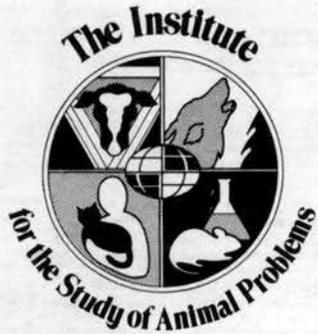




Minnesota State Zoological Board.
Zoo-Related Organizations Files.

Copyright Notice:

This material may be protected by copyright law (U.S. Code, Title 17). Researchers are liable for any infringement. For more information, visit www.mnhs.org/copyright.



*Humane
Society*

2100 L Street, N.W., Washington, D.C. 20037

(202) 452-1148

9 April 1980

Edward Kohn, General Director
The Minnesota Zoological Garden
12101 Johnny Cake Ridge Road
Apple Valley, Minn. 55124

Dear Mr. Kohn:

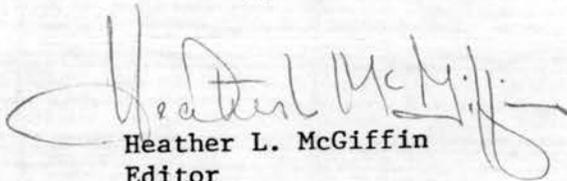
Thank you for your request of the publication, "Animals in Education: Proceedings of the Conference on the Use of Animals in High School Biology Classes and Science Fairs."

Due to increasing publication costs, it is expected that the price of the publication will be approximately \$9 plus postage and handling. We will send you an announcement when the publication is completed.

I should also like to draw your attention to our affiliate, The National Association for the Advancement of Humane Education (NAAHE) which has a variety of worthwhile educational materials for elementary school levels.

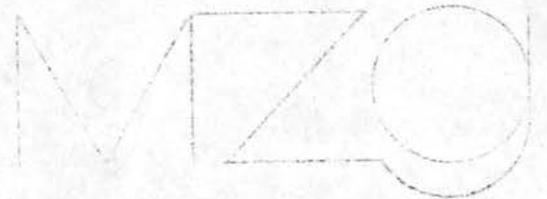
Thank you again for your interest.

Cordially,


Heather L. McGiffin
Editor

HLM/dg

MINNESOTA ZOOLOGICAL GARDEN



January 12, 1977

Ms. Sue Pressman
Humane Society of the United States
1604 K Street NW
Washington, D.C. 20006

Re: Wolves in Minnesota

Dear Sue:

Please find enclosed a typical news article similar to ones coming out almost weekly throughout the state. As a biologist you can appreciate the "irrationality". Nonetheless, the people living in northern Minnesota within the area where this rather successful population of timber wolves exist are far removed from the smokey centers of New York City, Washington, etc., and for the most part do not have their pork chops neatly wrapped in cellophane and displayed on supermarket shelves.

If the Humane Society of the United States is seeking good, qualified, objective information in order to determine its approach to the problem I would recommend that you contact both by letter and phone Dr. David L. Mech, Room 540, North Central Forest Experimental Station, Folwell Avenue, St. Paul 55108 (645-0841). Dave, in my opinion, as a qualified scientist and absolute hands-on experienced, objective biologist of the timber wolf problem in northern Minnesota, can provide you with very straight and forward facts.

With regard to the threat to poison wolves, I have no doubt in my mind that the concerned citizens living in these areas would not hesitate to poison, shoot, trap or otherwise undertake civil disobediences. There has been a remarkable amount of bureaucratic buckpassing, emotional reactions, etc. The problem basically revolves around the fact that for practical purposes, no other states (except Alaska) have few if any timber wolves. The deer herd in northern Minnesota is in a decline; for instance, the annual kill this year was about 50% of preceeding years. Changes have taken place in the habitat not conducive to deer and the wolf takes the blame from the common citizen.

I am in no position to render any but personal opinions, but I am certain that a special federal team set up to define the problem and make recommendations can do so effectively if backed up by understanding state and federal legislators.

In short, it would be well worth your while to talk with David and I will advise him by a copy of this letter.

Love,



Donald D. Bridgwater
General Director

DDB/je

Enclosure

cc: Dr. David L. Mech

THE MINNEAPOLIS

STAR

Friday, January 13, 1977

Copyright 1977 Minneapolis Star and Tribune Company

Single copy: 20¢
Carrier delivery:
70 cents per week

NORTHEASTERN MINNESOTA

Fear of wolves grips 2 towns

By BRENDA INGERSOLL
Minneapolis Star Staff Writer

It was not unusual a century ago for members of a pioneering family to find themselves drawn to the window of their log cabin by the howling of wolves at dusk.

But in 1977, the residents of Tower and Soudan, two small northeastern Minnesota towns, are crying to the same cry, the howl of the Eastern timber wolf, and they are afraid.

They had mothers find the oc-

casional glimpse of a shadowy form in their backyards unnerving. Family dogs are brought inside at sunset and townsfolk no longer feel free to stroll in the woods unarmed.

"I'll tell you what it is, it's fear right now," says John Larson, 54, who lives on the outskirts of Soudan.

Larson is one of several persons in the Soudan-Tower area who have had close encounters with wolves. He was atop a ladder, putting on storm windows, this

fall when he heard his small dog whimpering.

"I couldn't imagine why she was shivering there under the ladder," said Larson, a retired equipment operator for Reserve Mining Co. "I heard a growl behind me and turned around. There, about 30 feet in back of me were two young brush wolves."

Larson said he scared the animals away by beating against the side of a nearby shed with a rake. "These two brush wolves I saw

looked awfully hungry. I hope I don't see 'em again.

"I told the game warden that if I do and I have a gun handy, they won't be hungry for long." He added, "I've heard many people say they'd like to take an evening stroll, but they're a little afraid. I am, too."

There are no recorded instances of wolves attacking a human being in North America, but people still are uneasy.

"The only thing I'm afraid of is that one of those wolves might

attack an elderly person, or a youngster," Larson remarked. "It's a possibility, as far as I'm concerned."

Townfolk and area conservation officers agree that the wolf population is up, while that of white-tailed deer, natural prey for the wolf, is down.

James Charles, conservation officer for the Tower area, said that "In the 25 years I've been (game)

WOLVES
Turn to Page 5A



Continued from Page 1A

warden. I've never seen so much wolf sign as I have this year. . . We have an unusually large number of wolves, maybe too many for the deer." The wolf population, concentrated in the north-eastern part of the state, is estimated at between 1,200 and 1,500.

Townpeople are asking why wolves are coming into town. Conservation officers say there is a simple explanation: Hunger, and the absence of fear engendered by the wolf's complete protection under the Endangered Species Act.

"It is to be expected that the wolf population is building up," said Leroy Rutske, wildlife specialist for the state Department of Natural Resources and a member of an independent team of wolf experts that has prepared a timber wolf recovery plan at the behest of the U.S. Fish and Wildlife Service.

"They are not as wary as they once were because they haven't been persecuted in recent years," Rutske said. "It would have been very unusual 10 years ago" for wolves to approach a town; let alone forage for food in someone's backyard garbage can, he added.

RAY THORPE, game warden at the Kabetogama resort area and admirer of the timber wolf, said the wolves "are very definitely undernourished" this year.

Thorpe helped "live-trap" 31 wolves from the land of rancher Julian Brzoznowski, who lost 16 head of cattle to wolves last year. "I've never seen timber wolves that thin," he said of the captured animals. "Their ribs were showing and their hip bones were sticking out."

He added, "We're going to have one heck of a time building up a deer herd with what we've got and a darn good big percentage of the problem is timber wolves."

Thorpe said it was his opinion that "it's not protection that's going to bring them (wolves) back, it's thinning 'em down so there is enough food. That's the problem."

The body of a young wolf that was apparently trapped and then shot was left on the doorstep of Tower city hall early this week.

Glenn Bystrom, 63, former acting police chief at Tower, said he took the dead wolf home until he could turn it over to game wardens.

"I leaned the body up against the garage wall," Bystrom recalled. Later, Bystrom went out to check on it. "I was so dumbfounded. There was a live one, standing there smelling the dead one . . . The wolves, they aren't scared at all."

CHARLES AGREED that the wolves are getting bolder. "Fifteen years ago they were so terrified of human scent they wouldn't cross a snowshoe trail, but now with snowmobiles going everywhere and the fact that they're protected, they're getting used to human scent."

He said of the city hall wolf incident, "I think some fella was just trying to be smart, but if this sort of thing continues they are going to stir the wrath of protectionist groups and state agencies. It might work against their interests."

Another incident that upset area residents was the November death of John Pahula's mongrel dog, "Pedro."

Pahula, 62, retired crusher-screener operator for U.S. Steel Corp., said it happened in late afternoon as he was walking through swampy woods to his car from a cabin he is remodeling on Lake Vermilion.

"About 60 feet away I saw two wolves coming toward me on the trail there. My dog saw that and went straight for 'em," Pahula said.

"A third one, up on the hill

behind me, he streaked by me about 15 feet away. I was so mad and scared. I beat it back to my neighbor's to get a gun. These wolves were so darn big they must have been five times bigger than my dog."

But darkness was setting in, Pahula said, so he didn't see what happened until the next morning. "I went back and all that was left was the collar and a few head-bones. These are old timber wolves. They're smart. I've been up there to the cabin pretty near every day and I always walk out about 4:30 p.m. and they know that, see."

Pedro "was a brave dog, the best dog I ever had. He figured these wolves were going to attack

me and he went after 'em," Pahula said.

"NEVER MORE will I go into the woods without a gun. I carry a 12-gauge magnum shotgun. It'll kill anything, they can come right at me now."

Sophie Spollar and her husband John, Soudan, were frightened this fall while out for a walk on a road closed because of a storm-felled tree.

"We turned around a curve and here was a wolf pack," said Mrs. Spollar, 58. "We counted five for sure and there might have been more. They all had their heads down and they might have been eating a deer. We turned and ran back as fast as we could to our car."

The Spollars had to leave the road for the woods because of the fallen tree, she said, "and that's when we were really scared. I was making Indian war whoops to scare the wolves off and I had some candy in my pockets that I was dropping. I thought the wolves would stop for it."

She laughed and said, "Of course they wouldn't, but when you're that scared you don't think clearly . . . I thought I was going to have a heartattack I was so scared."

The Spollars, who now take a gun and a "Halloween noisemaker" with them on their daily walks, never looked back to see if the wolves were in pursuit. Naturalists said they certainly were not.

Should wolves be controlled? Dispute rages

By Ron Schara
Staff Writer

How many timber wolves should Minnesota have?

How many will ensure their survival; how many wolves is society, including state residents, willing to support and at what price?

The answers — basic to the increasingly intense controversy over the animal — appear to be as elusive as the wolf itself.

Nobody seems to know.

Meanwhile, the wolf issue continues to rage rather aimlessly, not only in Minnesota but elsewhere.

