.

What information is going to encourage them to be in favor of the issue or against it? Remember, since we do not know which way we will be arguing, we must include the NOW WHAT for both sides of the issue. Once more, is the NOW WHAT going to be found exactly in our reading? No, it is not, so again, pull those detective caps on! This time it might help to begin with the section "Why is this issue important now?" We will begin reading and then record our thoughts on the blue sticky note now.

Observe students level of completion before moving forward.

Those detective caps sure did work today! Now let's close our eyes. We will not begin until I see everyone's eyes closed.

Pause and wait.

Visualize the information on the sticky notes. We should see each item we wrote. Based on that information, raise your hand if you believe animals should be used for scientific research.

Ideally, half of the students support the practice. If not, have students remain with eyes closed and hands raised. Then ask for students to raise their hands who are undecided on the topic. At this time, you should have enough students to divide the class into two large groups, (pros and cons) to conduct the debate. Option 2: To bring more student engagement, it may be more beneficial to divide into smaller groups consisting of two or three members for each position in each group. This would mean having several debates occurring simultaneously. The debate below is scripted for two large groups.

Objective 2: Debate a current issue associated with animal agriculture.

Distribute **MS.AI.1.4.AS.B**.

It is almost time to begin our court room drama concerning using animals for scientific research. To make this court room as real as possible, we will be following a script that will help us organize our thoughts. Have your writing utensil ready and your lawyer attitude on guard so we can best argue our defense.

It is critical to our debate today that we understand this format. Take one minute to read over the sheet silently.

Provide one minute for students to read.

When you hear DEBATE turn to your shoulder partner and summarize in 15 seconds what our courtroom structure will look like today. We should all be prepared to share our summaries. DEBATE!

Call on a few students to summarize the debate format. Make sure students have a firm understanding about the worksheet and format before breaking into groups.

The prosecution team thinks that animal research is not okay. The defense team thinks that animal research is okay and should be allowed to continue. When I say MOVE, the prosecution team should take their article with sticky notes, their notebook, and a writing utensil to the right side of the room. The defense team should take the same materials and shift to the left side of the room. What questions do you have? MOVE!

Prosecution Team: you will decide which three of you will be prosecutors, meaning you will be asking the questions, and the rest will serve as witnesses for your side. You have 10 minutes to determine your role and complete the debate format sheet with your team.

Defense Team: you will be arguing for animals being used for research purposes. You will also have 10 minutes to determine which three will be the prosecutors and who will be witnesses on your team.

What questions are there? Begin!

Monitor groups to make sure they are on task and understanding the concept.

At the end of 10 minutes have the room set up for the debate. This would be a great opportunity to bring in administrators, parents, and other school staff to utilize as jury members and even the judge.

Review/Summary

Stand up and form a circle. Put your hands in the air with your pointer finger out. Close your eyes. When you hear POINT, point at one person in the circle. POINT!

Who has the most fingers pointed at them? It is your turn to share one thing you will take away from this discussion.

Repeat this activity until three to five students have shared.

Excellent job today! Not only were you great detectives, but you were wonderful lawyers and expert witnesses as well, but our debate is not over. As long as there are issues in agriculture, there will always be an opportunity for us to debate our points of view!

Application

Extended classroom activity:

Relive the classroom debate at an open house or for another class. This would be a great recruitment activity for a younger grade.

FFA activity:

Use this as introduction activity to the Creed speaking CDE. Talk about the strengths it takes to be a good public speaker.

SAE activity:

Pick another animal agriculture issue that is pertinent to a student's SAE program. Have them research the topic using the What, So What, and Now What format.

Evaluation

Students should turn in their debate outline notes for a completion grade. If they did not complete it correctly, return it to them and have them redo it. They may only do this once for credit.

Answers to Evaluation

See above.

Animal Agriculture Debate

Why is the issue important now?

During the past 10 years, a major controversy over the use of animals in biomedical and behavioral research has arisen. At the leading edge of the controversy are groups of "animal rights" activists whose purpose is to put an end to all experimentation and testing with animals. Their methods range from the use of publicity, misinformation and the filing of lawsuits, to raiding laboratories and threatening and intimidating scientists.

