

November 1994

## The Probe, Issue # 149 -- November 1994

Follow this and additional works at: <http://digitalcommons.unl.edu/icwdmprobe>



Part of the [Environmental Sciences Commons](#)

---

"The Probe, Issue # 149 -- November 1994" (1994). *The Probe: Newsletter of the National Animal Damage Control Association*. 6.  
<http://digitalcommons.unl.edu/icwdmprobe/6>

This Article is brought to you for free and open access by the Wildlife Damage Management, Internet Center for at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in The Probe: Newsletter of the National Animal Damage Control Association by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

# Guidelines for euthanasia of domestic animals by firearms

*J. (Al) Longair, Gordon G. Finley, Marie-Andrée Laniel, Clayton MacKay, Ken Mould, Ernest D. Olfert, Harry Rowsell, Allan Preston*

*Editor's Note: The following article originally appeared in a 1991 issue of the Canadian Veterinary Journal, volume 32: 724-726. It is a product of the Animal Welfare Committee of the Canadian Veterinary Medical Association (CVMA). It is reprinted here with permission. Although the focus is on domestic animals, many of the principles also apply to shooting wild or feral animals.*

*Euthanasia is defined by the American Veterinary Medical Association (AVMA) as the act of inducing humane death in an animal. In general, a humane death is the product of a killing technique that results in rapid unconsciousness followed by cardiac or respiratory arrest and ultimate loss of brain function, while minimizing any stress and anxiety experienced by the animal prior to unconsciousness.*

*The application of euthanasia to wildlife management in general, and wildlife damage management in particular, is controversial within the profession. The Editors of **The PROBE** welcome and encourage constructive dialogue on this topic.*

All animals that are to be killed, whether for food, for humane reasons, or because they are homeless, must receive a quick and painless death. The proper disposal of stray and unwanted animals in small communities is one area of specific concern. Whenever possible, veterinary or experienced humane society personnel should be utilized to humanely kill stray or unwanted animals. However, in some smaller communities, the materials, knowledge and expertise necessary to humanely kill stray and unwanted animals may not be readily available.

If obtaining the services of a veterinarian or a humane society to perform euthanasia is not possible, it is the view of the CVMA Animal Welfare Committee that the best alternative that provides for a humane death for the animal is by shooting. The following brief guidelines are intended to assist persons who must perform this task; they contain recommended techniques that will help to ensure that any animals killed by shooting will die in a humane way.

The initial impetus for the preparation of this article was the concern that stray and unwanted animals in smaller rural areas were often killed inhu-

manely, in the absence of expertise from a veterinarian or a humane society. To provide a set of simple guidelines on humanely shooting animals, for the police or for anyone else who might be placed in a situation where an animal needed to be killed, these guidelines were developed. It is the intention of the Animal Welfare Committee to produce this information as a small brochure or pamphlet for circulation to policing agencies, humane societies, and other interested people.

## General Considerations

For an animal to be receive a humane death, it should be rendered unconscious as rapidly as possible. Therefore, most recommended methods of euthanasia involve agents that affect the brain very rapidly. Shooting, although esthetically unpleasant, is a humane method of killing provided that the shot penetrates the brain. To ensure that this occurs, the weapon used must be fired with the muzzle placed close to the animal's head, pointing in the required direction. The animal should be adequately restrained to ensure proper placement of the shot. Each animal species has a slightly different brain positioning within the skull, therefore knowledge of these differences is essential.

Shooting an animal should only be done by persons well versed in handling firearms and licensed to use firearms, and only in jurisdictions that allow for firearm use. Ideally, local policing agencies should be involved. Safety to personnel and the general public must be considered. The procedure should be performed outdoors in a location away from public access. If police officers using their firearms for humanely shooting an animal from close range would be either a .22 caliber rifle with long-rifle mushroom shells or a .410 gauge shotgun with slugs or pellets. In most cases the barrel of the firearm should be 3—5 cm from the head if using a rifle, pistol or .410 gauge shotgun, or 1—2 m if using a larger gauge shotgun or rifle (e.g. a .308 rifle).