Both dead and living wolves have been paraded by opposing groups in a constant fight for public opinion.

Northern Minnesota residents express fear over the increase in wolves; wolf protectionists promise a court suit if the animal's endangered classification and legal protection is changed.

Even a computer was enlisted by the U.S. Fish and Wildlife Service (FWS) to examine hypothetical wolf population levels and their impact on deer, but the machine's answers were immediately challenged by human wolf experts.

And Minnesota's Department of Natural Resources (DNR), having lost jurisdiction over the wolf by the federal Endangered Species Act, has petitioned to declassify the wolf and return that jurisdiction. Last month, Lynn Greenwalt, FWS director, said a decision on DNR's petition, sent more than two years ago, will be announced by June.

Keith Schreiner, chief of the federal endangered species program, said the forthcoming decision may or may not say how many wolves Minnesota should have.

"The act does not require the listing or delisting (of a wildlife species) based on population," Schreiner said.

"I don't know how many wolves Minnesota should have. I'm not a wolf expert. But there should be enough so the wolf's future is reasonably well-assured."

In the final Eastern timber wolf recovery plan, formulated by a team of eight wildlife scientists, a goal of approximately 1,400 wolves was recommended, based on biological considerations. To achieve the goal, the

Wolves continued on page 8F



WOLVES

Rallying cry for love-hate

By JOE HENNESSY
Minneapolis Star Outdoor Writer

The timber wolf is he a magnificent beast or a costly nuisance?

Both, say state and federal wildlife officials. The answer they give depends on where the wolf has staked out a claim.

As for danger to humans, there is no record of a timber wolf ever making an unprovoked attack on a human in the United States. The question is whether the timber wolf should be removed from the endangered species list—at least in Minnesota.

"The problem is that we are seeing a polarization of extreme wolf lovers and wolf haters," said Jack Hemphill, Great Lakes regional director of the U.S. Fish and Wildlife Service at Fort Snelling. "It's what might even be called the lunatic fringe at both ends that is causing the trouble."

It is Hemphill's office that gets the complaints. The Minnesota Department of Natural Resources no longer holds any jurisdiction over control of timber wolves.

FOR THE RECORD, there were 56 official complaints of timber wolves causing livestock damage in Minnesota last year. Federal agents removed 51 timber wolves by trapping in 1976.

Although there is a maximum \$10,000 fine for each offense for the killing of a timber wolf for any reason, there have been no prosecutions in Minnesota since the animals were placed on the federal endangered species list in 1973.

"We are obliged to turn over any evidence we have on timber wolf violations to the U.S. district attorneys where the offenses occur," said Hemphill. "But in each instance the attorneys chose not to prosecute. Getting a conviction probably would be difficult, as the agent almost must see the person kill a wolf. Mere possession of a pelt or parts of the wolf would constitute only a misdemeanor."

Hemphill said that as he recalled, one of the cases involved a person who shot a wolf that was attacking his dog on the front porch. Another involved a person who shot a wolf in the act of killing livestock.

It's the diet of the timber wolf that has been getting him into trouble. His staple was venison. But deer are getting scarce in the heavily timbered area of northeastern Minnesota and the timber wolves have roamed farther west and south, into mixed woods and agricultural country. Another favorite of the wolf is dog. Wolves will kill any dogs they catch. They also will kill and eat brush wolves, known outside of Minnesota as coyotes.

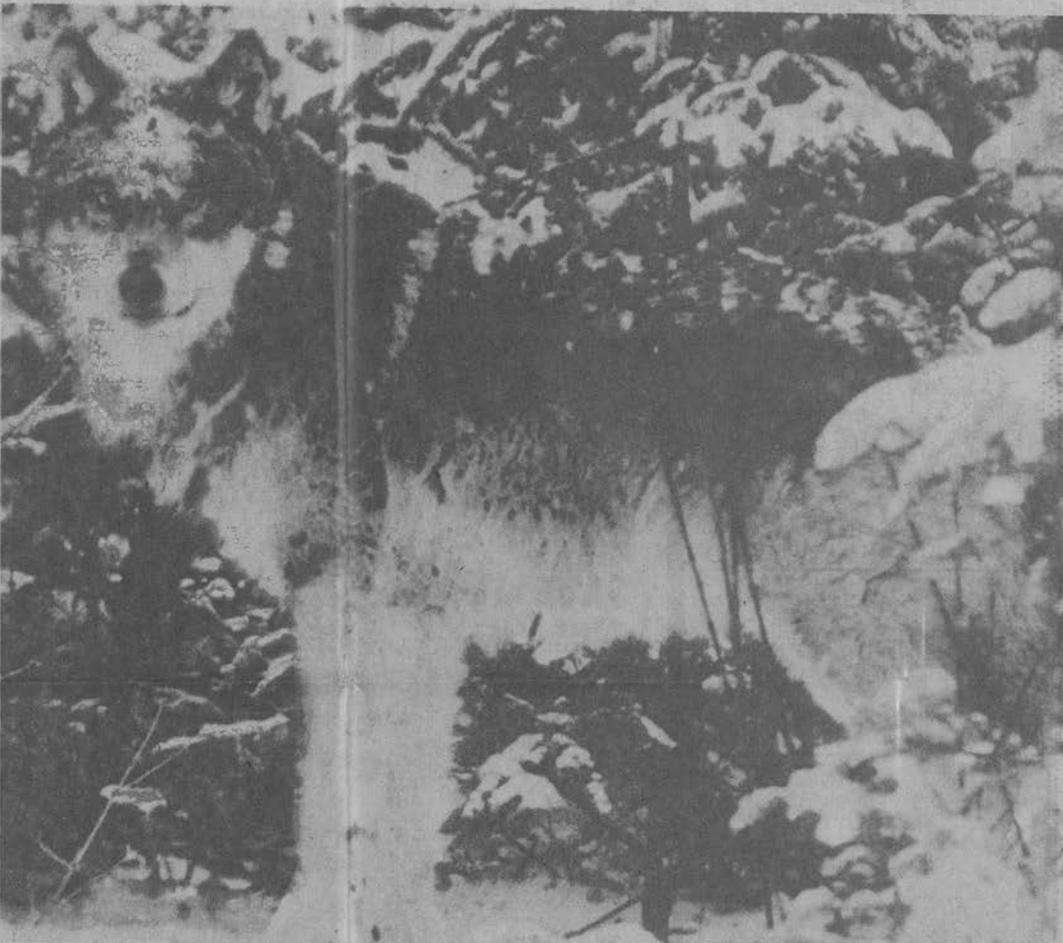
BRUSH WOLVES, running about 30 pounds, are only a third the size of a timber wolf. Brush wolves are entirely unprotected in Minnesota and may be taken at any time. The number of brush wolves trapped runs high. In one season, 1973, a total of 20,000 were taken. The year before 18,500 were trapped.

One aspect of the strong opposition to the timber wolf in the border country that worries Hemphill is the threat that poison may be used.

"That would constitute a conspiracy to violate federal law," said Hemphill. "We would crack down hard on such cases and they also would be easier to prosecute."

Down the hall from Hemphill's headquarters in the federal building is the office of Wesley R. Jones, chief of animal damage control for the service. He's the man under the gun on wolf complaints, and some are not gentle, he says.

"Strangely, the man who suffered the most dam-



A Minnesota timber wolf—victim of a love-hate rivalry

Department of Natural Resources Photo

age, did not complain as bitterly as some with lesser losses," said Jones. He referred to Julian Brzoznowski, a farmer near Orr, off whose property 31 of the 51 wolves were trapped last year.

"That case is almost unbelievable," said Jones. "But it is true. The best our men can come up with is that four separate packs of wolves apparently had his property surrounded.

"**THE WOLVES** were trapped and trucked out to places in the Superior National Forest. None, however, was taken into the Boundary Waters canoe Area at the request of BWCA officials. Two years ago we experimented with flying trapped wolves out. They were taken to an island in a remote lake. The plan was not particularly successful. We do know that the wolves ate one of their own kind on the island."

Although Minnesota no longer has authority to control wolves, the office of Dave Vessal, state fish and wildlife director, still gets complaints.

"All we can do now is refer them to the U.S. office," said Vessal. He leafed through a dozen letters that arrived on his desk in one day. Four of them concerned timber wolves. Three were violently anti-wolf, he said and the fourth appeared to be a form letter. It asked complete protection for them.

"It is true that there never has been a verified case of a timber wolf killing a human in the United State," said Vessal. "But people are seeing them

more frequently now, which is rare, and some see quite a few. One report was from the Lake Superior north shore. The man walked in about a mile and spotted a timber wolf. Then he saw another. By the time he got back out to the road eight of them were following him. I think I would have been worried."

HEMPHILL also believes the wolves are less wary about coming into closer contact with man.

"Once the animals are fully protected they seem to sense it," Hemphill said. "They will come into areas where they previously had feared to travel. I was stationed in Louisiana before coming here. When alligators were full protected (they since have been removed from the endangered species list) they became so fearless of man that they were crawling over golf courses, lawns and everywhere else. The timber wolf, by contrast, is a much more intelligent creature and soon learns that it is not being disturbed."

Both Hemphill and state wildlife officials have been asking for a reclassification of the timber wolf. Part of the decision may rest on the findings of the Eastern Timber Wolf Recovery team. Dr. David Mech of that team says their original policy did not preclude the taking of wolves that were doing damage. He said that figure might range as high as 150 to 200 animals.

ROBERT HERBST, Minnesota DNR commissioner,

Sports

the minneapolis star

Tues., Jan. 18, 1977 10

believes a reduction of the wolf population by about 150 to 200 per year would still keep a viable timber wolf population.

Timber wolves still carried a bounty in Minnesota as late as 1965. In 13 years prior to 1965, Herbst said that 2,440 timber wolves were presented for payment, or an average of 188 per year. From 1969 to 1973, when the state was removing wolves under its predator control system, an average of 65 were taken each year.

In 1965 the timber wolf population in Minnesota was estimated to be between 600 and 700. Latest state and federal estimates put the number from 1,000 to 1,500.

What will happen, Vessal believes probably nothing until June. The decision then will come from U.S. Fish and Wildlife officials in Washington. In the meantime, both state and federal officials in Minnesota are pleading for removal of the absolute ban on the taking of timber wolves for any reason.

Wolves

Continued from page 8F

"If I had to make a decision I'd say we ought to maintain roughly 1,000 wolves. Based on what I've seen that would be about right."

Maybe the answer to how many wolves should exist in Minnesota is immaterial.

David Mech, noted wolf authority, wrote recently that the long-range survival of the wolf depends, not on numbers particularly, but on the preservation of extensive areas where wolf-human conflict will not be possible.

Fifty years from now, Mech predicted, that could mean only Isle Royale National Park in Lake Superior, Voyageurs National Park and Superior National Forest. The rest of Minnesota's wolf lands could be mined, farmed, flooded, pastured or otherwise destroyed.