The traditional animal welfare and humane societies also have been active. Through legislation, regulation, negotiation and intimidation via publicity, they generally have sought to limit and control experiments conducted with animals, to reduce the number of animals being used, or to exempt certain animals from use in biomedical research.

Representatives of these animals cause groups' appeal to the emotions and raise ethical and moral questions. They question man's right to use animals in a number of contexts, including biomedical research; contest the value of animal research and the need to conduct certain types of experiments; challenge and generate concern over the amount of pain and suffering endured by animals during experiments; and promote the use of alternative methods of experimentation in place of the use of animals.

The activities of these organizations have grown in scope and intensity during the past 10 years and have had a number of important consequences. They have created confusion and doubt in the minds of some regarding the need for animal experiments, prompted the passage of federal and state laws regulating or restricting the use of animals in research, and led to the destruction or termination of many experiments.

Source: *Use of Animals in Biomedical Research*, American Medical Association White Paper, 1988.

No issue in the animal rights agenda is as bitterly contested as the question of scientific experiments on animals. With the following information, the public will have a better understanding of the issue, "Should animals be used for scientific research?"

What is the nature of the issue?

The use of animals in scientific research has been a controversial issue for well over a hundred years. The basic problem can be stated quite simply: Research with animals has saved lives, lessened human suffering, and advanced scientific understanding, yet that same research can cause pain and distress for the animals involved and usually results in their death. It is hardly surprising that animal experimentation raises complex questions and generates strong emotions.

Animal experimentation is an essential component of biomedical and behavioral research, a critical part of efforts to prevent, cure, and treat a vast range of ailments. As in the past, investigators are using animals to learn about the most widespread diseases of the aged, including heart disease and cancer, as well as to gain basic knowledge in genetics, physiology, and other life sciences. Animals are also needed to combat new diseases, of which acquired deficiency syndrome (AIDS) is currently the most prominent example. At the same time, behavioral researchers are drawing on animal studies to learn more about such major causes of human suffering as mental illness, drug addiction, and senility.

The recognition that animals are essential in scientific research is critical in making decisions about their use, but these decisions are also made in the broad context of social and ethical values.

Source: Use of Laboratory Animals in Biomedical and Behavioral Research, Commission on Life Sciences National Research Council, National Academy Press, Washington, D.C., 1988.

Animal rights and animal welfare, including farm animal rights and welfare, are issues that elicit polarized and often emotionally charged discussion. Every year, millions of animals are used in laboratories for scientific research that may benefit humans as well as other animals. The purpose of some of this research is to discover new drugs and learn about diseases. Other tests are performed to find if products are safe to use. Many of these experiments take away the animal's freedom to move about or eat as they wish. These tests may cause pain and sometimes even death to the animal.

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Agriculture Issues in Animal Agriculture

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According to Jeanne Williams, "No issue in the animal rights is as bitterly contested as the question of scientific experiments on animals, for this is where the values of humans are most in conflict. In order to save ourselves from suffering, we must gain scientific knowledge, but in order to gain this knowledge, we must cause animals to suffer. The pain and isolation endured by laboratory animals — an estimated 20 million each year in the United States alone — enrages animal advocates, whether it is caused for frivolous reasons (testing a new mascara) or for serious ones (seeking a cure for juvenile diabetes). Scientists who believe that they are acting out of compassion for humanity, are upset by their portrayal as torturers with no motive other than profit" (p. 49).

Source: Animal Rights and Welfare, Edited by Jeanne Williams, The Reference Shelf Volume 63, Number 4, The H.W. Wilson Company, New York, 1991.

Animal Rights advocates believe that animals should not be exploited by humans and that animals have the same rights as humans. They oppose any use of animals for the benefit of humans, including eating meat, maintaining pets, and medical research. These groups often support or carry out illegal break-ins and vandalism.

Antivicisectionists specifically oppose the use of animals in medical research, declaring it "bad science." They believe research conducted for the benefit of humans should be carried out on humans or by using alternatives, rather than animals.