*Continued on page 6, Col. 1*

# What is NADCA's Role in NWCO Certification?

At the September NADCA Membership Meeting in Albuquerque, New Mexico, a lengthy discussion regarding Nuisance Wildlife Control Operators (NWCO) Certification ensued. Some individuals pointed out that NADCA needed to be pro-active. Otherwise, those certification decisions would be driven by a few dominant commercial enterprises.

This issue could be far-reaching. It could involve all 50 states. It could also involve more than just NWCO's — like state and federal ADC personnel, extension wildlife specialists, and others.

The feeling seemed to be that NADCA should not provide certification. This may be more appropriately done at the state level and by state agencies. It was suggested that NADCA might choose to develop a model certification program. The NADCA could also list minimum standards which states could adopt or use as a starting point. The distinction between certification and licensing was made and discussed.

Most agreed that NADCA does not wish to get into the certification business itself. However, NADCA should take some action to help ensure that those in the nuisance wildlife field understand basic wildlife control principles and practices.

The general public, because of their close contact with NWCO's, may reach general conclusions about wildlife biologists and wildlife damage managers, based on the professionalism (or lack thereof) of these individuals.

The NADCA president, James E. Forbes, is forming a committee to look into certification/licensing of NWCO's and

provide professional input to the various states through the International Association of Fish and Wildlife Agencies.

The Wildlife Society Wildlife Damage Management Working Group is taking similar action. Mr. Forbes has asked NADCA member Gary S. Kania to act as coordinator between NADCA and the Wildlife Society Working Group.

What do you think? Do you agree or disagree with the above statements? Please send your comments and opinions to your Regional Director. Incidentally, **The PROBE** co-editor Bob Timm would welcome your "Letter to the Editor" on this subject.

If you would like to have a hand in guiding NWCO Certification /Licensing by serving on the Certification Committee, please contact Jim Forbes, (518) 674-2190 (evenings).

## CALENDAR OF UPCOMING EVENTS

**January 26-27, 1995: Annual Meeting New York Chapter of The Wildlife Society, Rochester, New York.** Theme: "Wildlife and Human Populations in Conflict". Contact: Mark Lowery, NYS Department of Environmental Conservation, SUNY, Bldg. 40, Stony Brook, NY 11790-2356, (516) 444-0305 or Lynn Braband, Critter Control, P.O. Box 19389, Rochester, NY 14619, (716) 235-2530.

**February 10-12, 1995: The Wildlife Damage Management Instructional Conference.** Presented by Wildlife Control Technology magazine. To be held at the Nordic Hills Resort and Conference Center, Itasca, Illinois. Contact: Peggy, (708) 858-4928. **NADCA Membership Meeting** - held in conjunction with this conference. Contact: Scott R. Craven, 226 Russell Labs, Univ. of Wis., Madison, WI 53706, (608) 263-6325.

**April 10-13, 1995: 12th Great Plains Wildlife Damage Control Workshop, Doubletree Hotel, Tulsa, Oklahoma.** Contact Ron Masters, (405) 744-6432 or Grant Huggins, (405) 221-7277.

**July 16-21, 1995: 10th International Conference on Bear Research and Management.** University of Alaska, Fairbanks, AK. Contact: Harry Reynolds, AK Dept. of Fish & Game, 1300 College Road, Fairbanks, AK 99701-1599. (907) 452-1531. FAX (907) 452-6410.

*The Probe* is the newsletter of the National Animal Damage Control Association, published 11 times per year. Copyright © 1994 NADCA. No part of this newsletter may be reproduced in any form without the written permission of the Editors.