If that happens, the timber wolf will not be the only loser.

January 3, 1976

Donald D. Bridgwater
Minnesota State Zoological Gardens
Veterans Service Bldg.
Columbus Circle
St. Paul, MN 55155

Dear Don:

Have you any information on the enclosed clipping? We received several letters before the holidays but we haven't come across anything since then.

I'd appreciate any additional information you might have.

Sincerely, *Sue*

(Mrs.) Sue Pressman
Director of Wildlife Protection

jl
Encl.



**The Humane Society
of the United States**

**National Headquarters
2100 L Street, N.W.
Washington, D.C. 20037
(202) 452-1100**

OFFICERS AND DIRECTORS

COLEMAN BURKE
Chairman of the Board
ROBERT F. WELBORN
Vice Chairman
EVERETT SMITH, JR.
Treasurer
DR. AMY FREEMAN LEE
Secretary
JOHN A. HOYT
President
PATRICK B. PARKES
Executive Vice President
MURDAUGH STUART MADDEN
Vice President/General Counsel
PAUL G. IRWIN
Vice President/Development
ROGER CARAS
Vice President
AMANDA BLAKE
SAMUEL A. BOWMAN
DONALD S. DAWSON
DR. JOHN DOYLE
ANNA FESMIRE
IRENE EVANS
HAROLD H. GARDINER
ROBERT W. GILMORE
CHARLOTTE GRISWOLD
HON. GILBERT GUDE
DODIE HAWN
DAVID JENCKS
WILLIAM KERBER
VIRGINIA LYNCH
JACQUES V. SICHEL
DICK WENDELKEN
K. WILLIAM WISEMAN

HONORARY DIRECTORS
Aida Flemming
Hugh John Flemming
Virginia Milliken
Elsa Horne Voss
Andrew Wyeth

Another vessel was seen from a distance

Threat to poison wolves focuses on Falls protest

BY JACQUI BANASZYNSKI
Of the News-Tribune staff

INTERNATIONAL FALLS — An anonymous letter threatening the mass killing of timber wolves has put increased pressure on a meeting sche-

dued tonight to protest the federal ban on wolf hunting.

John McHarg, a sportsman and meat-cutter from Ranier and leader of the Concerned Citizen's Committee, said he received the threatening letter on Monday, shortly after the meeting notice was published in the International Falls Daily Journal.

The letter was signed "SOS—Sportsmen's Only Salvation," McHarg said.

The letter, which McHarg said "made some wild and bizarre threats," was not postmarked and McHarg said he has no idea who is involved in the group calling itself SOS.

Although the Concerned Citizens is working to have the timber wolf removed from the national endangered species list, McHarg said his group does

not support the radical action threatened in the anonymous letter.

According to the letter, which was published in the Daily Journal on Wednesday, SOS is "made up of farmers and sportsmen from St. Louis, Beltrami, Itasca and Koochiching counties who are sick of watching the Minnesota deer herd dwindle because the timber wolf is free to roam and increase in numbers with no checks and balances.

"We are tired of going through legal and political channels to solve the problem," the letter continued. "You might say we are going to take the law into our own hands and do what we feel is necessary to save the deer herd from extinction in Minnesota."

The letter claimed that members of
Continued on Page 10A Column 1

Wolf

From Page One

SOS have been setting poisonous bait in wolf traps for the past two weeks.

"Use of strychnine is a very cruel way to kill something, but not any crueler than the way a wolf kills a Minnesota whitetail deer," the letter said.

The letter called on the Concerned Citizens to meet with federal and state officials and urge that the wolf be erased from the endangered species list. That action must be taken immediately before cattle and deer herds in the northern counties are jeopardized further, the letter said.

If the Concerned Citizens fail to resolve the problem through legal channels, the letter said SOS members "are going to dump dead timber wolves on the steps of the county courthouses before the New Year and continue to set out bait full of strychnine poisoning until not a living meat-eating timber wolf is left in northern Minnesota."

The letter said proof of the threat will be demonstrated at the meeting at 8 p.m. today at the Ranier Community Center.

McHarg said he was assured by Department of Natural Resources (DNR) officials that there has been no evidence of wolf killing.

McHarg said he originally called tonight's meeting to share information on the wolf issue. It will be attended by officials from the DNR and the Northeastern Minnesota Environmental and Economic Council, professional trappers, Senator-elect Bob Lessard, a representative of U.S. Rep. James Oberstar's office and Julian Brzozowski, an Orr area farmer who claims he lost \$10,000 worth of cattle to wolf herds in the past year.

"The wolf is at the door, so to speak," McHarg said. "We believe the time has come for the cessation of rhetoric and for action. But that action should not be the killing of wolves."

He said the Concerned Citizens do not sanction the threats made in the letter.

"Civil disobedience, to our way of thinking, is a last straw," he said.

Penalty for violation of the 1973 Endangered Species Act is up to \$20,000 and five years in jail, according to Senator-elect Lessard.

Lessard said he favors total declassification of timber wolves from the endangered species list.

Lessard called the situation near International Falls "volatile" and said citizens were ready to "mass revolt" if the wolf hunting ban is not reversed soon.

Civil court action to remove the wolf from the endangered species list could take from two to 10 years, he said.

Zoo Conflicts Cause Suffering for Animals

When the administrators and caretaker staff of a zoo are locked in fierce disagreement over operating procedures, you can be sure that the animals are being deprived of adequate care and attention.

HSUS zoo expert Sue Pressman had this belief confirmed recently when she visited two southwestern zoos involved in labor-management disputes. In Tulsa, Okla., she found that employees were justified in complaining that caretaker procedures were inadequate to ensure the well-being of the animals. In Albuquerque, N.M., she discovered that animals were becoming increasingly neglected as a strike by zoo employees continued into the fourth week.

Mrs. Pressman was called to the Tulsa zoo in January to mediate a strike threat by zoo employees caused by the zoo director's suspension of three members of the caretaker staff. The employees had been suspended after voicing their dissatisfaction with caretaker procedures to members of the press. Information uncovered during interviews with employees and administrators convinced Mrs. Pressman that major changes needed to be made in administrative policies in order to provide proper care for the animals. On an inspection tour of zoo grounds she found several major hazards to the health and welfare of the animals.

Among the discrepancies she cited were these: (a) cage and fence wire in "deplorable" condition (one animal had been killed after an animal in an adjoining exhibit broke through weak fencing and attacked it); (b) low areas within the grounds susceptible to flooding, providing breeding areas for disease; (c) vague instructions disseminated about staff duties, causing confusion and poor morale; (d) inadequate system for disseminating information to keepers on animals' diets; (e) need for the zoo veterinarian to take a greater role in management, with emphasis on nutrition, preventative medicine, and pest control.

To correct labor-management problems and physical discrepancies, Mrs. Pressman strongly recommended that a second-in-command executive be hired to handle day-to-day management requirements. "This person should come from another zoological garden



Victor Scheffer: Conference Speaker

because of the obvious need for fresh ideas," she said.

The zoo's problems were underscored a few weeks after Mrs. Pressman's investigation when a pair of rare white rhinos died from intestinal infection. The animals' keeper reported he had requested that the zoo veterinarian examine the rhinos on several occasions but that his requests had been ignored.

Animal mortality has been a major problem at the zoo for some time. In 1973, 173 animals died out of an inventory of 887. "A high mortality rate is almost always symptomatic of major problems in zoo administration," Mrs. Pressman said.

"It may be that the only way for the zoo to overcome its very serious problem is for the director to step aside," Mrs. Pressman said early this spring. "If all other measures fail, the hiring of a new director may provide the only hope for this zoo to survive."

Mrs. Pressman visited the Albuquerque zoo because she was afraid the animals were being neglected during a heated three-week strike by 15 zoo employees. Her fears were confirmed when she learned that the mortality rate had risen considerably.

"The union work stoppage has placed the entire zoological park in a state of stress," she wrote Mayor Harry Kinney following her visit. "Animals and staff cannot continue much longer under these circumstances."

The strike has since ended, but the reason for it being called—the demotion rather than the firing of the zoo director—has not yet been resolved. □

from HSUS
NEWS
(Spring 1975)

I now
realize that
what colleagues
have been
telling me
all along
(re HSUS &
S. Pressman)
is true!

D. Guccione

November 20, 1974

Mrs. Sue Pressman
Humane Society of the United States
1604 K Street NW
Washington, D. C. 20006

Dear Sue:

I am enclosing a copy of the Western Store catalog which I mentioned some months ago in which they offer such goodies as sea turtle boots and other such items. Please note the ant eater boots on the back page.

I don't know if anything appropriate can be done, but at least I felt obligated to make you aware of the problem.

I trust everything is going well with you and keep in touch with us.

Best regards.

Sincerely,

DDB vc

Donald D. Bridgwater, Director

MURDAUGH STUART MADDEN

Law Offices

*Barr Building
910 Seventeenth Street, N. W.
Washington, D. C. 20006 U. S. A.*

202 833-3360

May 21, 1973

Donald Bridgwater, Director
Minnesota Zoological Garden
Veterans Service Building
Columbus Circle
St. Paul, Minnesota 55155

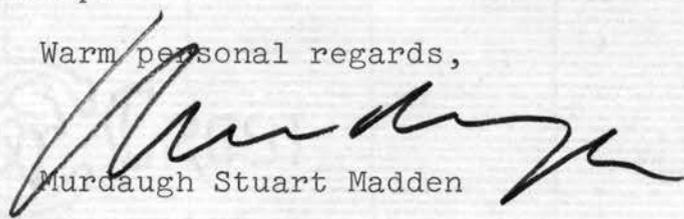
Dear Don:

Here is a copy of your testimony in our famous losing cause, which I thought you might want to keep as part of your memorabilia (sp.?) (sic).

We have noted an appeal, and I am trying to devise some way to have the case reviewed without spending too much time or money. It looks as though we will concentrate on the bow and arrow aspects of it where the testimony before the trial judge would appear to be completely onesided.

I hope that this finds you well, and thanks again for all of your interest and help.

Warm personal regards,


Murdaugh Stuart Madden

MSM:ch

Enclosures

AFTERNOON SESSION

2:10 p.m.

THE COURT: Good afternoon.

MR. MADDEN: May it please the court, we have agreed upon a hypothetical question, or a hypothetical set of facts.

THE COURT: All right. Call your first witness, then, and let us proceed.

MR. MADDEN: Yes, sir.

Dr. Bridgwater.

Whereupon,

DONALD BRIDGWATER

was called as a witness, and, having been first duly sworn, was examined and testified as follows:

MR. MADDEN: Your Honor, when I get to this, it is about four or five pages. Should I read it into the record?

THE COURT: Yes.

MR. MADDEN: All right.

DIRECT EXAMINATION

BY MR. MADDEN:

Q What is your name and address and occupation, please?