Animal Welfare proponents do not oppose all use of animals in research. They oppose inhumane and unnecessary use of animals and fight to eliminate pain and suffering of animals. These more moderate groups support the "Three R's" – replacement of animals through the use of alternatives; reduction in the number of animals used; and refinement of practices to reduce pain and distress for laboratory animals. These groups, including the Society for the Prevention of Cruelty to Animals (SPCA) and the American Humane Society, often have shelter programs for animals, and offer education programs on issues such as pet treatment and care. However, there is an increasing trend for traditional animal welfare organizations to support the more radical goals of animal rights groups.

PETA (People for the Ethical Treatment of Animals), the largest animal rights group in the country, takes a more radical approach to animal research. The organization was founded by Ingrid Newkirk and Alex Pacheco in 1980. According to Carol L. Burnett, a PETA spokesperson, "Our basic philosophy is that animals are not ours to eat, wear or experiment on. We focus on issues that cause the most suffering and can help the most animals. In addition to opposing animal research philosophically, we also believe that animal research is bad science. The results of experiments on one species are not necessarily the same on another species."

Source: Portraits of a partnership for life: the remarkable story of research, animals & man, Foundation for Biomedical Research.

The ability of biomedical scientists to enhance the well-being of humans and animals depends directly on advancements made possible by research, much of which requires the use of experimental animals. The scientific community has long recognized both a scientific and an ethical responsibility for the humane care of animals, and all who care for or use animals in research, testing, and education must assume responsibility for their general welfare.

Source: Guide for the Care and Use of Laboratory Animals, National Institutes of Health, 1985.

Who is involved in the issue?

It is estimated that there are over 400 animal advocate groups in the United States with membership over two million. These groups vary in their positions from the responsible attempts of The Humane Society of the United States to assure the humane treatment of animals to those who advocate that all research and testing be legally banned. The most militant of these latter groups have broken laboratories, destroyed property, and confiscated animals in an attempt to impede, if not halt, research (p. 23).

Source: Can Animal Use Be Ethically Justified? by J. Wesley Robb in Science and Animals: Addressing Contemporary Issues, Scientists Center for Animal Welfare, 4805 St Elmo Avenue, Bethesda, MD 20814, (301) 654-6390.

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Most animal rights groups have indiscriminately targeted the medical research, cosmetic, fur, and farming industries. But the lengths to which they are prepared to go vary. A common misconception is that the groups share the same philosophy, have a common mission, and pursue similar activities. There are, in fact, three categories in the movement.

According to Dr. Jack Albright, professor of Animal Science, Purdue University, Animal Welfare is more mainstream and reflects people's concern for the humane treatment of animals. Animal welfare appears to have growing support from society at large. When considering animal rights, the animals cannot be exploited. Animals essentially have basic rights — many say the same as people — to be free from confinement, pain, suffering, experiments, perhaps even death. This means that animals would not be used for food, for clothing, for entertainment, for product testing, for seeing-eye dogs, etc. Currently, animal rights is essentially anti-vivisectionist (i.e., dissection or other painful treatment of living animals for purposes of scientific research), pro-activist, and urban-based. The animal rights faction believes that humans have evolved to a point where they can live without any animal products — meat, milk, eggs, leather, wool, fur, by-products, etc. They feel that neither medical researchers nor the cosmetics industry has the right to experiment on animals; that zoos, circuses, rodeos, race tracks, horseback riding, nor even pet owners exploit the animal kingdom.

Source: Animal Rights — Animal Welfare, How the Goals of These Groups Will Effect You as Livestock Producer, by Dr. Jack Albright, Purdue University, 1990.

What is the historical background of the issue?

The first widespread opposition to the use of animals in research was expressed in the nineteenth century. Even before this, however, concern had risen about the treatment of farm animals. The first piece of legislation to forbid cruelty to animals was adopted by the General Court of Massachusetts in 1641 and stated that "No man shall exercise any tyranny or cruelty towards any brute creatures which are usually kept for man''s use" (Stone, 1977). In England, Martin's Act was enacted in 1822 to provide protection for farm animals. In 1824, the Society for the Prevention of Cruelty to Animals (SPCA) was founded to ensure that this act was observed. In 1865, Henry Bergh brought the SPCA idea to America (Turner, 1980). He was motivated not by the use of animals in research but by the ill treatment of horses that he observed in czarist Russia.

