Guidelines for Animals in North Carolina Schools



The purpose of these guidelines is to provide information which will promote safety for instructors and students when animals are brought into the classroom. Many times, inadequate understanding of animal disease and behavior can lead to unnecessary risks for the school children and animals alike.

These guidelines are designed to promote a better understanding of:

- 1. Which animals are not safe to bring into classroom situations,
- 2. Safety precautions for animals which have the potential to transmit disease to children.
- 3. Safety precautions for introducing animals into classroom situations, and
- 4. How to properly handle animal wastes to limit the spread of disease from animals to children.
- 5. Steps to take if a child or staff person is bitten or scratched by an animal.

I. Animals Which Are UNACCEPTABLE for Schools

- **A. Venomous Animals** Venomous spiders, venomous insects, venomous reptiles (poisonous snakes and lizards), toxin-secreting amphibians, and venomous marine fish should be prohibited from school grounds. Exceptions to this recommendation may include situations where such animals are presented at schools by professionals who have experience handling such animals, or where animals are displayed in cases which provide a physical barrier between the animal and the children (e.g., animal is enclosed behind sturdy glass or plastic).
- **B. Hybrid Offspring of Wild Animals-** These animals may exhibit unpredictable behaviors, especially in unfamiliar situations that may occur in a classroom setting with children. Therefore, hybrid offspring of wild animals should not be allowed on school grounds.
- C. Non Domesticated Native Wildlife and Exotic Animals These animals, including non-human primates, pose a risk for transmitting rabies and other zoonotic diseases (diseases which can be transferred from animals to man). Behavior of these animals also tends to be unpredictable. Therefore, these animals should not be brought to schools or handled by children. Exceptions to this recommendation include those instances where animals are presented at schools by professionals who have experience handling wildlife and/or exotic species, or those instances where the animals are displayed in enclosed cages which prevent contact between the animal and the children. Because of the high prevalence of rabies in bats, raccoons, skunks, and other wild carnivores, these animals (including recently dead animals) should not be permitted on school grounds under any circumstances.

- **D. Stray animals -** Stray dogs and cats, and other animals, should never be brought onto school campuses because the health and rabies vaccination status of these animals is seldom known.
- E. Baby Chicks and Ducks Because of the high risk of salmonellosis and campylobacteriosis associated with baby chicks and ducks, and because it is unlawful to sell such animals as pets in North Carolina, they are inappropriate in schools unless they are used as a component of a comprehensive embryology curriculum. Embryology programs should be conducted only in collaboration with the NCSU Cooperative Extension Service (4H). See: http://www.ces.ncsu.edu/depts/poulsci/4h/embryology/embryology.html for details. It is imperative that hand hygiene for students and staff be enforced before and after handling all animals. Additionally, children less than five years of age should not have contact with baby poultry under any circumstances.
- **F. Aggressive Animals** Animals which are bred or trained to demonstrate aggression toward humans and/or animals, or animals which have demonstrated aggression toward humans and/or animals in the past should not be permitted on school campuses. Aggressive, unprovoked, or threatening behavior should mandate an animal's immediate removal. Exceptions may be made for sentry or canine corps dogs for demonstration or law enforcement purposes when the animals are under the control of trained military or law enforcement officials.

II. General Guidelines for Animals in Schools

Animals brought onto school campuses should be clean and healthy to minimize the risk of disease transmission to students. Because children are more susceptible to contracting certain zoonotic diseases due to inadequate hand washing and being more apt to put their hands in their mouths, it is important that animals which they handle be well groomed and free of internal parasites, disease, etc. Therefore, animals which are brought to school should be clean and free of external parasites such as fleas, ticks, and mites, to decrease the chance of transmission of these vectors to the students. Visiting animals should be restricted to an area designated by the principal or administrator. Kittens and puppies may only be appropriate for short classroom visits (see handling restrictions based on rabies vaccination status below).

Some children and adults may be allergic to dander and/or hair from animals. Occasionally, asthma may result from exposure to dander or hair. It is important to determine if any children or adult staff are allergic to animals prior to allowing the animal in the classroom. Because animal allergens can persist after an animal has left the room, an allergic reaction can be triggered in the absence of the animal's presence. Thus, the room should be cleaned of allergens as soon as possible after the animal leaves the area.

- **A. Verified Rabies Vaccination -** Evidence of current rabies vaccination should be required for all dogs, cats, and ferrets which are brought onto school property for instructional purposes. Dogs and cats under three months of age and not vaccinated against rabies should not be handled by children.
- **B. Health Certificates for Dogs** A health certificate (showing proof of current vaccination against leptospirosis, and rabies) signed by a licensed veterinarian should be required for dogs taken onto school grounds. Other requirements should include a negative fecal exam for internal parasites within the past six months and a visual examination to

determine the animal is free of external parasites such as fleas, ticks, and mites. Dogs over four months of age should be housebroken. Younger animals should be approved by the principal or administrator before visiting.