A. My name is Donald Bridgwater. I reside at 4333 Railand Lane in Shoreview, Minnesota.

Q And what is your occupation?

A. Director of the Minnesota Zoological Board.

Q And what is the nature of your background and experience in your profession, please?

A. Basically, I was trained in undergraduate school as a biologist. I did a Master's Degree in the area of ecology, animal behavior.

MR. WERDIG: I am sorry, I can't hear the witness, Your Honor.

THE COURT: Can you hear him, Mr. Reporter?

THE COURT REPORTER: No, sir.

THE COURT: Speak up, if you can, please. Start over with what you were trained for in college.

THE WITNESS: I basically received an undergraduate degree in biology with the emphasis upon field biology, ecology, and so forth.

I received a Master's Degree from the Oklahoma State University, again, in the area of zoology. I taught for four years as a zoologist in the Liberal Arts College in Oklahoma. I did graduate work at the University of Oklahoma in the area of field biology, animal behavior.

I did several research projects in that area.

I was scientific curator at the Oklahoma City Zoo, and in 1968 I came to the National Zoological Park in Washington, D. C., as general curator.

Since 1969, I have been assistant director and director of the Minnesota Zoological Board.

BY MR. MADDEN:

Q Thank you.

MR. MADDEN: I would like to offer this witness as an expert on matters relating to this case, Your Honor.

THE COURT: Any objection?

MR. WERDIG: Yes, Your Honor. May we voir dire?

THE COURT: Yes. I think, in the exercise of the court's discretion, that is proper. So I will let you do that to a limited extent.

MR. WERDIG: Thank you.

VOIR DIRE EXAMINATION BY MR. WERDIG:

Q Mr. Bridgwater, would you tell us what a general curator is at the National Zoological Park?

A A general curator is the equivalent to, or in the context of, the administrative management person with responsibility for the animal collection and those associated functions such as the commissary, pest control, certain research studies, and so forth.

Q In your capacity as the general curator, did you go into the field for the collection of animals?

A Personally?

Q Yes, sir.

A Not as general curator, no. There was not time.

Q Your responsibility started in the preparation for the gaining of the animal, the administrative background to it, is that correct?

A The management of those animals in the collection.

Q When they arrived, but did you have anything to do with them before they got there?

A Only in terms of arranging transportation details, et cetera.

Q And you held that position for how long?

A From February, 1968, to February, 1970. That is approximate.

Q All right. Prior to that you had been a research curator at an Oklahoma Zoo?

A That is correct.

Q What were your duties as a research curator?

A The scientific curator was responsible, in my particular case was responsible, for the mammal collection and the bird collection in that zoo.

Here the duties were more specifically in terms of applying research to the animals, et cetera, rather than administrative, sir.

Q Did you have anything to do with the acquisition of the animals before they arrived at the Oklahoma Zoo?

A In some instances, yes, but, by and large, no.

Q In those instances in which you did have something to do with the obtaining of the animals, what was your responsibility?

A Again, primarily because a zoo animal acquisition in many cases is a function of a purchase from an animal dealer

or internal trades between zoos, and, again, the primary function was to insure safe transportation and adequate and humane means.

Q Mr. Bridgwater, you have a special area of interest so far as mammals are concerned, do you not?

A Yes, I do.

Q And what area is that, sir?

A The actual behavior of natural populations; and, in relation to the zoological garden field, specific management and propagation of captive groups of animals.

Q Do you have a particular species which you are particularly interested in?

A I am not involved with a particular species at this time.

Q As an undergraduate, did you take any courses in wildlife management?

A As an undergraduate, no.

Q As a graduate, did you take any courses in wildlife management?

A Yes, sir.

Q How many?

A With the title "Wildlife Management"?

Q Yes.

A It is a difficult question to answer, because such things as mammalogy, ornithology, wildlife management techniques, natural history of vertebrates, applied ecology courses in the

field --

Q But these would apply to mammalogy generally, would they not, Doctor? Excuse me, Mr. Bridgwater. I am speaking about wildlife management, in particular. How many courses did you have as a graduate?

A In terms of specific techniques?

Q Yes, sir,

A Two.

Q Two?

A Yes.

Q How many hours?

A Eight, I believe.

Q Have you written any papers, Doctor? Excuse me. I keep calling you a "doctor". Are you a "doctor"?

A No, I am not. I have not completed my thesis.

Q Your baccalaureate degree, was that a Bachelor of Arts or a Bachelor of Science?

A It was a Bachelor of Science in biology, and a Master's Degree in zoology.

Q Was that a Master of Science Degree?

A Yes.

Q All right.

A And three years of graduate work toward a Ph.d.

Q What is your field in your doctorate study?

A Behavior of certain types of ground squirrels.

Q Have you ever done any research in the field of ungulates?

A With reference to captive --

Q In the field.

A Yes.

Q And what was your --

A Oh, in the field?

Q Yes, sir.

A No, sir.

Q All of your research has been confined to captive animals, so far as your ungulate research is concerned?

A Yes, sir.

Q Mr. Bridgwater, in your professional experience, do you recognize a difference in the habits and propensities of wild animals as opposed to captive?

A One has to. They are, of course, set in two different circumstances.

MR. WERDIG: With the court's indulgence and no deprecation of the witness, I cannot concede that he is an expert in the area that we are discussing at this particular juncture, Your Honor.

MR. MADDEN: May I inquire further, Your Honor?

THE COURT: Yes.

BY MR. MADDEN:

Q Mr. Bridgwater, have you done any papers on ungulates?

A. Yes.

Q. What were the titles of those papers and the subject matter?

A. I will do it generally, because I am not certain of the specifics:

Captive behavior and mortality in zoo park hoofstock, herd animals, ungulates specifically.

THE COURT: Either the witness or counsel, I would like to have you tell me what an ungulate is.

THE WITNESS: A hoofed animal.

THE COURT: Thank you. Now, would you repeat your last answer? I am sure my court reporter, being the ablest in the court house, still could not understand you.

(A portion of the record was read back as follows:

"Question: What were the titles of those papers and the subject matter? Answer: I will do it generally, because I am not certain of the specifics: Captive behavior and mortality in zoo park hoofstock, herd animals, ungulates specifically.")

THE WITNESS: Just breaking ungulates into their two categories of perissodactyla and artiodactyla.

BY MR. MADDEN:

Q. Now, you testified that in graduate school you had two courses in wildlife management techniques, is that correct?

A. Wildlife management and wildlife management techniques, yes, sir.

Q And they were for a total of eight hours?

A Yes.

Q Do you mean eight hours per week?

A Well, in the hour system, the classes --

THE COURT: Was it eight hours per semester or per quarter?

THE WITNESS: That is total, eight hours, two semester courses.

THE COURT: So, in other words, 16 hours all together.

THE WITNESS: No. No.

BY MR. MADDEN:

Q How many classroom hours did you spend?

A Classroom hours were calculated on the basis of three classes per week, plus laboratory and field work.

Q And how many weeks did those courses last?

A 18.

Q 18 weeks?

A Yes, sir.

THE COURT: How much of that time was spent on laboratory and field work; or, in addition to that time in the classroom, how much was spent on laboratory and field work?

THE WITNESS: Essentially, in wildlife management techniques, they were basically all done in the field, using practical --

THE COURT: Using what?

THE WITNESS: Using practical applications of techniques; in other words, practical experience in the field as opposed to sitting in the classroom.

THE COURT: Did you visit or study wildlife refuges?

THE WITNESS: Many of them, sir.

THE COURT: Where?

THE WITNESS: Aransas National Wildlife Refuge.

THE COURT: All right.

THE WITNESS: Wichita Mountains --

THE COURT: Wichita Mountains?

THE WITNESS: Yes, sir. National Wildlife Refuge, Great Salt Plains National Wildlife Refuge, Blackbeard Island National Wildlife Refuge below Savannah, Georgia.

THE COURT: Any others?

THE WITNESS: I am sure there are.

THE COURT: Now, you might direct, counsel, if you care to, a question as to whether or not any of the animals involved in this case were involved in any of those that he listed.

BY MR. MADDEN:

Q Did you, in connection with your studies, do any field work with relation to the white-tailed deer herds?

A In terms of observation of the animals, participating in counts, this sort of thing, yes; but with no direct responsibility.

Q Well, in that you were a graduate student instead of the refuge manager, is that what you mean?

A That is right.

Q Are you in charge of a certain limited number of white-tailed deer now at the zoo where you work?

A No, sir. It is a paper zoo at this time. We are waiting on the --

Q All right. How about the National Zoological Park here in Washington, D. C.?

A Yes.

Q Were you in charge of white-tailed deer?

A Yes, and Sika deer.

Q You had the total responsibility for them?

A That is correct.

THE COURT: What is the difference between that and deer in one of these refuges that you say that you have visited?

THE WITNESS: Basically, that there we are talking about a large natural population of animals.

THE COURT: What do you mean by "there"? Do you mean in the zoo?

THE WITNESS: In the refuge.

THE COURT: All right, in the refuge.

THE WITNESS: Yes.

THE COURT: Okay.

THE WITNESS: As opposed to a small, confined, captive

population in a zoo environment.

BY MR. MADDEN:

Q Now, in your general professional readings, since you have been working, have you followed the general literature on wildlife management?

A Yes, sir, I have.

Q And that is part of your --

MR. WERDIG: Excuse me, Your Honor. I hate to interrupt counsel, but I thought we qualified experts on their personal knowledge, not on what they have read.

THE COURT: That is part of any expert's personal knowledge, Mr. Werdig. I think you know that. We do that with doctors all the time. We ask them about their familiarity with the literature in the field, and then the next question is, I presume, what literature.

BY MR. MADDEN:

Q What textbooks did you use in your graduate courses in school?

A It has been a long time ago.

Q In wildlife management. Well, if you recall.

A The classic or standard textbooks that were available.

Q But there were textbooks, and you took examinations?

A That is correct.

Q And what are some examples of the regular publications

that you read in this field of wildlife management?

A. I regularly read and subscribe to, either personally or through my office, the Journal of Wildlife Management, the Wildlife Review, and, of course, the wildlife monographs which come out, and other documents that are germane. I may have missed one or two.

THE COURT: Do you read them all?

THE WITNESS: As a matter of fact, I do.

THE COURT: All right.

BY MR. MADDEN:

Q In your position here in charge of the wild animals, were you managing those wild animals?

A. Yes, sir.

MR. MADDEN: I offer this witness, Your Honor, as a qualified expert in wildlife management.

MR. LENZINI: Your Honor, may I have a moment to examine him?

THE COURT: Yes.

VOIR DIRE EXAMINATION BY MR. LENZINI:

Q Mr. Bridgwater, during the period of time that you were at the Washington Zoological Park, did there come a time when any of the animals that were part of the collection died?

A. Yes, sir.

Q Have you had any training in internal medicine, Mr. Bridgwater?