In the second half of the nineteenth century, concerns for the welfare of farm animals expanded to include animals used in scientific research. The antivivisectionist movement in England, which sought to abolish the use of animals in research, became engaged in large-scale public agitation in 1870, coincident with the development of experimental physiology and the rapid growth of biomedical research. In 1876, a royal commission appointed to investigate vivisection issued a report that led to enactment of the Cruelty to Animals Act. The act did not abolish all animal experimentation, as desired by the antivivisection movement. Rather, it required experimenters to be licensed by the government for experiments that were expected to cause pain to vertebrates.

As animal experimentation increased in the United States in the second half of the nineteenth century, animal sympathizers in this country also became alarmed. The first American antivivisectionist society was founded in Philadelphia in 1883, followed by the formation of similar societies in New York in 1892 and Boston in 1895. Like their predecessors in England, these groups sought to abolish the use of animals in biomedical research, but they were far less prominent or influential than the major animal-protection societies, such as the American SPCA, the Massachusetts SPCA, and the American Humane Association (Turner, 1980).

Unsuccessful in its efforts toward the end of the nineteenth century to abolish the use of laboratory animals (Cohen and Loew, 1984), the antivivisectionist movement declined in the early twentieth century. However, the animal welfare movement remained active, and in the 1950s and 1960s its increasing strength led to federal regulation of animal experimentation. The Animal Welfare Act was passed in 1966 and amended in 1970, 1976, and 1985. Similar laws have been enacted in other countries to regulate the treatment of laboratory animals (Hampson, 1985).

Source: Use of Laboratory Animals in Biomedical and Behavioral Research, Commission on Life Sciences National Research Council, National Academy Press, Washington, D.C. 1988.

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According to Dr. C. Everett Koop, former U.S. Surgeon General, "Biomedical research has made significant strides throughout history in combating disease and improving the quality of life for the human race. Research with animals has made historical advances possible, from curing tuberculosis to the discovery of insulin for diabetics. Research using animal models has led to better treatments for heart disease and has enabled patients to survive organ transplants for a second chance at life.

"Virtually every major medical advance for both humans and animals has been achieved through biomedical research by using animal models to study and find a cure for a disease and through animal testing to prove the safety and efficacy of a new treatment."

"While animal research has aided us greatly in our battle for better living, our greatest challenges lie before us. Continuing medical research is desperately needed to combat diseases such as cancer, AIDS, Alzheimer's and cystic fibrosis. Without the use of animals in this research, continued medical milestones will be stifled."

"The biomedical research community has been harassed in recent years by animal rights groups trying to suppress necessary research by eliminating the use of animals in research. Research projects by brilliant scientists have been stopped, and facilities at leading institutions have been vandalized by proponents of animal rights."

"There have also been many distortions presented to the public on the use of animals in research, including the premise that the same research could be done without animals. That simply is not true."

Source: Portraits of a partnership for life: the remarkable story of research, animals & man, Foundation for Biomedical Research.

How can the issue be identified?

C. Everett Koop, M.D., Sc.D., former U.S. Surgeon General, indicated, "Virtually every major medical advance for both humans and animals has been achieved through biomedical research by using animal models to study and find a cure for disease, and through animal testing to prove the safety and efficacy of a new treatment. While animal research has aided us greatly in our battle for better living, our greatest challenges lie before us. Continuing medical research is desperately needed to combat disease such as cancer, AIDS, Alzheimer's, and cystic fibrosis. Without the use of animals in this research, continued medical milestones will be stifled."

Medical advances using animal research have been dramatic over the last century. Improved treatments for the three major killers — heart disease, cancer and diabetes — have been made possible through animal research. Jonas Salk's polio vaccine, developed in 1953 using monkeys, has virtually eradicated polio. Animal research led to the discovery of penicillin and other antibiotics.

