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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Forced Growth of Puppies

Speaking at the April 1976 Gaines Dog Research Center's Seminar for Dog Breeders two prominent veterinary authorities, Dr. Francis Kallfelz of Cornell University and Dr. Sten-Erik Olsson of Sweden, were critical of the increasingly popular practice of purposely overfeeding puppies in an effort to hasten the animal's growth. The two veterinarians charged that such practices lead to health problems including structural defects. Drs. Kallfelz and Olsson maintain that puppies must be allowed to mature naturally. They contend that immature dogs must be kept lean and hard in order to prevent stress on the developing body.

The practice of overfeeding might not be considered as an act of cruelty within the context of existing animal welfare statutes. However, humane societies should be alert to the fact that dog breeders may purposely overfeed animals and societies should counsel prospective pet owners that such practices are unhealthy.

Fund Raising Materials

The Gaines Dog Research Center is making two of its most popular publications, "Touring With Towser" and the "Gaines Guide to America's Dogs" wall chart, available to animal welfare organizations at a special discount bulk price. The center has asked that funds from the sale of these items be earmarked for projects aimed at educating the public about responsible pet ownership. Both publications sell for 50¢ on a single copy basis but societies can obtain 25 copies for $10; 50 copies for $17.50; 100 copies for $30; and 500 copies for $125.

Hunter Financing of Conservation Projects

The following text has been extracted from a paper prepared by HSUS director of research, Guy R. Hodge.

In 1972 the National Shooting Sports Foundation initiated a "Hunters Pay for Conservation" promotion. The purpose of this campaign was "to bring to light...the unceasing efforts on the part of hunters to promote the wise use of our natural resources and their willingness to foot the costs." Unquestionably, through license fees and excise taxes hunters have made significant contributions to the acquisition and preservation of rich wildlife habitat which otherwise would have been lost to future generations of Americans. In many cases similar lands cannot be obtained today at any price.

Sportsmen have seized upon the NSSF idea in promoting their pastime. As the popularity of counter-attacking anti-hunters has grown so too have the inflated boasts regarding the extent of the sportsman's financial contribution to conservation programs. Popular pro-hunting literature today characterizes the hunter as the sole financier of wildlife programs.

The Pittman-Robertson Federal Aid in Wildlife Restoration Act is the major taxing measure cited by hunters when describing their financial support of conservation projects. Indeed federal expenditures on wildlife management are an excellent measure of the financial structure of wildlife projects.

The federal agency most directly concerned with wildlife programs is the Fish and Wildlife Service (FWS) of the United States Department of
the Interior. For fiscal year 1975 FWS had a total budget of 234,593,000 dollars. This sum includes $13,000,000 from the Migratory Bird Conservation Account which is funded through the sale of hunting stamps or "duck stamps" as they are popularly known. Another $56,855,000 is attributable to an eleven percent excise tax on sporting arms and ammunition, a ten percent excise tax on pistols and revolvers, and a recently added eleven percent tax on archery sales. An additional $18,189,000 is obtained from a federal excise tax on sport-fishing equipment.

Thus, of a total Fish and Wildlife Service budget for 1975 of 235 million dollars only 69.8 million or 29.7% of the total budget is derived from funding programs involving taxes on hunters. Moreover, four-fifths of the monies from this category are obtained from taxes on sales which include purchases for non-hunting purposes such as firearms collecting, target shooting, and self-protection. An official of the Wildlife Management Institute has admitted that as much as 90% of these monies comes from firearms sales for non-hunting purposes. Additionally, a substantial number of duck stamp revenue is attributable to purchases by philatelists.

Conservatively estimating non-hunting sales at one-half of taxable sales then the hunters direct financial contribution to Fish and Wildlife Service programs is reduced to only 14.8% of the total FWS budget. Thus, the real monies used in programs directly benefitting wildlife which are attributable to funds actually "contributed" by hunters are a very small part of the FWS budget.

In analyzing the hunters' contribution to conservation programs it is important to review the utilization of hunter dollars. In a June 1974 news release Lynn Greenwalt, Director of FWS, reported on the distribution of funds obtained from the excise tax on firearms and ammunition. According to Mr. Greenwalt five percent of the revenue received is absorbed in administrative costs. Fifty percent of the monies are used in improving habitat for game with such projects as fencing deer and elk from farmland and "managing forests" a term which means manipulating habitat to provide food sources and shelter favorable to game species at the expense of other wildlife. Another 25 percent of the funds were used to finance research into such things as census-guided selection of hunting seasons and bag limits. The final twenty percent of the funds have been used to purchase land with emphasis on habitat containing large numbers of game species. Not included in Mr. Greenwalt's generalized summary was the $4,550,000 apportioned for fiscal 1975 to be spent on hunter safety programs. Conversely, the anti-hunter has been characterized as an unsupportive but vocal critic of wildlife management programs. Anti-hunters are, of course, members of taxable public which bears an overwhelming portion of the expense for government wildlife management programs.