A. Internal medicine?

Q. Internal medicine or pathology?

A. No.

Q. When autopsies were taken -- were autopsies taken of the animals that died at the Zoological Park?

A. Yes, sir.

Q. Were you permitted to perform the autopsies?

A. I did not. The Armed Forces Institute of Pathology and our staff pathologists carried this out,

Q. You are not trained in veterinary medicine?

A. No.

Q. Mr. Bridgwater, do you believe there is a close relationship between the management of captive populations of animals and the management of animals in wild field conditions?

A. In some cases.

Q. Let us talk about the white-tailed deer and the Sika deer. Would you believe that there would be a very close relationship between the management of a herd of white-tailed deer in a wild condition, in open-range conditions, and the management of the same type of species in a zoo-like condition?

A. With respect to reproductive biology and the year-to-year building of a herd, there is a distinct similarity.

Q. What about the limiting factors on white-tailed deer in wild conditions? Would they be comparable to those in a zoo-type atmosphere?

A. When you say "limiting factors" --

Q. I mean forage, nourishment.

A. No. In the case of the natural population, there is a great deal more dependence upon the animal's own ability to pick and select food.

Q. In the wild?

A. In the wild.

Q. Thank you.

THE COURT: Mr. Stein, do you have any voir dire questions?

MR. STEIN: Yes, Your Honor.

Mr. Madden said that he was sponsoring this witness as an expert on the issues in this case. I take it that the expert is not tendered as anyone having any skill in ballistics because I have heard nothing with respect to his background on that issue, and I would inquire of Mr. Madden whether he was going to use him for any ballistics questions.

MR. MADDEN: Well, this expert will testify that he has read the current literature. So he will testify as to his knowledge and understanding from that literature as to weaponry and what is in common use in reducing deer herds in deer-control work throughout the country.

The whole gamut of the field of wildlife management is going to be testified on.

If there is some particular question that comes up

or you want to cross-examine him on after he has testified, Mr. Stein, I think that is the time to do it and see if he knows what he is talking about.

I submit that he does.

MR. STEIN: Well, I would not want to concede that he was an expert on the issue of ballistics, and I would like to ask him a few questions.

THE COURT: I think you should.

MR. STEIN: Thank you, Your Honor.

VOIR DIRE EXAMINATION BY MR. STEIN:

Q Your knowledge concerning the use of weapons to reduce the animal population is based entirely on the literature that comes across your desk?

A That, plus my own very personal experiences in the field.

Q You have had no special training in ballistics?

A I have not.

Q Nor with archery?

A Other than shooting a bow occasionally, no.

Q You have no technical knowledge concerning the force at which bullets are projected?

A No, sir, other than that which you can read in the literature.

Q And you have no special knowledge about the relationship between the force of a projectile and the effect on the

animal with respect to the infliction of death?

A. Scientific ballistic information, no, sir.

MR. STEIN: I have no further questions.

MR. WERDIG: May I inquire a little further, Your Honor?

THE COURT: Yes, I will give you a second chance, Mr. Werdig.

MR. WERDIG: Well, since Mr. Madden had one, I think I should have one.

THE COURT: All right, but we have to move along, gentlemen.

MR. WERDIG: Yes, sir.

FURTHER VOIR DIRE EXAMINATION BY MR. WERDIG:

Q. Mr. Bridgwater, in your trips to the four refuges that you mentioned, the Aransas, Wichita, and Blackbeard, and there was a fourth. I forget the name of it.

A. I don't know which one you left out.

Q. All right. Were those all federal refuges, sir, national wildlife refuges?

A. National wildlife refuges.

Q. And you were there under the control and supervision of the refuge manager or some member of his staff?

A. In one instance we were there to participate in some specific management programs.

Q. Like what?

A. Pardon?

Q. Like what, sir?

A. Well, in this particular case, we were capturing alligators for a zoo exhibit.

Q. That was at Bluebeard, was it not?

A. Blackbeard.

Q. Excuse me. That is why I asked you earlier, Mr. Bridgwater, if you had a special species that you were interested in other than the ground squirrel. Is an alligator one of your areas of special interest?

A. "Special interest" is tricky, because at some level in time you begin to take an interest in the whole gamut of animals.

Q. I certainly understand that, but do you concentrate

A. No, the alligator is not particularly interesting to me.

THE COURT: I think we are interested in the animals that are involved in the herds in question.

MR. WERDIG: That is right.

BY MR. WERDIG:

Q. So your trip to to Blackbeard on this particular incident was related to alligators, is that correct?

A. That, plus carrying out some marking and observational studies with other reptiles on the island. We did mammal trapping, and participated in drive counts.

Q What kinds of mammals did you trap?

THE COURT: Were any of them deer?

THE WITNESS: Oh, no.

BY MR. WERDIG:

Q All right. Did you have any dealings with deer as a species at Aransas?

A. Other than observation, no.

Q You looked at them in the field?

A. Yes.

Q And at Wichita did you have any dealings with the deer as a species?

A. Only --

MR. MADDEN: Excuse me, counsel. What do you mean by "dealings with the deer"?

THE COURT: I think that is an appropriate question, if the witness understands it.

BY MR. WERDIG:

Q Do you understand my question, Mr. Bridgwater?

THE COURT: Your objection is overruled.

BY MR. WERDIG:

Q I do not mean to confuse you.

A. I understand it to mean: Was I involved in some function related to deer.

Q Yes. Yes.

A. Other than observation and conducting census, looking

for --

Q This work that you did on the census, was that under the direction of the refuge manager?

A No, sir. That would be considered classroom or laboratory activity.

Q You did that under the direction of a professor or an assistant instructor or somebody like that?

A Yes.

Q Mr. Bridgwater --

A And the refuge manager and the biologist.

Q Have you ever designed a public hunt?

A No, sir.

Q Have you ever managed a public hunt?

A No, sir.

Q Relating to the ground squirrel, are you familiar with the Delmarva Squirrel?

A Yes, sir.

Q The Fox Squirrel?

A It is an endemic -- well, I am not certain of my own feeling about whether it is a species or a variety race, but it is, I believe, on the endangered species list.

MR. WERDIG: Thank you, Your Honor. The same objection.

THE COURT: What do you know about the Great Swamp National Wildlife Refuge?

THE WITNESS: My knowledge of that refuge, sir, is based on a review of the data which has been collected.

THE COURT: My question is: What do you know about it? I would like to know what specifics you know about it.

THE WITNESS: Again, in terms of the population of deer there, what its function is, that type of knowledge?

THE COURT: Among other things, yes.

THE WITNESS: Well, the Great Swamp is a national wildlife refuge that was established to serve as a harbor and refuge for migratory waterfowl.

I do understand that there is a population of deer in the refuge and have looked at population data and descriptions of that deer herd which have been given by the refuge personnel, sir.

THE COURT: Do you feel that you are qualified to know whether or not the deer population within or on that refuge is excessive or not?

THE WITNESS: I can render an opinion, sir, on that, based on the available data.

THE COURT: What data?

THE WITNESS: Such as the size of the refuge, the estimated numbers of deer, the percentage of crop land, and forest habitat, and so forth.

THE COURT: Now, in further reference to Mr. Stein's questions, what do you know, if anything, about the effect of the

use of high-powered rifles?

THE WITNESS: Technically?

THE COURT: Yes.

THE WITNESS: Nothing.

THE COURT: What do you know, if anything, about the effect of the use of high-powered rifles in terms of the principles of sound wildlife management and good public policy?

THE WITNESS: I believe that the use of --

THE COURT: I am not asking you for your opinion, but what knowledge do you have in regard to that?

THE WITNESS: That they are efficient weapons with regard to killing deer.

THE COURT: Are they compatible with the principles of sound wildlife management?

THE WITNESS: When properly used, yes, sir.

THE COURT: And upon the knowledge of what facts do you base that opinion?

THE WITNESS: Again, only that I believe them to be an efficient weapon.

THE COURT: That does not answer my question. Upon what facts do you base that opinion?

THE WITNESS: I suppose the one that comes to mind is the relative per cent figure that occurred in our recent deer hunt in Minnesota, where the per cent of success using rifles as compared to the bow and arrow hunt was about four to 29 per

cent variance.

I would assume, by a piece of data like that, that the deer rifle is a more adequate and efficient weapon.

THE COURT: Do counsel have any other questions?

MR. MADDEN: Your Honor, this witness' knowledge of the facts of Great Swamp comes from the hypothetical question which he has looked at yesterday and has been altered only in minor respects and would be reread to him.

It is the facts that are in this case to which he is applying his knowledge.

THE COURT: Mr. Stein?

MR. STEIN: Your Honor, with respect to the witness' comments concerning the effect of a high-powered rifle on something living, I think his comments are those of a lay person. They do not carry with them any more force than any other person's comments.

He abdicates any precise knowledge on ballistics, and I do not think he qualifies under the rule which requires that in order for someone to give an opinion rather than first-hand factual knowledge, they are permitted to do that only if they persuade the court that they can illuminate, based upon their special background and experience.

In response to Your Honor's questions, he merely used as a counter, a study and said that the study, to him, has a self-evident proposition.

Well, that is not what expert testimony is for, and I think with respect to his use -- his proffer as an expert with respect to firearms and bows and arrows, that he is disqualified.

THE COURT: Well, let me ask you this, gentlemen, and you in particular, Mr. Stein, since you have raised the question, I think, very appropriately:

As you well know, the court is sitting here as a fact-finder without benefit of the jury, and I have heard the witness' answers with respect to his qualifications as an expert, the same as counsel.

I am well aware, or hopefully well aware, of the requirements for the taking of the testimony by an expert in this or any other case.

But, also, as a fact-finder, unlike a jury, would you not agree that the court is in a peculiar position, in the light of the facts elicited, to allow him to testify and to give such weight as the court, in the light of the facts adduced, deems appropriate? Is that not consistent with the rule under these circumstances?

MR. STEIN: Well, looking at the latest edition of McCormick On Evidence, Your Honor, it says that reversal for the abuse of discretion is rare.

So I think that whichever way Your Honor goes, Your Honor will be upheld. There is merit in both positions, but I

think it will speed the progress of this case if a scalpel were applied at this point and we would not be burdened with commentary by a man who is unqualified.

MR. LENZINI: Your Honor, I would simply add that our Court of Appeals has formulated the matter in such a way as to indicate a good deal of discretion in the trial judge, but, nonetheless, the critical factor, as the Court of Appeals has said, is the experience of the witness.

In this case it seems to me that there is a lack of experience by the witness with respect to wildlife management of herds not in captivity.

THE COURT: Mr. Werdig?

MR. WERDIG: Your Honor, I pointedly asked the witness -- and I hope Mr. Bridgwater understands what we are doing here.

THE COURT: You do not have to apologize to Mr. Bridgwater. He has undoubtedly been informed by his able counsel that all you are doing is your job, the same as he does back in Minnesota.