Currently, there is promising work on the development of an AIDS vaccine using primates. Cats are being used to explore the cause of Sudden Infant Death Syndrome (SIDS). Research on primates has uncovered an important characteristic of Alzheimer's disease, paving the way for discovering its cause and developing potential treatments.

Animals also benefit from knowledge gained through biomedical research. Most of the techniques and treatments used to save animals have been adapted on animal research. Medications to kill parasites and vaccines against rabies, feline leukemia, distemper, and hepatitis have been developed using animal research. New surgical techniques, radiation therapy, chemotherapy, cryosurgery, and hypothermia have helped many pets live longer.

Wild animals have also benefited from animal research. Many endangered species, such as the bald eagle, alligator, red wolf, and Florida panther, have been saved as a result of research on reproduction, nutrition, toxicology, and medicine (pp. 28-29).

Source: Minnesota Farmers Care, Minnesota Forum for Animal Agriculture, 2469 University Avenue, St. Paul, MN 5514, (612) 645-7533.

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What are the risks?

The use of animals in research has dramatically changed the face of human existence. Over the last century, medical advances using animal research have been made by health organizations such as the National Institutes of Health, pharmaceutical firms, and universities, to stamp out diseases such as tuberculosis, polio, and diphtheria. This research has also led to improved treatments for the current major killers: heart disease, cancer, and diabetes.

Animal research helped perfect coronary bypass surgery which has benefited an estimated 200,000 bypass patients annually. Half a million insulin-dependent diabetics survive today because of the discovery of insulin and current diabetes research with animal models.

Childhood diseases, such as rubella and whooping cough, have virtually disappeared due to vaccines developed through animal research. Every major medical advance to cure or treat disease has been developed using research animals. These discoveries and treatments touch every human life in some way from the moment of birth.

Animals have also benefited from medical breakthroughs. Animal research has led to preventive treatments, including medications to kill parasites such as heartworms and hookworms that infect pets, and vaccines to avoid rabies, feline leukemia, distemper, and hepatitis. Research led to the development of a vaccine against parvovirus, a new disease that killed thousands of young dogs in the 1970s.

Domestic animals, such as horses, cattle, sheep, hogs, and chickens also benefit from research on breeding and nutrition. Research on reproduction, nutrition, toxicology, and medicine has helped save endangered species, such as the bald eagle, alligator, red wolf, and Florida panther.

Source: Portraits of a partnership for life: the remarkable story of research, animals & man, Foundation for Biomedical Research.

Is there strong disagreement as to how the issue should be solved?

Historically, regulations concerning the care and use of animals in laboratory research have been derived from two main sources: the experimental scientists themselves and the local humane societies formed to protect pets, farm animals, and work animals from abuse. Since 1896, when the National Institutes of Health (NIH) originated, it has taken an active role in encouraging proper care and use of laboratory animals.

In 1963, the first edition of the Guide for the Care and Use of Laboratory Animals (Guide) was issued by the Animal Care Panel (later renamed the American Association for Laboratory Animal Science). Subsequent editions of the Guide have been developed by the National Research Council (NRC). The fifth, and most recent, edition of the Guide was published in 1985 (NIH85-23, later numbered NIH86-23). This is the primary reference for research animal care and use in the United States.

In 1966, suggestions in the press that pets were being used in research caused a public outcry and led to Congress' enacting the Pet Protection Act of 1966, the first version of what is now called the Animal Welfare Act (AWA). The United States Department of Agriculture (USDA) was given the responsibility for implementing the new law. The act applied only to dogs, cats, rabbits, monkeys, guinea pigs, and hamsters. Although research facilities were required to be registered, to have their suppliers licensed, and to undergo inspection by Animal and Plant health Inspection Service (APHIS) personnel, the Act did not apply directly to the conduct of research using animals. The AWA was revised in 1970 and 1976 and underwent a major revision in December 1985. Although NIH is not responsible for enforcing the Act, requirements for compliance with it have been incorporated into any research conducted or supported by any component of the Public Health Service.

During the 1980s the incidents of vandalism, harassment, and thefts of animals increased substantially. Subsequently, Congress has manifested an increasing interest in the care and use of laboratory animals, and powerful lobbying forces have maintained this interest.

