



A Guide For
4-H Animal Care

Purdue University Cooperative Extension Service
West Lafayette, Indiana

A GUIDE FOR 4-H ANIMAL CARE

- The purpose of this publication is to assist 4-H members, their parents, and volunteer leaders in the proper daily care of animals owned by the 4-H members and their parents.
- This reference guide is based on published data, acceptable principles, expert opinion, and firsthand experience applying methods and practices that are consistent with top quality animal care.
- All 4-H animal programs should be operated in full accordance with applicable federal, state, and local laws, regulations, ordinances, and policies.
- This publication does not attempt to contain an exhaustive list of all aspects of animal care.

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THE MISSION OF 4-H

The mission of today's 4-H is to help youth and volunteers in their development through experiential educational programs, using the knowledge and educational base of Purdue University and the United States Department of Agriculture. It is accomplished through direct involvement of youth, adults, and the community. 4-H educational programs are designed to empower young people to become independent and participating members of their family and community by experiencing the building of self-confidence, developing inquiring minds, encouraging interpersonal cooperation, developing concern for the community, and learning decision-making through real life participation.

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4-H PHILOSOPHY OF ANIMAL CARE

The Indiana 4-H program strongly supports positive animal care and strongly opposes animal abuse. 4-H is also dedicated to the mission of developing youth and volunteers through "Learning by Doing" programs. 4-H livestock projects teach life skills such as acquiring knowledge, making decisions, and applying leadership skills. It is with this philosophy in mind, that the following information is prepared regarding 4-H animal management practices, environmental control, facilities and equipment, and health care.

LIFE SKILLS LEARNED THROUGH 4-H

Competency	Coping	Contributory
Acquiring knowledge Using scientific methods Mastering technology Making career decisions Managing resources Communicating	Recognizing self-worth Relating to others Making decisions Solving problems Dealing with change	Applying leadership skills Taking community action Volunteering Conserving the environment

MANAGEMENT PRACTICES

When working and caring for animals, it is important to insure that appropriate safety measures are in place for both the animals and the persons who care for them. Therefore, there is no substitute for knowledge, common sense, and experience.

Animal handlers should study and learn to anticipate an animal's reaction and try to avoid problem situations. It is most important that 4-H members understand an animal's behavior so one can "outsmart" not "out-muscle" an animal. Foremost in the 4-H'ers mind should always be safety of the handler and of the animal. Moving animals is more of an art than a science. Movement of animals requires planning and knowledge to accomplish it with the least amount of time, effort, and stress to the animal. For example, one important management technique is not to force animals to walk toward apparent dangers or be deliberately stressed by placing them in unnatural circumstances, such as being housed near a predator or moving machinery.

Management considerations with regard to transportation, exercise, housing, birthing, identification, segregation, bedding, feed, water, etc. are listed below:

Beef	Cats / Dogs	Dairy Cattle / Dairy Goats	Horses/ Ponies	Poultry/ Water-fowl	Rabbits/ Cavies	Sheep/ Goats	Swine	Read the items straight across the page from the symbols in your project column.
	.			.	.			Animals should be transported in approved carrying cases.
.	.	.	.			.	.	When animals are moved, a slow walk is preferred, especially during hot or humid weather or on slippery floors.
.	.	.	.	.	.	.	.	During transportation, attempts should be made to minimize stress on the animal. This includes control of loading, manner of driving, interior space, footing, wind, ventilation, shadows, and temperature stress.
.	.	.	.		.	.	.	Most animals need daily exercise to help maintain muscle tone and cardiac fitness and to prevent edema (swelling of tissue due to increased fluid). Routine exercise and handling also prepares them mentally to accept background noise and the unexpected. Rabbits and cavies should be handled daily.
.	dog	.	.			.	.	Consistent discipline is very important to ensure safety of the handler.
.		.	.			.	.	Animals with year-round housing are generally more manageable and healthier than animals kept in the open.
.	.	.	.	.	.	.	.	During birthing, animals should be housed in a separate area away from physical contact with other animals.
.		.				.		When raising both horned and polled animals in the same environment, extra care should be taken with horned animals. Possible separation of animals would ensure that handlers and polled animals do not become injured.
.	.	.	.		.	.	.	Individualized permanent animal identification is important to keep accurate health records, to segregate sick or aggressive animals for individual feeding and care, and to select genetically superior animals for breeding.
	.							Animals should have proper fitting collars identifying owner and a record of rabies shots given by veterinarian.