**Editors:** Robert H. Schmidt, Department of Fisheries and Wildlife, Utah State University, Logan UT 84322-5210

Robert M. Timm, Hopland Research & Extension Center, 4070 University Road, Hopland, CA 95449

**Editorial Assistant:**

Pamela J. Tinnin, 160 Mulford Hall, UC Berkeley, Berkeley, CA 94720

Your contributions to *The Probe* are welcome. Please send news clippings, new techniques, publications, and meeting notices to *The Probe*, c/o Hopland Research & Extension Center, 4070 University Road, Hopland, CA 95449. If you prefer to FAX material, our FAX number is (707) 744-1040. The deadline for submitting material is the 15th of each month. Opinions expressed in this newsletter are not necessarily those of NADCA.

---

# **ADC News, Tips, Ideas , Publications . . .**

## **Setting Prices for Animal Damage Control Services**

One of the most difficult tasks for animal damage controllers is setting prices that will both provide a working wage and yet still entice a customer to hire you rather than do it themselves. Obviously, if you're only part-time or a recreational ADC agent than this issue isn't as critical. But if you plan on taking the full-time plunge than this issue should be a top priority.

The first step in setting prices is determining how many hours it takes to do typical jobs, like squirrel removal, carcass pickup, inspection, etc. Remember to include travel time and animal/carcass handling time when calculating the total hours for a task. Your pay should start the moment you leave the driveway and only end when the carcass is in the freezer. Get an average of the time needed to reach the towns that border the one where you live. That will give you a pretty good idea of the time needed to serve the customers in your working area. If you are new to the business, drive around to the area towns during rush hour to determine what your travel time will be.

The next step is to set an hourly rate. Before you price yourself too low, consider that at least 35-50% of your wage will be consumed by expenses and taxes. So when you feel rich after getting paid, remember that your net earnings are maximally sixty-five percent of the check's face value.

The final step in price setting is how you will charge your customer. Your cost structure should have two major parts. The first part is what you decide to charge for one-stop/emergency work. Decide on what fee you will charge for catching a squirrel in the basement or getting a bat out of the bathroom. Don't forget to add extra money for late night work.

The other part is your trapping price structure. This will be the job that you return to day after day when removing an animal infestation. While you can nuance this pricing in a number of ways, they generally follow one of two main patterns. The first is a pay-per-visit method in which the client pays the trapper for every visit for a set number of days, like five. Here the trapper is paid whether anything is caught or not, and is paid one price no matter how many animals are caught. To prevent the client from being gouged, the trapper will then trap for the next five days for free providing that nothing was caught during the first five days. Pay-per-animal is the other method. With this method, the customer pays for each successful target catch and not by visits. A little bit of thought will reveal the advantages and disadvantages of each method. Feel free to modify them to meet your needs.

The important thing is to keep your pricing structure simple enough for your client to understand, effective enough to pay you a wage, and fair enough to draw business. Just remember

not to work for free. It's not worth the risk of being sued for work that you don't earn any money with.

*PROBE Correspondent Stephen Vantassel*

## **Saccharin Samaritans**

I have received a number of requests to help stranded cats in trees, injured animals, etc. Often the caller will describe the poor animal's plight and how no one, including the local SPCA, will help it. When I discuss the cost, these people invariably inform me that it isn't their animal and that they are just trying to be responsible people. I had one lady tell me that if I could live with myself after not helping the cat, then okay. I guess she didn't consider that her conscience didn't bother her enough to pay for the cat's rescue.

I call these so-called "concerned citizens" *Saccharin Samaritans*. They are Saccharin Samaritans because the Biblical Samaritan not only rescued the mugging victim, but he also paid the innkeeper to help the victim's continued recovery (Luke 10:35). The Samaritan played the role of the good citizen. But unlike many so-called concerned citizens, he didn't ask the innkeeper for a free room. Rather he paid the innkeeper for the room from his own money.