C. Health Certificates for Cats - A health certificate (showing proof of current vaccination against rabies) signed by a licensed veterinarian should be required, Cats also should be free of external parasites such as fleas, ticks, and mites.

D. Livestock at School -

Students should be supervised by responsible adults at all times. Students should not enter enclosed spaces that hold livestock. Where possible, direct animal contact should be minimized. Hand-washing utilizing liquid soap, water and paper towels should occur after contact with animals and before eating, drinking or smoking. If possible, coveralls or similar clothing should be worn over "school clothes" in order to reduce the risk of disease transmission to humans. Clothing that is contaminated with urine, feces or animal products should be cleaned with soap and warm water. It is preferable to change clothing after handling animals and before returning to the school environment.

Raw dairy products should not be consumed. Other animal food products should be properly prepared to reduce the risk of disease transmission. Juvenile ruminants (those not yet weaned) are not appropriate for school settings as they are more likely to be shedding *Cryptosporidium* parasites. Additionally, pregnant ruminants are not appropriate for school settings as they may be shedding *Coxiella burnetti*.

III. Proper Restraint of Animals

Because animals may react strangely to classroom situations, it is important to have an effective way to control them. Fear may cause an animal to attempt to escape or even act aggressively in situations which are unusual to them. Appropriate restraint devices will allow the holder to react quickly as well as prevent harm to the students or escape of the animal.

- **A. Collars and Leashes -** Dogs, cats and ferrets should be wearing a proper collar, harness, and/or leash when on school grounds or in the classroom so that they can be easily controlled. Household rope or string is not considered an appropriate restraint tool. Dogs and ferrets should have a collar or harness and a leash. Cats should have a collar. The owner or person responsible for the animal should stay with the animal during its visit to the school. No animal should be allowed to roam unrestrained on the school campus or in the classroom.
- **B. Pet Birds** Pet birds should never be allowed to fly free in a classroom.
- **C. Designated Areas** All animals should be restricted to the area designated by the principal or administrator. Livestock in particular must be maintained on an impervious surface that can be readily cleaned. In school facilities in which the common dining area is also used as an auditorium, gymnasium, or multi-purpose room, animals may be allowed in the area at times other than during meals if:
 - 1. Effective partitioning or self-closing doors separate the area from food storage and food preparation areas;

- 2. Condiments, equipment, and utensils are stored in enclosed cabinets or removed from the area when animals are present; and
- 3. Dining areas, including tables, countertops, and similar surfaces, are thoroughly cleaned before the next meal service.
- **D. Estrus** Dogs and cats should be determined not to be in estrus ("heat") at the time of the visit.

IV. Special Conditions for Specific Animals

Specific recommendations should be observed for the following animals due to zoonotic diseases that they may carry or certain tendencies exhibited by these animals:

- **A. Psittacine birds** Because psittacine birds (budgies, cockatiels, parakeets, parrots, macaws and cockatoos) may carry psittacosis and may bite those unfamiliar to them, these birds should not be handled by children. Psittacine birds showing any signs of illness should not be brought to the school. Pet psittacine birds may be brought to school as long as their cages are clean and the birds' wastes can be contained, such as within a cage. Because visual inspection alone cannot rule out the presence of psittacosis, it is recommended that only pet psittacine birds which have been under the regular care of a veterinarian should be allowed on school property. Psittacine birds kept for breeding purposes tend to be aggressive and are likely to bite; therefore, so called "breeder birds" should not be brought to school. Psittacine birds permanently housed on school property in cages should be examined by a veterinarian and treated prophylactically for psittacosis 45 days prior to entering the premises.
- **B. Ferrets** Ferrets can be allowed to visit school classrooms, but they must be handled by the person responsible for them. Because of their propensity to bite when startled, it is not recommended that school children hold ferrets visiting the classroom.
- **C. Reptiles and Amphibians** Reptiles and amphibians are popular pets, especially for children who are allergic to animal hair and dander. However, a wide variety of reptile and amphibian species (both wild caught and domestically bred and reared) have been demonstrated to carry and shed salmonella bacteria. Because children are especially prone to contracting reptile-associated salmonellosis, the following special precautions should be instituted when school children handle them: School children under 12 years of age should be prohibited from handling reptiles and amphibians without supervision. No turtles with a carapace length less than four inches should be allowed in schools. Any person handling a reptile or amphibian should be instructed to wash his/her hands thoroughly utilizing warm water, soap and paper towels afterwards. "Wet wipes" should be used only as an adjunct to soap and water.
- **D. Pocket Pets** Because pocket pets (hamsters, guinea pigs, gerbils, sugar gliders, etc.) may carry and shed salmonella bacteria, even when reared as pets or for display, special precautions should be instituted when school children handle them. Lymphocytic choriomeningitis virus (LCMV) is known to exist in feral rodents and may be transmitted to pocket pets held in captivity. Therefore, school children under 12 years of age should be prohibited from handling pocket pets unsupervised. Any child handling a pocket pet should be

instructed to wash his/her hands thoroughly afterwards utilizing soap, warm water and paper towels. "Wet wipes" should be used only as an adjunct to soap and water.