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Each institution which falls under authority of the Animal Welfare Act and/or receives Public Health Service support for research and teaching involving laboratory animals must operate a program with clear lines of authority and responsibility, a properly functioning Institutional Animal Care and Use Committee (IACUC), procedures for self monitoring, adequate veterinary care, a program of occupational health, sound animal husbandry practices, and appropriate maintenance of facilities for housing animals.

Source: Institutional Animal Care and Use Committee Guidebook, U.S. Department of Health and Human Services, Public Health Service National Institutes of Health, NIH Publication No. 92-3415.

The ability of agricultural scientists to enhance the well-being of both agricultural animals and humans depends directly on the advancements made possible by research. This requires the use of experimental animals as well as the dissemination of new knowledge through various teaching programs, many of which also require the use of animals. The agricultural community has long recognized both a scientific and an ethical responsibility for the humane care of animals, and all who care for or use animals in agricultural research or teaching must assume responsibility for the animals' general welfare.

It is especially important to recognize that the intent of agricultural research and teaching is to advance knowledge of immediate or potential benefit to agricultural animals and their production and those who consume the products of animal agriculture. Scientists have developed, and should continue to develop and use, scientifically valid adjunctive or alternative methods to animal use in agricultural research and teaching.

Institutional animal facilities and programs should be operated in accordance with the requirements and recommendations of all applicable federal, state, and local laws, regulations, and policies. Professional judgment is essential in the application of these guidelines (p.1).

Scientists use agricultural animals in experiments and demonstrations, thus saving the time, expense, and uncertain interference associated with use of model species. Some projects call for special environments for agricultural animals, but many require that the animal reside in simulated agricultural production settings.

Proper animal management is essential to the well-being of animals, validity of the research, effectiveness of the teaching, and health and safety of animal care personnel. A sound animal husbandry program provides a system of care that permits the animals to grow, mature, reproduce, and maintain health. Specific operating procedures depend on many objective and subjective factors unique to individual institutions. Well-trained and properly motivated personnel often can achieve high quality animal care with less ideal physical plants and equipment (p.6).

Source: Portraits of a partnership for life; the remarkable story of research, animals & man, Foundation for Biomedical Research.

Debate Format

Opening Statement Presenter:

Gathers the main arguments into an introductory statement. Does not give specific information; just says "this is true because of A and B and C."

Argument 1. _____

Argument 2. _____

Argument 3. _____

Topic Presenters:

Present the main arguments for the team. Each presenter gives specific details that prove A and B and C. (2 or 3)

Argument Details 1. _____

Argument Details 2. _____

Argument Details 3. _____

Rebuttal Presenters:

Answer the arguments of the other team. These presenters must take notes as the other team is presenting their arguments and respond to every argument, using specific information to disprove them. (This can take place multiple times until all arguments are exhausted.)

Round 1:

Answer to Argument 1. _____

Answer to Argument 2. _____

Answer to Argument 3. _____

Rebuttal Conference

Round 2:

Answer to Argument 1. _____

Answer to Argument 2. _____

Answer to Argument 3. _____

Debate Format

Rebuttal Conference

Round 3:

Answer to Argument 1. _____

Answer to Argument 2. _____

Answer to Argument 3. _____

Rebuttal Conference

Round 4:

Answer to Argument 1. _____

Answer to Argument 2. _____

Answer to Argument 3. _____

Closing Statement Presenter:

Presents the closing arguments for the team; repeats the main ideas the team presented and the reasons that develop the argument.

1. _____

Debate Rules

No put downs.
You must raise your hand if it's not your time to speak.
Teams lose 1 point for each interruption.
Teams lose 1 point for whispering while another speaker is talking.
Teams gain 1 point for each argument that does not have a rebuttal.

TIME LIMITS ARE NOT TO EXCEED

- Opening statements for both sides = 3 minutes each
- Arguments for both sides = 3 minutes each
- Rebuttal conference = 1 minute
- Rebuttals = 2 minutes each
- Closing statements for both sides = 3 minutes each