Three points emerge when we consider the actions of these Saccharin Samaritans. First, we should not get too overwhelmed with all this animal rights talk. For in reality, the vast majority of people only care about the animal's suffering if it doesn't cost them anything. Second, the public should be educated to call a veterinarian or a wildlife rehabilitator, not an ADC person, when looking for someone to help an injured animal. Failure to educate may only make you the object of their misdirected ire. In my state, it is illegal for me to rehabilitate animals, so I make sure that the caller knows this. Finally, if you can do some pro bono work in rescuing animals from trees, holes, etc., then by all means do so. Don't, however, allow callers to put you under some guilt complex because you won't work for free in every situation. People who do that are only Saccharin Samaritans unwilling to look at their own responsibility.

*PROBE Correspondent Stephen Vantassel, 332A Cooley Street, Box 102, Springfield, MA 01128, E-Mail America Online users send to ADCTRAPPER.*



*The editors of The PROBE thank contributors to this issue: Stephen Vantassel, James E. Forbes, and Wes Jones. Send your contributions to The PROBE, 4070 University Road, Hopland, CA 95449.*

---

# Part 2: Hantavirus Prevention

*This is the second part of "Hantavirus: Prevention is the Best Defense," which began in the October PROBE (issue #148). It is authored by Suzanne Graham, USDA Forest Service, and is reprinted from Forestry Research West, Sept. 1994 issue.*

## Risk factors discussed at workshop

Sandra Martin, a research wildlife biologist with the Pacific Northwest Research Station who works in Kittitas County in central Washington State, shares her colleagues' concerns about hantavirus. She also sent rodent samples to the Centers for Disease Control (CDC) for testing, but has not yet received results. Nevertheless, says Martin, "It's a foregone conclusion that we have deer mice infected with hantavirus in this State—the probability is just too high to ignore." She believes that the danger extends far beyond direct handling of the rodents. Pointing out that one of the confirmed cases was a young bird researcher working out of a remote mice-infested cabin in the southern Sierra Nevada, she expresses concern about the overall lack of hantavirus knowledge among wildlife researchers.

To help combat the confusion, Martin organized a 4-hour session on Vertebrate Research Hazards at the March 1994 annual meeting of the Northwest Scientific Association, 2 hours of which were specifically devoted to the risk factors and protection measures surrounding the hantavirus. At the meeting, held in conjunction with the Society for Northwestern Vertebrate Biology and several other scientific associations, field researchers also answered questionnaires and gave blood samples for a nationwide study by the CDC in cooperation with state Departments of Health to determine the infection level among high risk groups. Questionnaire respondents also were asked if they could recall any colleague suffering from sudden onset of respiratory illness over the past few years. Samples and data collected at this and at an earlier Washington Wildlife Society conference have put Washington State in the forefront of representation in the national study.

Taking precautionary measures against the hantavirus causes some problems. Martin acknowledges the added inconvenience complicates already difficult working conditions. Andrew Carey, a Principal Research Biologist with the Pacific Northwest Research Station, points to extra equipment expense and the extra time needed to train field workers. Even then, he admits, the result is sometimes increased anxiety. "Some people are just not comfortable continuing to work with rodents once they realize the risks, and then you have to deal with reassigning them to other research projects."

Nevertheless, Carey and Martin believe the extra trouble is justified. They both hope that within the next 15 months, the CDC will have a better handle on the hantavirus. Things are looking promising: the agency, having isolated the virus in October 1993, is now culturing it. CDC scientists have injected the virus back into deer mice and hope to be able to determine how long it takes for rodents' urine and feces to carry the infection. They also are exploring how the virus is spread among deer mice communities. "From what we know about other viruses, we believe the main route of transmission is through males fighting and biting over territory, and then it spreads to females through courtship. But we're also exploring the possibility of vertical transmission of virus, from parent mice to offspring in utero," says Lori Armstrong, epidemic intelligence service officer for the CDC. Until more is known, she cautions, "any bodily fluid—saliva, urine, serum, blood—or any contact with the animal's tissue is suspect as a means of transmission of the virus." So for now the CDC's interim guidelines for risk reduction, which deliberately err on the side of conservatism, remain in effect.