Note: Cavies are any of the various short-tailed or apparently tailless South American rodents of the family Caviidae, which includes the guinea pig.

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.	Separation of animals may be necessary to lessen overeating and fighting by aggressive animals and inadequate eating by more shy animals.
.	.	.	.	.	.	.	.	Animals should have adequate access to a dry resting place and the opportunity to remain reasonably clean.
.	.	.	.	.	.	.	.	Bedding should be absorbent and free of toxic chemical residues that could injure the animals and/or their handlers. Good management practices include removal and replacement of contaminated bedding.
.	.	.	.	.	.	.	.	Each animal should have adequate feed. Clean, fresh water should be available every day. Automatic waterers should be examined daily to assure their proper operation.
.	.	.	.	.	.	.	.	Feed and water should be available in ways that avoid contact with urine, feces, and other undesirable materials.
.	.	.	.	.	.	.	.	Feed ingredients and complete ration feeds should be wholesome and carefully mixed. All feeds should be carefully stored and delivered to animals to minimize contamination or spoilage.
.	.	.	.	.	.	.	.	Feed containers should be free of sharp edges and constructed of metal, plastic, rubber, concrete, wood, or any other material that is safe, sturdy, and can be thoroughly cleaned. Feed storage containers should be properly labeled.
.	.	.	.	.	.	.	.	A minimum daily level of dietary roughage (fiber) is required for these animals' digestive systems.
	Cat							A sanitary and frequently cleaned litter box should be provided.
.	.	.	.	.	.	.	.	Feet or nails should be trimmed periodically to reduce potential lameness and infections.
			.					To protect the hoof, protective or corrective shoes may be needed. This need will vary with use and terrain. Many animals do not need to be shod.
						.		Shearing ewes before lambing is a good management practice. Unshorn sheep can accidentally smother newborn lambs, and newborn lambs have more difficulty nursing unshorn ewes. Unshorn sheep are more likely to suffer heat stress in hot weather and more open to diseases such as ketosis and "fly strike."
.		.	.			.	.	For safety and handling male animals should be neutered unless kept for breeding purposes.
	.							Animals should be neutered unless kept for breeding.
.	.	.	.	.	.	.	.	Animals should not be restrained by their ears, tail, fur, hair, feathers, and/or wool.

Environmental Control

An animal's good health is often directly related to the environmental factors associated with its living space. The presence of predators, dust, odors, pests, temperature, and humidity has direct effect on an animal's well-being.

Beef	Cats / Dogs	Dairy Cattle/ Dairy Goats	Horses/ Ponies	Poultry/ Water-fowl	Rabbits/ Cavies	Sheep/ Goats	Swine	
.	.	.	.	.	.	.	.	An animal's living space should be checked and cleaned daily to keep the animal's environment free of dust, odors, gases, flies, and parasites. Protection from predators is necessary.
.	dog	.	.	.	.	.	.	The use of fans may be necessary to keep an acceptable temperature, relative humidity, and/or air quality.
.		.				.	.	Water sprays or mists can be beneficial for cooling during hot weather.
							.	To prevent drafts during cold weather, air movement must be kept at a much slower speed than during hot weather.
	.			.	.		.	Housing should be dry and draft free, where the temperature is below 80°.

Facilities And Equipment

Animals react favorably to daily care and comfortable housing. They need adequate protection from bad weather, disease, pests, and predators. Consideration should also be given to specific animal needs such as size of their housing space, lighting, and ventilation. The best of facilities and equipment cannot and should not be a substitute for daily observation and careful attention to signs of illness, injury, and/or unusual behavior.