- **E. Fish** Disposable gloves should be worn when cleaning aquariums. Used tank water should be disposed of in sinks that are not used for food preparation or for obtaining water for human consumption.
- **F. Guide, Hearing, and other Service Dogs and Law Enforcement Animals** These animals should not be prohibited from being on school grounds or in classroom situations.

V. Student Contact with Animals

Even very tame animals may react aggressively in strange situations; therefore, student contact with animals should always be supervised and regulated by a few basic rules.

- **A.** Because increased activity and sudden movements can make animals feel threatened, all student contact with animals should be highly organized and supervised.
 - 1. Animal bites can usually be avoided if students are kept in small groups.
 - 2. Rough play or teasing should not be allowed.
- **B.** It is recommended that children not be allowed to feed pets directly from their hands.
- **C.** Small animals such as rabbits, hamsters, gerbils, and mice should be handled with leather gloves whenever possible. Surprisingly, rabbits do not like to be held and will struggle to free themselves.
- **D.** Children should be discouraged from "kissing" animals or having them in close contact with their faces. This statement is especially true for reptiles and amphibians.
- **E.** Education with animals should be used to reemphasize proper hygiene and hand washing recommendations. All children who handle animals should be instructed to wash their hands immediately after handling them.
- **F.** Animals should not be allowed in the vicinity of sinks where children wash their hands, or in any area where food is prepared, stored, or served, or in areas used for the cleaning or storage of food utensils or dishes. Animals should also be restricted from nursing stations or sterile and clean supply rooms. Do not allow cats or dogs in sand boxes where children play.
- **G.** Immunocompromised students may be especially susceptible to zoonotic diseases; therefore, special precautions may be needed to minimize the risk of disease transmission to these students. Consultation with the child's parents about precautionary measures is strongly advised. The Division of Public Health can provide assistance to school systems wanting to draft further precautionary measures to protect individuals who are immunocompromised.

H. Field Trips are an important teaching tool but can pose unique health risks because of the possibility of physical trauma and/or infectious diseases. Several precautions can make field trips a safe and effective learning tool:

Educate your chaperones:

- Healthy animals may carry bacteria, protozoa, parasites and other infectious agents that sometimes make people sick.
- Young children under five years of age, elderly people, pregnant women and people of any age with compromised immune systems are more likely to get sick from these bacteria. They should avoid any contact with reptiles and amphibians.

Promote hand washing:

- Students must wash hands utilizing soap, warm water, and paper towels. "Wet wipes" should be used only as an adjunct to soap and water. Young children will need supervision.
- Remind students to wash hands thoroughly before and after interacting with animals; assist as necessary.

Promote food safety:

- Eat and drink in an area that is well apart from where people and animals interact, and always wash your hands before eating.
- If feeding animals, use only animal food. Do not allow students to feed "people food" to animals.
- Do not consume or allow students to consume raw (unpasteurized) dairy products.

VI. Handling and Disposal of Animal Wastes While on School Campuses

- **A. Clean Up of Animal Wastes** Children should not be allowed to handle or clean up any form of animal waste (feces, urine, blood, etc.). Animal wastes should be disposed of where children can not come in contact with them, such as in a plastic bag or container with a lid or via the sewage system for feces. Food handlers should not be involved in the cleanup of animal waste.
- **B. Prohibited Areas** Animal wastes should not be disposed of near areas where children routinely play or congregate (i.e., sandboxes, school playgrounds, etc.) Also, visiting animals should not be allowed to urinate or defecate in or near these areas.
- **C. Litter Boxes** Litter boxes for visiting animals (typically cats and ferrets) should not be allowed in classrooms. Information should be provided to pregnant students or teachers about the risk of toxoplasmosis to the developing fetus.

VII. Humane Treatment

To avoid the intentional or unintentional abuse, mistreatment, or neglect of animals, the

humane care and husbandry recommendations of the National Science Teachers Association and the National Association of Biology Teachers should be adopted (attached).

VIII. Wound Management

If a child or adult is bitten or scratched by an animal, wound treatment is important regardless of the apparent severity. Universal precautions should be used by the person attending to the wound.

Bleeding should be stopped as quickly as possible. If appropriate, the wound should be washed with soap and water, dried and dressing applied. Because of the possibility of infection, medical personnel should be consulted to determine if further treatment is necessary.