## Guidelines provide safeguard against contracting virus

Those guidelines list safeguards that should be used by anyone likely to encounter infected rodents, such as rural householders or wilderness campers. General advice is to avoid coming into contact with rodents. For campers this means sleeping in tents with floors and sleeping surfaces at least 12 inches above the ground, keeping food in rodent-proof containers, using only water that is bottled or disinfected, burning or burying all trash, avoiding potential rodent nesting sites, and staying out of cabins or other enclosed shelters that are rodent infested until they have been cleaned and disinfected according to CDC guidelines.

For householders and farm or ranch owners, recommendations include washing dishes and cooking utensils immediately and removing all spilled food; storing food, animal fodder, and garbage in metal or thick plastic containers with tight-fitting lids; using steel wool or cement to cover all openings into the home with a diameter of more than a quarter-inch; placing metal roof flashing as a rodent barrier around the base of buildings and 3 inches of gravel under the base to discourage rodent burrowing; using raised cement foundations in any new construction; placing woodpiles 100 feet or more from the house and elevating wood at least 12 inches off the ground; cutting grass, brush, and dense shrub-

*Continued on next page, col. 1*

---

# Trapping Weasels

*James E. Forbes, President, NADCA*

**T**his month, I'd like to update you on the NADCA Membership meeting which was held on September 22, 1994, in conjunction with the Wildlife Society First Annual Conference, in Albuquerque, New Mexico.

It was appropriate to meet, in Albuquerque, as George Rost (first NADCA President) and Bill Fitzwater (First Editor, *The PROBE*), both residents of Albuquerque, were among the founding members of NADCA some fifteen years ago.

Treasurer Wes Jones reported that the financial report for Calendar Year 1994 showed: Income - \$7,733; Expenses — \$6,615; Checking Account — \$3,813; Savings Account — \$4,343, for a Total Balance of \$8,156.

Wes also reported that our current membership stands at 464 members. Currently, the three largest regions are Region 7, 106 members, Region 1 - 64, and Region 2 - 50. Obviously, there are lots of prospective members out there if we (all of us) would just ask them to join NADCA.

Co-editors Bob Timm and Robert Schmidt reported on the status of *The PROBE* newsletter. One problem mentioned was the lack of input from the members to the editors, which resulted in 4-page issues in the past several months. However, the September and October issues will each be 8 and 6 pages, respectively. Stephen Vantassel, a Massachusetts N.W.C.O., has been invited to provide regular contributions from his perspective. Forbes asked the NADCA Regional Directors to each submit a feature length article to Bob Schmidt. He also asked APHIS-ADC administrators, in the East and West Regions, to provide appropriate news items.

I'd like to encourage all members to contribute items of interest. They need not be typed. In fact, you may call me at (518) 674-2190 and give me the information verbally — I'll write it for you.

The remainder of the meeting, a lengthy discussion of items of interest to NADCA members ensued regarding NWCO's Certification, a proposed Ways and Means Committee; the In-service Training Committee, and a proposed Publication Committee. These will be discussed in greater detail in future issues of *The PROBE*.

In closing, I would like to encourage all of you to be active in contacting the committee Chairs, Regional Directors or Officers. Please give them your ideas and suggestions on how we can improve NADCA and deliver better service to our members.

bery within 100 feet of the house; hauling away trash, abandoned vehicles, discarded tires and other potential nesting sites; and using spring-loaded rodent traps continuously.

When emptying rodent traps, or cleaning out rodent-infested areas, the CDC advises first thoroughly wetting the targeted area with disinfectant, wearing rubber gloves while removing the remains and placing them inside a plastic bag also containing a disinfectant. Before final disposal, place everything inside a second plastic bag and then burn or bury it all or otherwise dispose of it according to local requirements.