Beef	Cats / Dogs	Dairy Cattle/ Dairy Goats	Horses/ Ponies	Poultry/ Water-fowl	Rabbits/ Cavies	Sheep/ Goats	Swine	
.	.	.	.	.	.	.	.	Housing should be well-ventilated, properly drained, comfortable, well-lighted, clean, pest-proof, and designed for the specific needs of the animals.
.		.	.			.	.	Animal housing areas should be free of equipment and other items which may cause injuries.
	dog				rabbit		.	Adequate protection should be given to newborns. Rabbits do not retrieve their young and therefore require a nesting box. Piglets should be provided with a warm, draft-free, dry area. Piglets should also be protected from accidental injury or crushing by the sow by using farrowing stalls or guard rails. Newborn puppies should have supplemental heat in cold weather.
							.	Thirty should be the maximum number of pigs housed in any one group.
.		.	.			.	.	Equipment used must be strong and safe. An animal's natural instinct when scared is that of flight, rather than fight.
.	.	.	.	.	.	.	.	Animals should be kept on the property with a secure fence or leash.
.	.	.	.	.	.	.	.	After weaning, young animals should be housed separately.

Health Care

A wise practice is to observe your animals daily to insure their continued good health. Frequent consultation with your veterinarian will help to (1) insure a healthy environment, (2) get prompt treatment, (3) secure isolation of animal for its protection, and (4) prevent the possible spread of a contagious disease to other animals. Reasonable attention must also be given to the use of drugs and their approved withdrawal times.

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				.				Birds obtained for use by 4-H members should be acquired from National Poultry Improvement Plan flocks to insure the birds are disease-free.
.	Animals need a regular veterinarian. The veterinarian should also help develop a herd health program and individual health records.
.	Animals should be scheduled for a visit with a licensed veterinarian: to maintain their vaccination against harmful diseases; for routine tests to insure their continued good health; and freedom from parasites and communicable disease.
.	Precautions should be taken to avoid carrying disease-causing pathogens between pens and buildings. Avoid contact with animals in other facilities. When animals are introduced to a herd, they should be isolated from other animals, blood-tested if necessary, and observed before mixing with the group. Be cautious about where horses, ponies, rabbits, and cavies are allowed to graze to avoid their taking in parasite eggs.
.	Sick or injured animals requiring veterinary medical care should be promptly treated.
.	Animals suspected of contagious disease should be isolated. A veterinarian should be consulted for diagnosis and treatment.
.	Food and Drug Administration dosages and withdrawal times for drugs must be followed. The use of illegal drugs is prohibited.
.	When animal medical procedures are necessary, these should be done only in a professional manner that minimizes trauma, stress, and pain to the animal. These should be performed or supervised by a licensed veterinarian.
		.						Post-milking disinfection of teats is an essential management practice that improves udder health and greatly reduces the incidence of mastitis.

Further information and guidelines may be obtained from the following resources:

- *Animal Agriculture - Myths and Facts*. Animal Industry Foundation. Arlington, VA 22209. Revised April 1989.
- Indiana Commission of Farm Animal Care, Inc. c/o Department of Animal Sciences, Purdue University. West Lafayette, IN 47907
- *Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*. Consortium. Executive Committee, Division of Agricultural Care. Washington, D.C. 20036-1191. March 1988.
- *Guide for the Care and Use of Laboratory Animals*. U.S. Department of Health and Human Services, Public Health Service, National Institute of Health. 1985.
- *Handbook of Livestock Management Techniques*. Battaglia and Mayrose. Burgess Publishing Co. 1981.
- Local veterinarians.
- Members' 4-H project guides available from the County Extension Office.
- *Our Farmers Care*. Research and Original Draft by Louise Archbold and edited by Russel Weisensel. Wisconsin Agri-Business Foundation. Madison, WI 53703. 1989.
- *Pork Industry Handbook*. Purdue Cooperation Extension Service. Purdue University. West Lafayette, IN 47907.
- *Swine Care Guidelines for Pork Producers Using Environmentally Controlled Housing*. National Pork Producers Council. 1990.
- *The Veterinarian's Role in Food Animal Welfare - Positions and Recommendations*. American Veterinary Medical Association, 930 North Meacham Road, Schaumburg, IL 60196. 1986.

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