This special edition of Update has been prepared by the Department of Research & Data Services. This issue contains information regarding statistical data and scientific studies which might be of special interest to HSUS staff. Similar reports will continue to be issued at irregular intervals.

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PUBLIC ATTITUDES TOWARD ANIMAL CONTROL

National Analysts has completed a study for the Pet Food Institute which examines citizen attitudes toward pet ownership and the pet overpopulation problem. Preliminary results of the study were released in March 1975 and the final report was summarized in a recent PFI publication which states, in part:

Social issues considered by the study included pet waste disposal, pet "overpopulation," and food supply issues. Considering the high level of media concern and the comments repeated by government officials in some parts of the country, the social issues elicited a surprisingly low level of concern, with the pet waste issue stimulating the most receptivity for action and some support suggested for stronger enforcement of leash laws.

However, the majority of those interviewed did not want public money to be spent on enforcement of animal control. Preference was expressed for handling this problem through public pressure and education which would encourage owners to restrict dogs to their own property.

Views toward pet population focused blame on irresponsible owners. There seems to be a perception that any pet "overpopulation" is not a matter of the total number of cared-for pets, but of the number of animals without homes and of pounds and humane societies burdened with more animals than they can handle. In this view, overpopulation would not be a problem if every owner were "responsible," regardless of the total number of animals.

Although some willingness was expressed to encourage animal birth control through license fees for unaltered pets or through required sterilization of animals before adoption from humane societies, there was strong opposition to mandatory pet sterilization or to any other legislation to limit the number of pets which an individual could own.

On the subject of potential shifts in attitudes toward pets or pet feeding as the result of economic changes, the study found indications that rising costs presently are not having any major effect on
pet ownership, as well as considerable resistance to admitting any changes in pet feeding due to the rising costs. Contrasting, however, with the claim that rising costs were not affecting the pet feeding habits of the people interviewed, were some indications of greater utilization of human food for pets and of greater attention to economy in the purchase and use of pet foods.

PAINLESS BRANDING IRON

A November 1975 Associated Press wire service story from Pullman, Washington stated that a quick, painless, laser beam branding iron has been developed by Washington State University professor of veterinary medicine R. Keith Farrell. AP reported that the device takes only thirty billionths of a second to stitch a brand on livestock or fish. At present, there are only two of these devices in existence and they cost $26,000 each. Farrell claims that laser technology is advancing at such a rapid rate that the purchase price for his branding iron could be cut in half within a few years. He believes the device is economical when considered from the perspective of reduced manpower costs. Farrell insists his laser will eventually replace conventional branding irons.

PIGEON BAND IDENTIFICATION

The 1975 pigeon band list is now available. The list is published jointly by the American Racing Pigeon Union and the International Federation of American Homing Pigeon Fanciers. It contains the names and addresses of persons holding band numbers and can be used to identify the owner of a pigeon found wearing a leg band. The list is revised each summer. Copies may be obtained from Mrs. Nona Feuerbach, National Sec'y.-Treas., International Federation of American Homing Pigeon Fanciers, 474 Wilson Blvd., Central Islip, New York, N.Y. 11722.

PROBLEM CHEWING

The Dow B. Hickman company has developed a non-toxic, non-staining aerosol product that prevents chewing by animals. The product, known
as "Stoma-Nil," is based upon taste reaction and reportedly has no disagreeable odor. It can be used around the house to prevent dogs and cats from chewing furniture or to discourage tail biting. Stoma-Nil also may be used to discourage cribbing and stall chewing by horses. However, Stoma-Nil's primary use is in the animal health field since it can be used to protect bandages from chewing by dogs and cats. While this product is available only to veterinarians, further information can be obtained by writing Dow B. Hickman, Inc., P. O. Box 35413, Houston, Tx. 77035.

ATTITUDES ON HUNTING

James Applegate of the Rutgers University Department of Horticulture and Forestry is the author of a paper entitled "Attitudes Toward Deer Hunting in New Jersey: A Second Look." The paper reports on a May 1974 survey of New Jersey residents and is a followup to a similar undertaking by Applegate in May 1972.

The purpose of the study was to document changes in attitudes toward hunting over a period of time. Applegate's measurement of attitudes was based upon a four category scale expressed as strong approval, mild approval, mild disapproval, and strong disapproval.

Approximately 1,200 New Jersey residents over eighteen years of age were polled in Applegate's recently released study. In his original 1972 study, 54% of the persons interviewed approved of deer hunting, 38% disapproved, and 8% were undecided. In 1974, of the persons surveyed, 49% approved of deer hunting, 43% disapproved, and 8% were undecided. Thus, according to Applegate's data, in two years the margin of support for deer hunting in New Jersey had declined from 16% to 6%. In two years 10% of New Jersey citizens have switched from being undecided or in favor of hunting.