Much of the above sounds extreme. However, the CDC predicts that "as we continue to find human cases and infected rodents, people will have to take more precautions." Carey also points out that apart from hantavirus, two of the biggest disease risks involved with handling animals in the wild are leptosporosis and tularemia, and "the precautions we're taking against hantavirus provide some safeguards against these zoonoses as well." CDC Epidemiologist Armstrong, while acknowledging that most wildlife researchers and field workers don't wear respirator masks and surgical gloves at the moment, says that will have to change. In Washington State, it's already changing. In a state where no "cure" for hantavirus has yet been needed, at least some researchers have decided that informed knowledge and rigorous precautions may be the best remedy of all.

For more information contact Lori Armstrong, Centers for Disease Control, 1600 Clifton Rd N.E., Atlanta, GA 30333. (404) 639-1115.

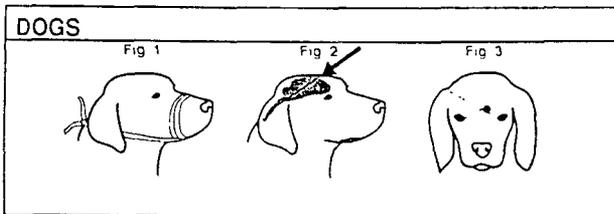
## **NADCA Region 4 Director Moves to Texas**

Rosemary Heinan, NADCA member, Regional Director of Region 4, and Chairwoman of the Membership Committee, has relocated to Alpine, Texas, where she is a graduate student studying the food habits of mountain lions. She is looking forward to working them.

Rosemary is also our outstanding NADCA cap saleswoman. Her new address is P.O. Box 336, Alpine, TX 79830, Telephone (915) 837-3184.

## ... Euthanasia of domestic animals by firearms

To facilitate the humane shooting of an animal, familiarity with handling animals is necessary. The animal should be treated with a calm and reassuring manner to reduce any anxiety that the animal may have. An animal that becomes tense or excited will be more difficult to restrain and to kill humanely. In some cases it may be advisable to sedate the animal before killing it. In some cases the shot may pass right through the animal's head, thus direction of shooting must be considered. It must be noted that although an animal shot correctly is instantly unconscious, there may be convulsive thrashing and muscle spasms for some seconds after the shot.

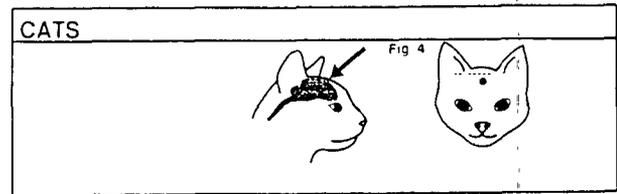


### Guidelines for shooting domestic animal species

#### Dogs

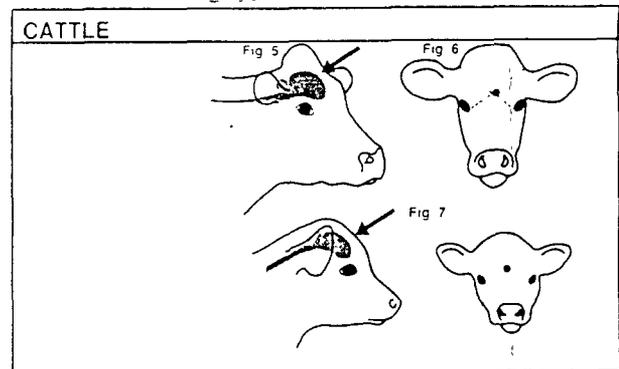
Dogs should always be handled and spoken to in a kind and calm manner. It may be necessary in some cases to muzzle unpredictable, nervous or injured animals. Muzzling is easily done by taking a long piece of soft cord (or gauze, soft fabric or panty hose) and making a loop in the middle. The loop is slipped over the dog's muzzle and gently but firmly tightened with a single half-hitch knot on top. The ends of the cord are then passed around under the chin, crossed over and tied behind the ears (Figure 1).