In a paper presented at the 1975 North American Wildlife and Natural Resources Conference Richard DeGraaf and Brian Payne of the U.S. Forest Service provided data on monies spent on the non-consumptive enjoyment of wildlife. According to Mr. DeGraaf approximately 500 million dollars is spent each year by the public directly on the protection and study of urban birds. This sum includes $170,000,000 on the purchase of birdfeeders and birdhouses, $3,000,000 on the purchase of field guides to birds, $115,000,000 on the sale of binoculars, $187,000,000 on the sale of cameras and camera
equipment for bird photography. Not included in the authors' expenditures summarization were costs related to the construction of home made bird-feeders or monies spent in administering to orphaned or injured birds, nor did the authors consider related actions such as the purchase of wildlife art.

DeGraaf and Payne used waterfowl hunting as their basis for comparing consumptive and non-consumptive uses of wildlife. Comparing hunter expenditures on arms, ammunition, licenses, and related expenditures for 1970 ($180,000,000) and 1974 ($300,000,000) to their bird watching statistics the authors determined that hunters spend only sixty percent as much money on their pasttime as birdwatchers do on their hobby. Perhaps more importantly, while little of the hunters monies directly benefit wildlife approximately fifty percent of the monies spent by birdwatchers fall into this category.

Another surprising revelation relating to conservation financing is found in a comparison of organizational expenditures. There is no significant private financing of wildlife conservation or wildlife protection projects by either sportsmen's federations or hunt clubs with the exception of Ducks Unlimited. To the extent that monies are used to purchase land or propagate wildlife such endeavors are intended to provide "good hunting" for members rather than benefitting either wildlife or the general public. By contrast humane societies conducted extensive wildlife rescue projects involving orphaned and injured animals, they initiated several thousand investigations into incidents involving the mistreatment of wildlife, they administer massive environmental education projects designed to teach the public an understanding and respect for wildlife, and they work to reduce traffic in captive exotic animals. According to a published National Wildlife Federation report the total monies spent by local and national animal welfare organizations on such activities approaches $100,000,000 annually.

**Pigeon and Blackbird Control**

The following equipment may be used to disperse concentrations of blackbirds, starlings or pigeons or to inhibit their reproduction:

- **Chemical Sterilents**: Ornitrol. G. D. Searle & Co., P. O. Box 5110, Chicago, Ill. 60680
- **Propane Guns**: Reed-Joseph International Company, 230 South Main Street, Greenville, Ms. 38701; Smith Roles, Inc., Box 1238, Minot, N.D. 58701; Delsea Farms, Delsea Drive, Hurffville, N.J. 08080
- **Exploding Shotgun Shells**: Colt Firearms Division, 150 Huyshep Ave., Hartford, Ct. 06102; Penguin Industries, Inc., Box 98, Parkesburg, Pa. 19365; Stoneco, Inc., Box 187, Dacono, Co. 80514; W.V. Clow Seed Co., 1107 Abbott Street, Salinas, Ca. 93901 (Bomb in special pistol); Western Fireworks Co., 2542 S.E. 13th Avenue, Canby, Or. 97013; Marshall Hyde, Inc., Port Huron, Mi. 48060.
- **Sound Devices**: Av-Alarm Corporation, P. O. Box 2488, 2734 Industrial Parkway, Santa Maria, Ca. 93454; Wightman Electronics, Inc., P. O. Box 989, Easton, Md. 21601 (A portable record player, has starling distress call and other animal records.)
- **Revolving Lights**: Hub States Corporation, 2000 North Illinois St.,
The Naval Undersea Center at San Diego, Ca. has sponsored a feral cat removal program on San Clemente Island. Data collected in connection with the trapping program provided the basis for an ecological study of the feral cat. The program was administered by the San Diego State University Foundation. The study took place from January 2, 1974 through April 18, 1974.

The data collected from this study indicated that, in spite of the biologically depauperate habitat of the feral cat, its food habits reflected the basic abundance and availability of prey species. The most frequent item in the diet of the feral cat was the endemic Island night lizard. In order of frequency in the diet, feral cats also consumed the side-blotched lizard, orthopterid, isopterid, hemipterid, and coleopterid insects, the white-footed and feral house mouse, and several species of ground nesting birds. In some areas of the Island garbage and food scraps comprised from between 5% to nearly 90% of the diet.