Applegate's data reflected a change in the intensity of attitudes toward hunting. The second survey indicated a substantial erosion (-8%) from the ranks of the mild approvers and proportionate increases in the numbers of those who strongly approve (+3%) and those who strongly disapprove (+5%). Applegate believes these figures reflect an increasing polarization in attitudes toward deer hunting.

Applegate believes further that changes in attitudes toward hunting are in large measure attributable to the declining number of persons reared in a rural atmosphere where hunting is a culturally acceptable form of recreation. He predicts that hunting advocates will continue to decline in number. He also suggests that the increased polarity
in attitudes may reflect a recognition among the populace that the hunting debate is becoming a real issue with clearly defined battle lines.

Applegate believes the role of state wildlife management agencies will be forced to change. The scope of their responsibilities will be redefined from providing game for hunters to preserving wildlife for people.

VEGETARIANISM

Growing numbers of Americans are adopting the vegetarian ethic and refraining from meat consumption. This trend has stimulated requests to animal welfare organizations for information on vegetarianism. The best publication pertaining to the vegetarian philosophy is Peter Singer's book Animal Liberation (Random House, 1975). National organizations and periodicals espousing the vegetarian ethic include:

"Vegetarian Times"
P. O. Box A3104
Chicago, Ill. 60690

American Vegetarians
P. O. Box 5424
Akron, Oh. 44313

"Vegetarian World"
Suite 216
8235 Santa Monica Blvd.
Los Angeles, Ca. 90046

North American Vegetarian Society
501 Old Harding Highway
Malaga, N.J. 08328

American Vegetarian Union
P. O. Box 68
Duncannon, Pa. 17020

"Vegetarian Review & Digest"
Box 221
Haverford, Pa. 19041

WILDLIFE MANAGEMENT CONCEPT CHALLENGED

At an October 1975 National Academy of Sciences symposium on laboratory animal use, Dr. Lee Talbot of the Council on Environmental Quality presented a paper which discussed the implications of depleting wildlife populations to provide research animals. During his presentation Dr. Talbot announced completion of a one year study of wildlife management concepts. The study was an offshoot of The Law of the Seas Conference. It was coordinated by CEQ and involved thirty internationally prominent scientists.
The study focused upon the concept of maximum sustainable yield (MSY) which involves managing wildlife populations to produce the maximum possible annual "harvest" for commercial and recreational purposes. MSY is the dominant wildlife management principle according to which wildlife populations are currently managed. The study found that MSY is "conceptually inadequate" in that it does not adequately consider the impact of exploitation upon habitat, eco-systems, or wildlife populations. The study also found that projections of the impact of exploitation upon the health and density of a population was statistically inadequate.

The completed CEQ study is to be published by the World Wildlife Fund which provided financial sponsorship for the project.

WILD HORSE & BURRO POPULATION PROBLEM

Some wildlife managers and Bureau of Land Management officials are now claiming that the 1971 federal law protecting wild horses and burros was ill-conceived and impractical. These officials insist the protection afforded to these animals has prompted a population explosion among horses and burros which is resulting in the destruction of habitat and displacement of other wildlife species.

Most persons recognize wild horses and burros are a part of our heritage and they have the same survival needs and rights of other animals. Of course, these animals--especially burros--can cause considerable ecological damage in fragile desert habitat. Such habitat is not an issue with regard to the BLM lands which allegedly are being destroyed by wild horses and burros. In a recent magazine article the National Parks and Conservation Association stated, "After decades of BLM policies permitting public lands to be overgrazed, strip mined, defaced, and denuded in the name of 'range management' and overrun with off-road vehicles, talking about burro control almost seems like quibbling."

The sudden cessation of wild horses roundups, which were prohibited by the 1971 federal law, has led to a population buildup among these animals. The immediate result of increased herd size is overgrazing, intense interspecific competition, and a general deterioration of the health of the population. But within a period of several years, the wild horse and burro populations should stabilize at a new level in balance with the available food supply. Of course, there are many factors which could influence population numbers--including the resumption of roundups or the continued introduction of domestic horses into wild herds.
A review of available information indicates that the wild horse debate is, in reality, based on long standing issues. The horses compete with livestock and game species for available food. This places wild horses and burros in conflict with the interests of ranchers and sports hunters.

PET HEALTH INSURANCE PLANS

In consultation with the American Veterinary Medical Association, we have determined that four pet health insurance programs are currently available to pet owners. However, AVMA Public Information Director Karl Kessler has warned The HSUS Department of Research & Data Services that the AVMA holds little hope for the success of such programs.