IX. Conclusion

Animals can serve as excellent teaching tools and students love to have them visit the classroom. When using animals as an instructional aid, the objective should always be well planned in advance. By following the above recommendations, the use of animals in the classroom can be made safer for both the animals and the children.

These guidelines were created by the Communicable Disease Branch of the NC Division of Public Health and were based in part on guidelines written by the Alabama Department of Public Health.

For questions or comments please write or call: Communicable Disease Branch 1902 Mail Service Center Raleigh, NC 27699 (919)733-3410

Code of Practice on Use of Animals in Schools

This code of practice is recommended by the National Science Teachers Association for use throughout the United States by elementary, middle/junior high, and high school teachers and students. It applies to educational projects conducted and lessons taught, involving live organisms in schools or in school related activities such as science fairs, science clubs, and science competitions.

The purpose of these guidelines is to enrich education by encouraging students to observe living organisms and to learn proper respect for life. The study of living organisms is essential for an understanding of living processes. This study must be coupled with the observance of humane animal care and treatment.

I. Care and Responsibility for Animals in the Classroom

- **A.** A teacher must have a clear understanding of and a strong commitment to the responsible care of living animals before making any decision to use live animals for educational study. Preparation for the use of live animals should include acquisition of knowledge on care appropriate to the species being used including housing, food, exercise, and the appropriate placement of the animals at the conclusion of the study.
- **B.** Teachers should try to assure that living animals entering the classroom are healthy and free of transmissible disease or other problems that may endanger human health. Not all species are appropriate. Wild animals are not appropriate because they may carry parasites or serious diseases.
- **C.** Maintaining good health and providing optimal care based on an understanding of the life habits of each species used is of primary importance. Animal quarters shall be spacious, shall avoid overcrowding, and shall be sanitary. Handling shall be gentle. Food shall be appropriate to the animal's normal diet and of sufficient quantity and balance to maintain a good standard of nutrition at all times. No animal shall be allowed less than the optimum maintenance level of nutrition. Clean drinking water shall always be available. Adequate provision for care shall be made at all times including vacation times.
- **D.** All aspects of animal care and treatment shall be supervised by a qualified ADULT WHO IS KNOWLEDGEABLE ABOUT RESEARCH METHODS, BIOLOGY, CARE, AND HUSBANDRYOF THE SPECIES BEING STUDIED.
- **E.** Supervisors and students should be familiar with *literature on care and handling* of living organisms. Practical training in these techniques is encouraged.
- **F.** Adequate plans should be made to *control possible unwanted breedings* of the species during the project period.

- **G.** Appropriate plans should be made for future care of the animals at the conclusion of the study.
- **H.** As a general rule, laboratory bred animals should not be released into the wild as they may disturb the natural ecology of the environment.
- **I.** On rare occasions it may be necessary to sacrifice an animal for educational purposes. This shall be done only in a manner accepted and approved by the American Veterinary Association, by a person experienced in these techniques, and at the discretion of the teacher. It should not be done in the presence of immature or young students who may be upset by witnessing such a procedure. Maximum efforts should be made to study as many biological principles as possible from a single animal.
- **J.** The procurement, care and use of animals must comply with existing local, state, and Federal regulations.

II. Experimental Studies of Animals in the Classroom

- **A.** When biological procedures involving living organisms are called for, every effort should be made to use plants or invertebrate animals when possible.
- **B.** No experimental procedure shall be attempted on mammals, birds, reptiles, amphibians, or fish that cause the animal unnecessary pain or discomfort.
- **C.** It is recommended that preserved vertebrate specimens be used for dissections.
- **D.** Students shall not perform dissection surgery on vertebrate animals except under direct supervision of a qualified biomedical scientist or trained adult supervisor.
- **E.** Experimental procedures including the use of pathogens, ionizing radiation, toxic chemicals, and chemicals producing birth defects must be under the supervision of a biomedical scientist or an adult trained in the specific techniques. Such procedures should be done in appropriate laboratory facilities that adhere to safety guidelines.
- **F.** Behavior studies should use only reward (such as providing food) and not punishment in training programs. When food is used as a reward, it should not be withheld for more than 12 hours.
- **G.** If embryos are subjected to invasive or potentially damaging experimental manipulation, the embryo must be destroyed prior to hatching. If normal embryos are hatched, provisions must be made for their care and maintenance.

III. Research Investigations Involving Vertebrate Animals

The National Science Teachers Association recognizes that an exceptionally talented student may wish to conduct research in the biological or medical sciences and endorses procedures for student research as follows:

- **A.** Protocols of extracurricular projects involving animals should be reviewed in advance of the start of the work by a qualified adult supervisor.
- **B.** Preferably, extracurricular projects should be carried out in an approved area of the school or research facility.
- **C.** The project should be carried out with the utmost regard for the humane care and treatment of the animals involved in the project.

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