The researchers concluded that the impact of feral cats upon the indigenous species of San Clemente Island is minimal. The food spectra of the feral cat and the endangered endemic Island Fox were found to be similar, but not to the degree that substantial competition was evident. This finding may be a product of the brevity of the research project. During the summer or dry periods both the fox and cat must necessarily depend more exclusively on insects for food items and the reduced food supply may accentuate competition.

The feral cat removal program was not as successful as researchers and naval officials had anticipated. Trapping efficiency diminished more rapidly than would have been expected if reduced population numbers from trapping were the exclusive influence upon trapping efficiency. The researchers believe that feral cats may have developed a "shyness" toward traps. They suspect that recommended traps sizes and baits may have been inadequate or failed to produce sufficient stimulus to any but the most curious animals. The researchers concluded that the feral cat removal program should not be reinstituted until trapping efficiency can be increased. They also suggested that alternative methods of population reduction be considered as a result of the inefficiency of trapping in controlling feral cat populations.

Parenthetically, arrangements were made to transport trapped cats to the University of California Medical School in an effort to test for background levels of various viruses common to cats. The researchers report, however, that this transfer of animals was abandoned almost immediately "due to the inability of the examiners to deal with the extreme ferocity of the animals."
The HSUS is now attempting to determine if a viable population of feral cats remains on San Clemente Island. Dr. Michael Fox and Guy Hodge hope to visit the Island following the 1977 HSUS annual Conference in San Diego. Hodge noted that the Island's feral cat population had been isolated from mainland conditions for at least 90 years. The fact that we are dealing with an isolated ecosystem makes San Clemente Island an ideal location for further studies of feral cats.

The Hunting Controversy: A Selected Bibliography

Humane society officials and students regularly request information relating to the sports hunting controversy from The HSUS. Listed below are a select number of books and articles all of which examine this issue from the animal welfare perspective:


Hope, Jack E. "Hunters: useful pruners of nature or just killers?" Smithsonian, Volume 4, Number 1 (January 1974).


Animal Problems #1 in Boulder, Colorado

The single greatest law enforcement problem in Boulder County, Colorado is animal control. Sheriff Brad Leach reports that in 1975 the Sheriff's office received 4,000 complaints about dogs running at large and more than 600 complaints regarding loose cattle and horses. Both categories of complaints are up 200-300% from 1974. Reports of attacks by dogs on livestock and humans led to enactment of a leash law for county subdivisions in 1975. Sheriff Leach believes that the new law might partially account for the increase in complaints. He noted "county residents are more likely to call the sheriff's office now instead of just complaining to themselves or their neighbors."

The Boulder County report appears to substantiate a claim by The HSUS that animal control has a substantial impact upon community law enforcement activities. The Society has argued that law enforcement officials are mistaken in charging that they are too busy with major crimes to concern themselves with animal control matters. Law enforcement officials fail to consider the amount of manpower and funds expended in processing animal control complaints, making referrals to other municipal agencies, and conducting investigations into bite cases and pet thefts.

Animal Cruelty and the Law

The Spring 1975 issue of Environmental Affairs contains a 49-page article by law student Stephen Burr which is entitled "Toward Legal Rights for Animals." Burr, a former MSPCA volunteer worker, provides a historical and contemporary overview of the status of animals under the law. He analyzes weaknesses in existing statutes and proposes dramatic revisions in animal cruelty statutes. "Toward Legal Rights for Animals" would be
a valuable reference for any legislative committee considering amendments to animal welfare statutes. Copies of this document should be available in most law libraries or interested persons may obtain a copy by forwarding $6 to Environmental Affairs, The Environmental Law Center, Boston College Law School, Chestnut Hill, Mass. 02167. A companion article relating to the legal standing of endangered species also appears in the Spring 1975 issue of Environmental Affairs.