The AVMA identified several major failings of past pet health insurance plans. First it is not possible for the insurer to develop a realistic calculated risk policy since vital statistics records are not kept for most animal maladies. Secondly, few states require advance deposits from pet health insurance firms. Such companies generally attempt to pay claims and administrative costs from policy sales and such revenues are usually inadequate especially during the early years of such ventures. Thirdly, without a foolproof identification system the insurer cannot protect itself against invalid claims for animals which are substituted for pets covered by a policy. Lastly, it is unclear if there is an adequate number of prospective health plan participants to make such a program feasible.

The above cited problems constitute a serious flaw in pet health care programs. An article which appeared in the August 1, 1975 issue of the Journal of the AVMA noted that 27 pet health plans have been established since 1959 and none have survived for longer than three years. The firms currently offering pet health insurance are:

Canine Shield Insurance Agency, Inc.  Pet Protection Plan
2500 East Devon Avenue United States Pet Registration
Des Plaines, Ill. 60018 2101 Grove Street
(312) 297-3166 Berkeley, Ca. 94704

Pet-Care Plan, Inc.  Pet Medical
86 Weybosset Street 5900 North High Street
Providence, R.I. 02903 Worthington, Oh. 43085
BACKYARD RODEOS

In a July 1975 letter to the editor appearing in Amusement Business Magazine rodeo promoter Bruce Lehrke admitted that only one third of the 3,000 individual rodeos in this country are sanctioned by either the Rodeo Cowboys' Association or the International Rodeo Association. In commenting on an interview which had previously appeared in Amusement Business, Lehrke noted, "I stated ... that probably 80 per cent (sic) of the rodeos in the country were amateurish and that even the IRA and RCA had within their ranks this type of rodeo."

DOG-VEHICLE ACCIDENTS: A CASE STUDY

The November 15, 1975 issue of the Journal of the American Veterinary Medical Association contains a paper reporting on the injuries sustained by dogs which had been struck by motor vehicles and admitted to the Trauma Emergency Service of the University of Pennsylvania Veterinary Hospital. The abstract for this paper states:

The records of 600 dogs injured in motor vehicle accidents and admitted as emergencies to the Trauma Emergency Service of the University of Pennsylvania Veterinary Hospital were studied. Young males were the most frequently injured dogs. The motor vehicle accidents resulted in a wide variety of injuries. Superficial wounds were diagnosed as the only manifestation of trauma in 190 (31%) dogs. Among the remaining 410 dogs, skeletal injury was diagnosed in 87% and soft organ injury in 27%. Multiple region injury occurred in 36% of all dogs. Among specific injuries, it was found that the pelvis was the most frequently injured skeletal structure and that the liver was the most frequently injured abdominal organ. Almost all deaths resulted from intrathoracic and intraabdominal injuries, and over 50% of the dogs euthanatized had central nervous system injury.

The overall fatality rate, including euthanasias, was 12.5%.
PORPOISE KILLING: A HISTORICAL SYNOPSIS

Until the late 1950's fishermen took tuna by pole and line fishing, trolling, and long-lining. However, more recently the use of purse seine nets has become the most common method for taking tuna. While this method is efficient and economical, it does result in the wholesale slaughter of porpoises.

In southeastern Pacific waters schools of yellowfin tuna follow porpoises. This relationship is not fully understood; however, biologists theorize that the tuna may be taking advantage of the porpoises fishing abilities by swimming below the porpoises and feeding upon the smaller fish the porpoises ignore. It has also been claimed that the pods of porpoises provide a spatial orientation for the tuna since these fish are known to congregate around any large object.

To capture tuna the fishermen use high powered skiffs to encircle the visible pods of porpoises with half mile long purse seine nets. This maneuver traps both the porpoises and the tuna below. As the net is constricted the porpoises panic, become entangled in the mesh, and drown.

For the past few years fishermen have employed a technique termed "backing down" to release trapped porpoises. This process involves slacking the net before it is hauled on board so that the cork lines sink slightly and the porpoises can swim out. Even when combined with Medina panels (stretches of small mesh netting which supposedly do not entangle the porpoises) this measure has not been satisfactory in reducing porpoise mortalities which remain at 200,000 to 350,000 animals per year.

The highlight of efforts to terminate the slaughter of porpoises is the Marine Mammal Protection Act of 1972. This measure required that fishermen reduce the incidental killing of porpoises to insignificant levels within a 24 month period. However, the exemption provision has been extended.