Once the dog has relaxed, it can be taken outside, the leash secured to a solid object, and the dog offered some food. It may be convenient to place the food on a small stool or chair. The firearm is then aimed at a point midway between the level of the eyes and the base of the ears, but slightly off to one side so as to miss the bony ridge that runs down the middle of the skull (Figures 2 and 3). The aim should be slightly across the dog and towards the spine. In some cases, the shot may pass right through the animal's head, thus direction of shooting must be considered.



#### Cats

Members of the cat family may be very difficult to shoot humanely. It may be preferable to sedate those animals (medication can be added to their food, for example) prior to shooting them. It is recommended that the animal be placed into a canvas bag or thick blanket with only the head out. The firearm is then aimed at the center of the cat's head slightly below a line drawn midway between the ears (Figure 4). When proper technique has been used, the animal will become unconscious immediately, but convulsive activity and bleeding may persist for a short period of time. In some cases the shot may pass right through the animal's head, thus direction of shooting must be considered.



#### Cattle

##### Mature Cattle

The head should be secured in a chute or by halter and shank to a solid structure. Food can be placed in front of the animal. The firearm is held at right angles to the slope of the front of the skull and aimed at a point 2/3 of the way up on the forehead at a point intersecting imaginary lines drawn between the back of the ears and the corners of the eyes (Figures 5 and 6). It may be easier to shoot slightly to the side of the ridge that runs down the center of the face.

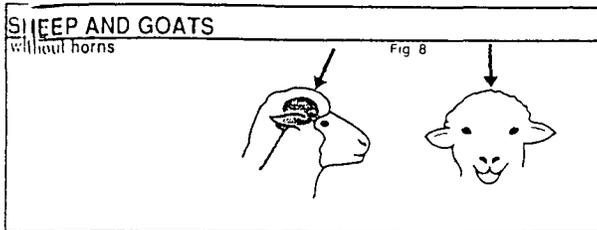
##### Calves

Calves can be handled in the same manner as mature cattle but the aim of the firearm should be squarely on the midline of the forehead slightly lower than in mature cattle (Figure 7).

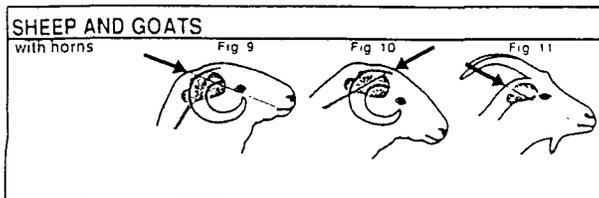
### Sheep and goats

Sheep and goats without horns

Sheep and goats can be handled in the same manner as cattle – the head should be secured with a halter, and food offered to



the animal. The aim of the firearm should be from behind or from the top of the head at a point high up on the head an equal distance from the eyes and ears (Figure 8).

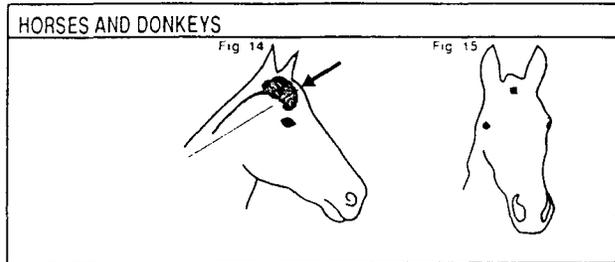
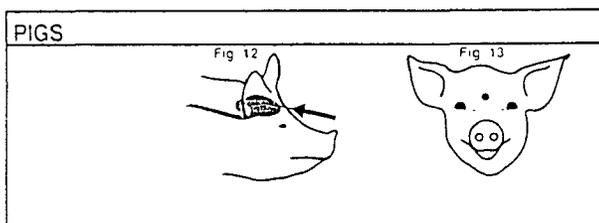


### Sheep and goats with horns

If the animals have horns, the approach should be from the rear and the aim directed between the base of the horns towards the mouth (Figure 9). Alternatively the firearm can be aimed from the front just above the eyes on the midline, shooting towards the spine (Figure 10). Goats are treated as per horned sheep.