MR. WERDIG: But carrying on the point my colleague, Mr. Lenzini, raised, his only experience upon which there is any basis that he can testify as an expert, which puts him an element above a layman, are the visits to the national wildlife refuges, which is the whole property before Your Honor.

Now, he has gone at the alligator and the other

mammals and has had only the opportunity to observe deer in their natural habitat.

I pointedly asked him, from the prefatory remarks given to us by Mr. Madden, certain questions and elicited the answer that he has never designed a public hunt; he has never managed a public hunt.

That is what we are here for. That is the nitty-gritty of this case.

MR. MADDEN: May it please the court, I do not think we are going to get a hunt designer or a hunt planner here as a witness, and I don't think anybody should wait for us to get one who is willing to testify.

I submit that this man took courses, passed the courses presumably, studied texts in wildlife management and is just a thesis short of having a Ph.d. in a field closely related and interrelated with that.

His testimony was that on the one refuge -- and I fail to see what real difference that made -- he did participate in counting deer tracks and in helping the refuge manager census it.

But I do submit that he is an expert, and if in the course of his testimony -- he is not being offered as a ballistics expert. That is obvious.

THE COURT: Yes, but, Mr. Madden, let the court suggest this to you:

This gentleman is being proffered as an expert witness in the methods selected for the three deer-herd-reduction hunts that are in question in this case.

Now, as the court recalls -- and I may be in error -- one of them is by the use of guns. The permit provided for guns. He knows nothing about ballistics or the effect of those guns, from the testimony that the court has heard thus far.

I would gather that he knows very little, if anything, about the use of bows and arrows, which is another method that is in issue here, one of the critical, fundamental issues.

He may be the world's greatest expert on wildlife management, in general, but if he does not know about the methods that were selected in this particular case, I do not mind telling you that the court is troubled.

MR. MADDEN: Well, Your Honor, one of the questions, of course, is: Were these methods, as compared with all other available methods of herd reduction, including natural reproduction including buffering, including the material they studied in this field -- I think that is all relevant.

The fact that he has not been involved in the killing job himself, or in ballistics, it seems to me, is just one of the questions here.

We are going to try to develop, Your Honor, the way you manage a deer herd, and not necessarily the way you kill them. They die --

THE COURT: We are not going to talk about management, Mr. Madden. That is the reason I asked the parties before this trial began, back in December of 1972, to agree upon the central issue in this case.

You and the two intervenors agreed that the basic question deals with the methods selected and whether these methods selected for the three deer-herd-reduction hunts in question are compatible with the principles of sound wildlife management or are otherwise contrary to public policy.

Now, he may have extensive knowledge with respect to the latter portion of the question, but the fundamental thing that is at issue here is, again, as has been stated in the court's opinion of whatever date it was -- let's see -- November, 1972, November 30th. The basic issue is whether these methods for the three hunts in question are ineffective and inefficient, or so ineffective and so inefficient as to be not compatible with the public interest, or the principles of sound wildlife management.

If he cannot testify as to the two principal means by which these hunts were authorized, again, I say to you very candidly and frankly that I am troubled by it.

MR. MADDEN: Well, Your Honor, for example --

THE COURT: If I let him testify, I cannot, or if any judge were to let him testify under the circumstances adduced thus far, I just cannot conceive of a court, trial or

appellate, attaching great weight to the gentleman's testimony, no matter how nice he is or how much the court would generally respect him as an individual.

MR. MADDEN: Your Honor, I don't feel that we need a gun or a bow man to testify that, with respect to sound wildlife management and herd-reduction methods, and consistent therewith, a bow-and-arrow hunt that put men in the field for one month and did not reduce the herd by one deer was inconsistent with those principles and was disturbing to the balance of the wildlife. I think there are many issues here, Your Honor, for which one does not have to be a ballistics man.

THE COURT: Well, I listed some of them on page 5 of my opinion of November 30, 1972, when I denied the motion for summary judgment to the distress of your friend, Mr. Werdig.

But in any event, I think, in the exercise of the court's discretion, I will let him testify. But you have the burden of proof on the issue that you agreed on before we began this trial; and, hopefully, you will be able to persuade me that you can make out a case, hopefully for your clients.

MR. MADDEN: Well, Your Honor, with reference to that issue we agreed upon, which I signed -- and it has a footnote on it -- it seems to me that it obviously left out the third element: compatible with the major purposes for which the refuges were established.

I would hope that Your Honor is not going to exclude

that from determination in this trial, because it is a three-pronged test that we have been talking about from the beginning of the trial.

I don't think any counsel intended that that one sentence be this whole trial.

THE COURT: Well, there are two sentences here, sir.

MR. MADDEN: And it added the words "basic or main issue," and I think that is consistent with my trial brief, Your Honor: that everything else flows under that one proposition. I may be raising some irrelevant issue here, but I think the primary purposes for which these refuges were established must be in this case because they are in the statute.

MR. WERDIG: If Your Honor please, I will stipulate that the major purpose for which they were established was to provide migratory waterfowl habitats, each of the three.

MR. MADDEN: Therefore, issues disturbing those waterfowl are issues that are relevant here.

THE COURT: All right. I will overrule the objection in the exercise of my discretion and add that I have some reservation about his expertise on all the issues that are involved, but you may proceed.

MR. MADDEN: Thank you, Your Honor.

BY MR. MADDEN:

Q Now, sir, I am going to ask you to please assume the following facts:

The principal objectives for the management of the Great Swamp National Wildlife Refuge are, listed in the order of priority: to preserve its pristine uniqueness, to provide high-quality environmental education and recreation, to encourage scientific study, to provide waterfowl migration habitat, to provide nesting habitat for ducks, and to provide habitat for optimum numbers of migratory birds and other wildlife in an ecological balance.

The Great Swamp National Wildlife Refuge in New Jersey, the Eastern Neck National Wildlife Refuge in Kent County, Maryland, and the Chincoteague National Wildlife Refuge in Virginia are all a part of the National Wildlife Refuge System.

These three refuges were established for the primary purpose of providing habitats for migratory birds.

The Great Swamp National Wildlife Refuge, comprising approximately 5900 acres, was established in 1960, and is located approximately 30 miles west of New York City, in Morris County, New Jersey, a suburban area.

In 1968, 3750 acres of the Great Swamp National Wildlife Refuge were designated a wilderness area.

The Great Swamp National Wildlife Refuge and Wilderness Area is comprised of approximately 3000 acres of brush and timbered swamp, 600 acres of marsh, 1200 acres of upland timber, and 800 acres of farm pasture and haylands.

In 1964, the white-tailed deer herd at Great Swamp had

been stable for several years at 120 head, with no sign of a browse line.

In 1965, the herd estimate was from 240 to 200, with no browse line.

In 1966, the herd population was reported stable at 200.

In 1967, the estimate was 380 to 320, with the deer heavy and the bucks carrying well-developed antlers.

In 1968, the herd had not increased from 1967, and all deer appeared to be healthy. In fact, the estimate was between 380 and 320.

In 1969, the count was up by 40 head as of December 31, and the deer herd appeared healthy. Its peak was 460.

In 1970, the deer herd size in December was identical to that of the year before and stood at between 550 and 360 head.

The refuge manager arrived at these population estimates basically by means of road counts conducted by riding around the main roads on the refuge in the last hour of daylight and counting the deer that come out to the various fields to feed. Based upon the number of deer seen, an estimate was made of the total refuge herd.

The count was considered to be 50 per cent of the total herd and covered less than one-third of the refuge area, but was the area where a high percentage of the deer are located.

The refuge manager's estimate of the carrying capacity of the refuge was based upon a rule-of-thumb of 20 acres per deer

because the refuge manager had no better information.

In 1968 and 1969, the deer caused considerable damage to foundation plantings, gardens and tree nurseries on private property surrounding the swamp. Red cedar, domestic yew and arborvitae were being heavily browsed throughout the refuge, and even the new growth on Colorado Spruce was being sampled. The refuge manager reported as "the strangest thing" that many common deciduous shrubs, such as dogwood, birch and blueberry, normally considered good deer browse, showed practically no sign of utilization, and reported that it seemed to him as though the deer sought out and concentrated on anything that is green during the winter.

No helicopter count or deer-tagging operation was ever engaged in prior to the authorization of public hunting.

A public hunt was authorized for December 19, 1970, to reduce the deer herd population.

A special one-day either-sex deer season was authorized for 150 hunters randomly selected by computer by the New Jersey Division of Fish, Game and Shell Fisheries. There was a requirement that all deer taken be checked out at the refuge check station.

The only weapon permitted was shotgun using buckshot.

Hunters were to be selected from regular New Jersey license holders. The minimum age for obtaining a regular New Jersey license is 14.

The Chincoteague National Wildlife Refuge, comprising approximately 9400 acres, was established in 1940 and is located on Assateague Island, Virginia.

The primary purpose for the acquisition and creation of the Chincoteague National Wildlife Refuge was to provide migration and wintering habitat for the endangered Snow Goose flock. The principal management objectives referred exclusively to waterfowl and habitat. The secondary goals and objectives refer to nesting habitat for specific waterfowl.

In 1963, the Sika deer herd was estimated in the hunt plan at 1050, and a browse line was noted.

The refuge manager's report noted that very little was known of the life requirements for Sika deer, and that any accurate estimate of population density was unknown. An early season, October 22 to 26, was recommended in order to have the hunt prior to the arrival of sizable waterfowl populations.

In the September/December 1963 narrative report, the Sika deer herd was estimated at 1300, and the deer were in excellent condition.

In 1965, the Sika deer archery hunt resulted in 34 deer reported killed and 33 reported as cripples.

In February, 1966, the assistant refuge manager recommended no further gun hunts until the population is determined and referred to the prior shotgun slaughter as resulting in over-harvesting.

As a result of the 1965 hunt, the herd was apparently well-thinned, with few fawn observations and only scattered and scarce signs of deer in the impoundments compared to the previous year.

The 1966 archery hunt resulted in nine reported cripples and four reported kills, and there was also a shotgun hunt held that year.

The refuge manager noted that the remaining Sika herd which had been tame is now extremely wary following the "barrage" of the 1964 and 1965 hunts.

By the end of 1966, the browse lines had disappeared. Two observations of white-tailed deer were recorded for the first time. The report states that an accepted method of censusing Sika deer has not been devised.

In 1967, the food and cover production continued to be sufficient to support a healthy deer herd. That year the bow and arrow hunt reportedly crippled five deer and reportedly killed seven.

In the fall of 1968, the East Coast Biologist suggested that the amount of reduction and the present size of the herd were questionable.

In 1968, the refuge report indicates that 50 Sika deer and seven white-tailed deer were taken. They were healthy, and the habitat conditions were very good.

In 1969, during a one-month archery season, no deer were

taken, and one deer was reported crippled. There was natural food in sufficient abundance to carry the resident wildlife. There was no census taken.