The tuna industry's failure to significantly reduce incidental porpoise kills has prompted interest in a nationwide tuna boycott. On January 16, 1976, The HSUS Executive Committee approved the Society's participation as a founding member of a boycott which is to be co-sponsored by several other animal welfare and conservation organizations including the Sierra Club and the Animal Welfare Institute.

It is important to understand that only yellowfin tuna associate with porpoises. Tuna fish marketed under the names bonito, skipjack, and albacore are not caught "on porpoise" and their taking does not directly
harm marine mammals. Unfortunately, yellowfin, albacore, and bonito tuna are all sold under the label white meat and in most cases it is not possible for the consumer to differentiate between these products.

The HSUS and allied groups will be advocating a general tuna boycott because of the difficulty in differentiating yellowfin tuna from other varieties. Additionally, dark and white meat tuna are both sold by the same companies and, therefore, a selective boycott would not have the desired economic impact.

THE CONSERVATION DIRECTORY

The Conservation Directory is a listing of government agencies and private organizations active in the conservation field. The Directory is revised annually and usually is available for distribution in January of each year. The Directory is approximately 220 pages in length and sells for $2.50 (1975 price). The Conservation Directory is published by the National Wildlife Federation, 1412 Sixteenth Street, N.W., Washington, D.C. 20036.

NATURE CENTER DIRECTORY

"Natural Science Centers for Youth" is a directory of nature centers and natural history museums which is published annually by the Natural Science for Youth Foundation, 763 Silvermine Road, New Canaan, Ct. 06840. The directory is approximately 150 pages in length and the current price is unknown. Revised editions usually are made available in the Spring of each year.

CRIPPLING LOSSES BY HUNTERS

One standard by which hunting can be objectively judged is crippling losses--a term which refers to the number of game animals which are wounded, die, and go unrecovered. There have been approximately 200 published and unpublished studies of crippling losses utilizing data based upon survey techniques ranging from field counts of dead deer to interviews with hunters passing check stations. Some of these studies were introduced and admitted into evidence by a United States District Court in connection with the HSUS 1973 suit regarding hunting on national wildlife refuges.
Those court documents indicate that almost 30% of all mortally wounded deer go unrecovered. In the book *A Voice For Wildlife* Dr. Victor Scheffer states that only 82% of the 19.5 million waterfowl killed annually by hunters are recovered. In one major study it was found that archers failed to retrieve 50% of the deer which they mortally wounded while crippling losses for gunners with buckshot were equal to 26% of the total kill and hunters with shotgun slugs lost 7% of fatally wounded deer. The data also indicates that hunters make a greater effort to recover trophy specimen. In a Utah study only 7% of all bucks killed went unrecovered while 25% of the mortally wounded does and 42% of the mortally wounded fawns were left in the woods.

Evaluating crippling losses is not as simple as it might first appear. Among the reasons for the low recovery rate associated with archery seasons is the fact that the animal dies from hemorrhaging and, therefore, is likely to move some distance after a fatal shot. Moreover, archery hunting is done in early autumn, in advance of the gun season, when foliage is still heavy and animals are more difficult to track. Also, fewer dead animals remain in the woods when hunter density is high since many hunters are willing to recover animals shot by another person. Conversely, in single sex seasons when only bucks or only does may be taken, hunters are likely to abandon a recoverable animal of the wrong sex. Some hunters will even abandon legal kills if they decide the animal is not a satisfactory trophy specimen.

Confusion regarding crippling losses is often furthered by overzealous game biologists who are concerned with protecting the image of the sports hunter. For example, the 1974 HSUS Revised Special Report on Hunting improperly implied that the Michigan Department of Conservation had found 74,000 carcasses during a recent winter deer count. In fact, Department biologists had projected the dead deer figure based upon careful examinations of limited woodland areas. The study also indicated that apparently 30,000 of these animals had died from hunting wounds. Officials of the Michigan Department of Conservation and hunting groups have seized upon the HSUS error in an effort to discredit the HSUS Special Report and to minimize the alarming crippling loss estimate contained in the Michigan study. The fact that 30,000 deer killed by hunters lay in Michigan woods is deplorable. It matters little that this figure was arrived at by scientific statistical approximation rather than pathological examinations of all the carcasses.

Crippling losses statistics are not an optimal method for evaluating hunter proficiency. Such data does not take into account wounded animals which recover from their injuries nor does it consider shots which cleanly missed their target. Crippling losses statistics
report on only one aspect of the proficiency problem but even that point is startling in its implications: of every 3-5 animals fatally shot by hunters at least one will go unrecovered. One wildlife biologist who conducted a ten year study of crippling losses concisely summarized his findings: "Few hunters have the will power to resist shooting at deer that are beyond the effective killing range of their weapon, or that are moving too far or too fast to be hit consistently in a vital spot."