### Swine

Mature swine are hard to handle and can be very dangerous if aroused. A large bowl of feed placed before the animal may help to distract the animal. The bullet should enter the skull at a point 2 cm above an imaginary line drawn between the eyes (Figures 12 and 13). The aim should be well up into the skull.



### Horse, mules and donkeys

These animals should be haltered to control the head, and led to the desired location. Food can be placed on the ground and the animal allowed to eat. In these species, it is essential to aim the shot above the eyes as the brain is high in the upper part of the skull. The bullet should center the skull at a point where an imaginary line crosses from the eyes to the ears (Figures 14 and 15). The direction of the shot should be down towards the withers.

For more information, see the following publications:

1. American Veterinary Medical Association. 1986 Report of the AVMA Panel on Euthanasia. *J Am Vet Assoc* 1986; 188: 252-268.
2. Australian Veterinary Association. Guidelines on humane slaughter and euthanasia. *AVA News. Aust Vet J*, 1987; November: 4-6.
3. Carding T. Euthanasia of dogs and cats. *Anim Reg Studies* 1977; 1:15-21.
4. Short DJ, Woodnott DP, eds. *Humane Killing*. In: I.A.T. *Manual of Laboratory Animal Practice and Techniques*. Illinois, USA: Thomas, 1969: 231-243.
5. Universities Federation for Animal Welfare. *Humane Killing of Animals*. Potters Bar, England: UFAW, 1978.

## Send Your Articles to The PROBE

**THE PROBE** is soliciting new articles for publication. If you have an idea, want to suggest a topic, or want to volunteer to write an article, we want to hear from you! Send your comments or articles to: Robert H. Schmidt, Department of Fisheries and Wildlife, Utah State University, Logan UT 84322-5210, tele-phone 801-797-2536, Fax 801-797-1871, or e-mail to [rschmidt@cc.usu.edu](mailto:rschmidt@cc.usu.edu).

**DO NOT DELAY**  
**TIME VALUED MATERIAL -**

Nonprofit Org.  
U.S. POSTAGE  
**PAID**  
Lincoln, NE  
68501  
Permit No. 46

Scott Hynstrom  
Forestry, Fisheries & Wildlife  
202 Nat. Resources Hall  
University of Nebraska  
Lincoln, NE 68583-0819

**Membership Application**

**NATIONAL ANIMAL DAMAGE CONTROL ASSOCIATION**

Mail to: Wes Jones, Treasurer, Route 1 Box 37, Shell Lake, WI 54871, Phone: (715) 468-2038

Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ Home

Address: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ Office

Additional Address Info: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP \_\_\_\_\_

Dues: \$ \_\_\_\_\_ Donation: \$ \_\_\_\_\_ Total: \$ \_\_\_\_\_ Date: \_\_\_\_\_

Membership Class: Student \$10.00 Active \$20.00 Sponsor \$40.00 Patron \$100 (Circle one)

*Check or Money Order payable to NADCA*

Select one type of occupation or principal interest:

- |   |   |
|---|---|
| <input type="checkbox"/> Agriculture                        | <input type="checkbox"/> Pest Control Operator  |
| <input type="checkbox"/> USDA - APHIS - ADC or SAT          | <input type="checkbox"/> Retired                |
| <input type="checkbox"/> USDA - Extension Service           | <input type="checkbox"/> ADC Equipment/Supplies |
| <input type="checkbox"/> Federal - not APHIS or Extension   | <input type="checkbox"/> State Agency           |
| <input type="checkbox"/> Foreign                            | <input type="checkbox"/> Trapper                |
| <input type="checkbox"/> Nuisance Wildlife Control Operator | <input type="checkbox"/> University             |
| <input type="checkbox"/> Other (describe) _____             |   |