In 1970, the refuge was opened for the first trophy Sika stag gun hunt (November 30th to December 5th; December 7th to December 12th). The bow and arrow hunt that year yielded one reported cripple and no reported kills.

The trophy Sika stag gun hunt permitted antique or modern rifles and shotguns limited to one shell, and buckshot was permitted.

In addition, in 1970 white-tailed deer were designated as legal bag in an either-sex archery hunt for Sika and white-tailed deer from October 15th to November 14th.

In 1971, the trophy stag hunt, held from November 28th to December 4th, and from December 5th to December 11th, prohibited buckshot and permitted rifles and slugs only in shotguns.

In addition, an either-sex archery hunt for Sika or white-tailed deer was held from October 15th to November 13, 1971.

From 1966 through 1970, the herd was estimated at under 500, with a report of 61 kills in 1966, 42 kills in 1967, and 54 kills in 1968.

THE COURT: Repeat that again. From 1966 through 1970 the herd was estimated at under 500, with a report of what?

MR. MADDEN: With a report of 61 kills in 1966,

42 kills in 1967, and 54 kills in 1968.

THE COURT: All right.

MR. MADDEN: The Eastern Neck National Wildlife Refuge, comprising approximately 2300 acres, was established in 1960, and is located on Eastern Neck Island in Kent County, Maryland.

It is comprised of 38 per cent cropland, 17 per cent upland, or timbered area, and 42 per cent marshland.

In 1966, public hunting was proposed stating that the deer were abundant and in "hunnable numbers."

The population estimate was 500 head.

In 1968, the sex ratio of the results of the hunts was changing to more bucks than does.

In 1967, the deer were extremely fat and sported beautiful pelage, and the crop damage was considerably less than the prior year. The habitat conditions were good and supported the deer quite well. The population was estimated at 400 and 189.

In 1968, the population was estimated at 200 to 400.

In 1969, the food and cover for resident wildlife was very good, and signs of previous overbrowsing had disappeared. Muzzle-loader hunts were set for the first time.

In 1969, the population level was estimated to be 225 to 350.

In 1970, the food and cover conditions for resident game species continued to be good, and the population was esti-

mated to be "up slightly" from 1968 and 1969, at 250 to 350.

In 1971, the Biologist confirms that they had no knowledge of the size of the deer population.

The 1971 public hunt regulations called for one deer, either sex; bow and arrow only, October 22 to 23 and November 1 to 2; muzzle-loaders only, October 29 and 30; shotgun hunt (slugs), October 18 to 19 and November 5 and 6.

Now, in addition, the further facts have been stipulated:

Until 1971, there had been no formal study to determine and monitor the physical condition of the white-tailed deer in the Great Swamp, the effect of the deer on the habitat, if any, the degree of utilization of habitat, the carrying capacity of the refuge as related to deer, population size of the deer, reproductive information and movements by the deer in and around the Great Swamp area.

Prior to the commencement of this study, these items were determined primarily visually, and the count was made by riding around the main roads on the refuge in the last hour of daylight and counting the deer in the fields feeding.

The count was usually considered to be 50 per cent of the total herd, and then a rule-of-thumb of 20 acres per deer was used to determine the carrying capacity.

There was no better information regarding carrying capacity before the current study was undertaken in 1971 at

Great Swamp.

May it please the court, the witness had seen the earlier draft of the hypothetical question and gone over it. This has some minor changes in it. May I give the witness this copy of the question -- I mean of the facts to utilize in his answer?

THE COURT: I see no objection to that. Counsel offer none. You may do so.

MR. MADDEN: Could you mark this, please, as Plaintiffs' Exhibit No. 68 for identification?

THE CLERK: Plaintiffs' Exhibit No. 68 marked for identification.

Plaintiffs' Exhibit 68-A marked for identification.

(Plaintiffs' Exhibits 68
and 68-A marked for
identification, respectively)

BY MR. MADDEN:

Q Mr. Bridgwater, would you glance through that quickly for any of the changes, because, as I understand, you are familiar with it except for the changes therein, and then let me ask you some questions.

THE COURT: While you are waiting, Mr. Madden, why do you not take this document and show me where the plaintiffs' felt the word "issue" should be inserted. You might confer with your co-counsel. Just draw a circle around it and insert it.

MR. MADDEN: All right, Your Honor.

THE COURT: Show it to counsel.

MR. WERDIG: If I may suggest to the court, unless the witness has perused this, it might be an appropriate time for a break.

THE COURT: All right. I will keep that in mind. Have you perused it?

THE WITNESS: I am ready.

THE COURT: All right. You may proceed.

BY MR. MADDEN:

Q Based upon the facts which are set forth in Plaintiffs' Exhibits 68 and 68-A for identification, do you have an opinion as to whether these authorized herd-reduction hunt plans, that is, the 1970 plan for Great Swamp, the 1971 plans for Chincoteague and Eastern Neck, were, first, compatible with the major purposes for which these refuges were established, compatible with the principles of sound wildlife management, and were otherwise in the public interest?

A Yes, I do.

Q What is that opinion?

A I have reviewed the hypothetical data here in question, and, with regard to the three refuges, perhaps I should respond to each one specifically.

THE COURT: Yes.

THE WITNESS: Rather than generalizing.

BY MR. MADDEN:

Q Yes, I wish you would, please.

A With reference to the hypothetical facts of the Great Swamp Refuge, I do not feel that any hunt as a requirement for population control was consistent, or is consistent, with the principles of sound wildlife management techniques, nor in the best interest of the public which may utilize that refuge.

I, further, do not believe that the planned cropping was compatible with the purposes for which the refuge was established.

My immediate observation is that there is a great lack of data on which to base the decision which was made. There needs to be reliable census taken, preferably over a period of years, so that consistent data can be developed.

I see no efforts other than the road drives to develop population data; for instance, utilizing the pellet counts or track counts, aerial surveys, or tagging and marking operations and subsequent re-observation or taking of animals, to develop population data on which to base a calculated herd reduction.

There is a lack, evident lack of knowledge of age classes and sex ratios of the population in question.

Again, that is something that is very, very important when the objective is to reduce a population of deer.

Again, there was very little empirical evidence suggested here in terms of --

THE COURT: Are you reading your answer from something?

THE WITNESS: No, I am not.

BY MR. MADDEN:

Q Do you have some notes there?

A I have an outline.

THE COURT: A what?

THE WITNESS: I have an outline to carry me.

THE COURT: To do what?

THE WITNESS: To carry me.

BY MR. MADDEN:

Q Are you referring to some notes?

A Yes.

MR. MADDEN: Would Your Honor like to see them? They are just sketchy notes that he made after seeing the hypothetical question.

THE COURT: I see. All right.

BY MR. MADDEN:

Q Would you continue, please?

A Further, the lack of empirical data in terms of damage to the habitat and vegetation.

Without this kind of knowledge, the design of a hunt, I feel, is very difficult to do accurately.

For instance, the typical sex ratio of a prime producing herd of deer primarily runs about one male per three female deer.

Now, if you look at these sex ratios at birth, we find them equally one to one. In fact, it is just a little bit in favor of the male.

During the time from birth to maturity there is an excess population of males produced in the normal deer herd. And these animals are essentially useless to the productivity of the herd and are considered croppable.

So that if you reduce a herd of deer, you have to have some effect on the female, the doe, the producing animal, in a calculated way.

In addition, there are some other points that could be made. Hunting is not necessarily the only management practice which can be used to control population. Such things as buffer feeding whereby herds or deer can be regulated on the refuge, live trapping and removal, and so forth, can be applied.

I see no evidence that any of these were, with reference to Great Swamp.

There is a further point which is evident here, too:

That, if, in fact, it is necessary to remove deer by hunting -- and quite often this has to be the mechanism, either for financial reasons or lack of personnel, and whatnot -- you can consider, and should consider, the most efficient time of the year in terms of the reproductive activity of the animals or in terms of the ease of taking in terms of season.

Now, when the leaves are off the trees, and so forth, may,

in fact, be a better time to crop those animals than when visibility is more difficult.

I don't necessarily feel that it has to be done in one day or one week or one month, but calculated control of population can be done over a period of time, quietly, with reduced numbers of personnel involved and in such a way that you have better control over the animals that are being taken.

In the case of Great Swamp, I would not feel that buckshot is essentially a good weapon to carry out this efficiently.

MR. WERDIG: Objection, Your Honor. I think we have gone through this part of the woods before, about the use of weapons.

THE COURT: In the exercise of the court's discretion and being fully aware of what has gone on before and this witness' expertise in the use of weapons, I am going to let it in for what it is worth.

THE WITNESS: The other observation that I would make, and an area which bothers me about the proposition presented here, is the actual functions and purposes of a national wildlife refuge.

To me, "national" means ownership by the people.

"Wildlife refuge" means, exactly that, a place where wildlife can seek shelter and can be managed to the benefit of the public.

Any management program that is carried out on the Great Swamp Refuge should be one that is designed in such a way

to exercise the least amount of damage to the environment, the least amount of disturbance and personal harassment to the animals involved.

If these criteria are applied, then one would question the sound wildlife management practice as it was to be implemented here.

Public hunting is a function that in this case serves evidently a very tiny percentage of the people, locally or even at a national ownership level.

It is a recreational device, and I feel, perhaps strongly, that, because of this, the technique that was accepted is not a sound wildlife management practice, compatible with the public interest and the use of the refuge.

With respect to Chincoteague, this is even perhaps a more appalling case.

Again, there is no data, at least as suggested in this hypothetical fact sheet. Well, I would say that here it was almost operating in the dark.

We watched the population of deer at high levels of around 1000 and 1200 reduced to low levels, with, evidently, a substantial recovery of the habitat damage.

We watched, also, in terms of the hypothetical question, those populations of deer that were being taken by hunters reducing and reducing and reducing year after year. Yet, there was no cessation of hunting carried out.

There are two points that would concern me:

One, the trophy hunt which, for reasons that I mentioned earlier, where we, as biologists, know that there are excess males that can be taken which will not, in effect, affect herd reduction in terms of reproductive potential.

The other was what would be considered a rather capricious inclusion of white-tailed deer in the hunting bag, again, without any knowledge of what the actual population was.

There was a choice, I believe, there of a bow-and-arrow hunt, and in one case I believe in 1970, the bow and arrow hunt that year yielded one reported cripple and no reported kills, which would not, in my opinion, be an effective population control device, at most.

Eastern Neck, I would make the following comments upon:

The very fact that the biologist or park manager made the statement that they had no knowledge of the population of deer there is evident in the hypothetical sheet here.

Again, no data is available, and data is lacking to make a good judgment as to how best to control the population of deer.

Yet, we see evidence in the hypothetical data sheet that habitat was recovering; populations were stable; and the food supplies were good.

In summary, I would simply have to say that I believe

that there was a data lack in all three cases on which to base a sound wildlife management program.