**HSUS Library Periodicals**

Attached to this issue of update is a listing of periodicals in the HSUS Library. The Library does not maintain copies of local humane society newsletters, and therefore these publications have not been included in the accompanying list. All of the publications currently subscribed to are routinely circulated to HSUS Headquarters staff. While it is not possible to extend this service to regional offices or members of the board of directors such persons do have loan privileges and may obtain individual issues of any periodical or they may request a photocopy of any article appearing in these periodicals. HSUS Regional Directors are encouraged to schedule time during Headquarters office visits so that they might review periodicals and keep themselves updated on issues which are pertinent to their regions.
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<th>Publication</th>
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<tr>
<td>ANIMAL CAVALCADE</td>
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<td>ANIMAL CITIZEN</td>
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<td>ANIMAL TRACKS</td>
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<td>ANIMAL WELFARE NEWSLETTER</td>
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<td>ANIMALIA</td>
<td>1976--April/May/June, Oct./Nov./Dec.; 1975--complete; 1974--Jan./Feb./March; 1970--Spring</td>
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<td>AQUASPHERE</td>
<td>1975--Sept.</td>
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<td>ARKANSAS GAME &amp; FISH</td>
<td>1976--Spring, Summer; 1975--Summer, Fall</td>
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<td>1976--complete</td>
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Periodicals in Library/2

BROOKFIELD BANDARLOG 1972--Fall; 1968--No. 34
CATALYST 1972--Vol. II Nos. 1, 3, 4; 1970--Fall, Spring
CITIZENS' BULLETIN 1976--March
COPEIA 1976--complete
DELAWARE CONSERVATIONIST 1976--Spring, Summer
EARLY YEARS 1974--May
ENVIRONMENTAL ACTION 1975-76--No. 2 missing; 1974-75--Nos. 5, 6, 8, 10, 11, 13, 15, 18 missing; 1973-74--Nos. 4, 18 missing; 1972-73--Nos. 7, 8, 23, 24 missing; 1971--No. 3 missing
FAMILY PET 1976--Spring; 1975--Autumn
FELINE PRACTICE 1975--May/June
Periodicals in Library/3

FRISKIES RESEARCH DIGEST  1976--Spring, Summer; 1975--except Summer; 1974-- Summer, Fall; 1973--Summer, Fall; 1970--Fall


GAINES DOG RESEARCH PROGRESS  1976--Spring, Summer, Winter, 1974--Winter


JOURNAL OF WILDLIFE MANAGEMENT  1976--complete


KENNEL MANAGEMENT  1968--July

KENTUCKY HAPPY HUNTING GROUND  1976--May-Oct.

Periodicals in Library/4

LIVING WORLD, THE  1972--Vol. 1, No. 6
LOUISIANA CONSERVATIONIST  1976--Mar./Apr., May/June
MAINE FISH & WILDLIFE  1976--Spring, Summer, Winter
MAINSTREAM  1974--Summer
MARYLAND CONSERVATIONIST  1976--Mar./Apr., May/June
MINNESOTA VOLUNTEER, THE  1976--May/June
NOTORIUS  1974--May/June
NAAMA JOURNAL  1976--complete; 1975--complete; 1974--complete
Periodicals in Library/5


NEBRASKA Land 1976--complete

NEW HAMPSHIRE NATURAL RESOURCES 1973--Spring/Summer


NORTH DAKOTA OUTDOORS 1976--Apr.-Sept.


OREGON WILDLIFE 1976--Mar.-Sept.


OUTDOORS IN GEORGIA 1976--except Jan.-Mar., July


PARKS 1976--Apr.

PARKS & RECREATION 1971--May, Nov.


PENNSYLVANIA GAME NEWS 1976--May-Sept.

POW WOW 1976--March


PREDATOR, THE 1976--complete; 1975--Winter

PUG TALK 1976--March, Apr.

PURINA KENNEL NEWS 1976--Spring; 1975--Fall, Winter; 1974--Fall, Winter; 1972--Fall

SADDLE & BRIDLE 1974--May (last edition)

SAN DIEGO'S NORTH COUNTRY LIVING 1974--June

SATURDAY REVIEW 1972--December


SOUTH DAKOTA CONSERVATION DIGEST 1976--Mar./Apr.-July/Aug.

SPOTLIGHT 1976--April

TENNESSEE CONSERVATIONIST 1976--Apr.-Sept.

TEXAS PARKS & WILDLIFE 1976--Apr.-Sept.


VETERINARY ECONOMICS 1973--May


WASHINGTON WILDLIFE 1976--Summer, Spring; 1975--Fall, Winter

WEST VIRGINIA CONSERVATION 1965--May; 1964--Oct.
Periodicals in Library/7


WILDLIFE IN NORTH CAROLINA 1976--Apr.-Sept.

WILDLIFE MONOGRAPHS 1976--April

WILDLIFE REVIEW 1973--Summer, Winter; 1972--Winter

WILDLIFE SOCIETY BULLETIN 1976--Spring, Summer, 1973--Summer

WONDERFUL WEST VIRGINIA 1976--Apr.-Sept.

WYOMING WILDLIFE 1976--July, Aug.; 1973--June