I do not believe that the public hunts that are in question would be compatible with sound wildlife management practice, and I do not believe that the particular use of that refuge for hunting, based on the facts here, is compatible with at least the public interest of the majority.

MR. MADDEN: I have no further questions.

THE COURT: Cross-examination. Just a moment. Will counsel come to the bench.

[AT THE BENCH]

THE COURT: How much time do you estimate you will require for cross-examination?

MR. WERDIG: I will probably work for an hour to three hours.

THE COURT: Now, Mr. Werdig, be reasonable.

MR. WERDIG: If I get him hung, I am going to go.

THE COURT: Do you have any idea, Mr. Stein?

MR. STEIN: I would say about ten minutes.

MR. LENZINI: Ten or 15 minutes for me.

THE COURT: The next question I want to ask is: How much time do you have for the balance of your case-in-chief, Mr. Madden? How much time do you require or need? That is what I am really asking you.

MR. MADDEN: Well, it depends on -- I have said in

my trial brief that I want to use portions of depositions. There will be argument whether I can get them in or not. That, plus my experts.

THE COURT: You have more than one expert?

MR. MADDEN: Yes, sir.

THE COURT: All right.

MR. MADDEN: Oh, yes, but it would take maybe three trial hours, if I get my depositions in that way, Your Honor.

THE COURT: Are those of witnesses who are available?

MR. MADDEN: These are the men who made the decisions. I want to use their depositions because I want to argue this issue, Your Honor.

Your Honor suggested that I should not be calling everybody or using anybody without taking their deposition, and then later withdrew that. But I took these depositions at great expense.

I have the refuge manager and the people who did this, and I want to use their depositions.

THE COURT: They are available, are they not?

MR. MADDEN: They are, to all intents and purposes, parties, and I think I am entitled to use them for any purpose, Your Honor.

THE COURT: As part of your case-in-chief?

MR. MADDEN: I don't want to call these fellows.

THE COURT: You can call them as adverse or hostile

witnesses and use the depositions to impeach them. These people are saying no.

MR. MADDEN: They have seen the portions that I want to use.

THE COURT: Maybe they will cooperate with you.

MR. WERDIG: All of those depositions were taken, Your Honor, without objections as to admissibility of the statements and without any cross-examination.

THE COURT: Well, you have a duty to object to that at the time. Otherwise, they are waived.

MR. WERDIG: We agreed at the deposition that we did not waive any of our objections as to admissibility so that we could proceed with this thing.

MR. MADDEN: There are not any, I would assume, serious objections.

THE COURT: I will tell you right now that you are going to have to call these witnesses, if they are the kind of witnesses whose depositions were taken that come within the ambit of the rule.

You can use those depositions then to impeach them, Mr. Madden.

MR. MADDEN: It just seemed to me cumbersome.

THE COURT: Is that not a correct statement of the law?

MR. WERDIG: Yes, Your Honor.

MR. STEIN: I would think so.

MR. LENZINI: Yes.

MR. MADDEN: Your Honor, in a case involving the government, again, Rogers Morton is the man who made the decision. Now, does your ruling mean that nobody else can be treated as a party except Rogers Morton? And he does not know anything about the case. And that is what happened to me. I am not able to try my case against normal defendants.

It is a great benefit, of course, to take a defendant's deposition and use that deposition for all purposes. I think it would speed up matters and would be in the interests of justice, Your Honor.

THE COURT: I think so, too. And I would like to be able to compel these gentlemen to authorize you to use these depositions, but, obviously, I cannot. It is not permitted by the rules of procedure which govern my conduct of the trial.

MR. MADDEN: Well, I have some law which I will cite to you in the morning, Your Honor.

THE COURT: All right. Mr. Werdig, I would only admonish you to be as brief as you can. I do not want you to hurt your case. I just want you to take all the time that you really need, and I cannot conceive that you would need three hours.

MR. WERDIG: I said one hour to three.

THE COURT: Maybe three and a half minutes would

be enough, really.

MR. WERDIG: Three is the outside limit.

THE COURT: All right. I am going to sit here until you are all finished.

MR. WERDIG: Could we have a break so that I can prepare for cross-examination?

THE COURT: I will give you five minutes.

MR. MADDEN: My three-hour estimate was based, of course, on using these depositions. So I think it is three hours plus three government witnesses. Impeaching them just takes forever.

THE COURT: All right.

(Brief recess.)

[OPEN COURT]

THE COURT: All right, gentlemen, let us proceed.

You may proceed with your cross-examination, Mr. Werdig.

MR. WERDIG: Thank you, Your Honor.

CROSS-EXAMINATION

BY MR. WERDIG:

Q Mr. Bridgwater, you have indicated to us that in your professional opinion there was a lack of data on the populations at each of these refuges, is that correct?

A Lack of data of several different kinds.

Q What kinds of data were lacking?

A Accurate estimates of population --

Q Excuse me. You said active estimates?

A. Accurate estimates of population based on reliable techniques to measure those populations.

Q. Yes, sir.

A. Knowledge of the herd composition in terms of sexes, age classes; empirical evidence relative to habitat damage, consistent on a year-to-year basis.

Q. Now, what kind of empirical evidence would you like to have about habitat damage?

A. By creating some sort of consistent technique, such as laying out transect lines, identifying vegetation that is being consumed, identifying the degree of damage to that vegetation and relating it to locations on the refuge.

Q. Would complaints from neighbors be empirical evidence to you?

A. No, sir, they would not.

Q. If you went, after you had heard a complaint, and had seen a damaged bush, would that be empirical to you?

A. Not empirical data. It would be evidence of destruction of that particular plant.

Q. And if you got complaints from 15 neighbors, would that help your empirical data?

A. Okay. These neighbors are not part of the refuge operation, I am assuming. Well, I will not assume anything. Are they part of the refuge area?

Q. Less than 50 yards from the refuge.

A. Well, that kind of damage assesement is a complaint. It is not developing empirical data on which to make judgments, sir.

Q. It would identify the vegetation, however, though, would it not?

A. With the bushes or shrubs in question, yes.

Q. Would that be any empirical indicia to you that these animals were not getting what they needed some place else, for example, on the refuge?

A. I did not understand you. Would you repeat the question?

Q. Would this be any indicia to you that the animals were not getting what they wanted on the refuge?

A. "Indicia" meaning indications?

Q. That is what I think, yes, sir.

A. No, sir.

Q. Are you familiar with the usage of the term "browse line"?

A. Yes, sir.

Q. What does a browse line mean to you?

A. A browse line is an apparent line on vegetation which appears when it is heavily utilized by deer. Because of their height and ability to reach, it develops a visually apparent line of demarcation from what is eaten and what has not been eaten.

Q All right.

A It is generally considered to be a measure of damage to vegetation.

Q It has no other indication, other than that it is damage to vegetation in your mind?

A (No response)

Q That the animals are a pest because they are eating this vegetation?

A That would depend on where the browse line was, and I would not use the term "pest".

Q Mr. Bridgwater, is it not an accepted yardstick of population density that when a browse line appears, there is not sufficient vegetation to support the herd?

A In some cases, yes; and in others, no.

Q Tell me when it does not indicate that.

A When the browse line does not indicate an overpopulation?

Q Yes.

A It is in situations where you have a total amount of area, and you have a concentration of animals in a particular spot. By manipulating the environment, perhaps, by creating more buffer feeding, you can --

Q But you are talking about injecting something that is not natural?

MR. MADDEN: I object, Your Honor, and ask that the

witness be permitted to finish his answer.

THE COURT: I thought he had. If he had not, why, of course, he may. Do you have something you wanted to finish?

THE WITNESS: Just simply to add that a browse line per se is not totally an indication of overpopulation. It may be an indication of population centers in a given area which might be relocated.

BY MR. WERDIG:

Q You mentioned that you would need, before you conducted a hunt, a description of the herd composition by sex and age. May I ask why?

A In terms of population dynamics, you have a variable range of productivity with respect to particularly does, females. Younger females tend to produce less young. There tends to be an optimum period of time when these animals produce best and then a decline.

The random taking of animals without taking this into consideration can, in fact, lead you into very serious situations in the future.

If, for instance, you put a hole right in the center of your prime producing females, as compared to the old, non-reproductive females or young animals coming on, the consequences may be very serious.

Q And where did you gain this information in your expertise?

A. Simply from the literature.

Q. All right. Whose in particular?

A. Men or agencies or --

Q. This is a man's name?

A. No. I asked: Are you talking about specific individuals?

THE COURT: You mentioned the literature. He wants to know if it is a book, and, if so, which book and who was the author of it.

THE WITNESS: I think a lot of the work has been done by Klimstra.

BY MR. WERDIG:

Q. And was Mr. Klimstra writing about deer?

A. Specifically, yes.

Q. And he is talking about taking out the older females; is that what he is --

A. He has done a series of papers on the internal make-up of a herd of deer in a national wildlife refuge in a number of different studies. Taken collectively, they would be just part of it.

Q. All right. Now, let me try to understand this. Are you talking about Dr. Klimstra describing something or proposing something?

A. No, it is actually data collected and written about with reference to that particular national wildlife refuge.

Q And his data showed what about age upon which you base the fact that this hunt should have been predicated upon this prime fawn-bearing age?

A The data indicated that there was a differential in productivity in terms of age classes. I am simply saying that this should be taken into consideration.

Q Oh, this is your idea based on what Dr. Klimstra said about the productivity of an animal?

A With reference to these particular --

Q Now, do you know of any other expert in your field who says that hunts should be conducted in relation to the age of a female doe?

I presume we can stipulate that a doe is a female deer.

MR. MADDEN: May it please the court, I think that the record is clear that the witness never said anything like the hunt should be conducted with relation to the age of a doe.

THE COURT: This is proper cross-examination, Mr. Madden.

MR. MADDEN: Pardon?

THE COURT: This is proper cross-examination. Your objection, if it is an objection, is overruled.

BY MR. WERDIG:

Q I believe my question was:

Do you know of any other expert in the field who has indicated, as you have before us today, that a hunt should be

predicated upon the age of the female deer in the population?

MR. MADDEN: I would like to renew my objection, Your Honor.

THE COURT: Same ruling.

THE WITNESS: A specific example does not come to mind, although they are available in the literature.

BY MR. WERDIG:

Q Are you familiar with what period of time Dr. Klimstra worked? I mean so far as months, years, weeks or day?

A No, sir. I never had given that a thought in terms of totaling it up.

Q Did he indicate in his paper how long he had gathered this information?

A They have conducted studies on that refuge pretty much as an ongoing thing since the late 1950's, I believe.

Q Well, Dr. Klimstra's study, particularly, I am interested in.

A Well, there are several of them that are scattered throughout the literature, particularly in the last three years.

Q And is Dr. Klimstra a federal employee?

A I believe, sir, he is a professor at the University of Illinois, perhaps attached to the field survey. I am not certain, sir.

Q Now, are you personally familiar, from your having reviewed this literature which Dr. Klimstra has written, with who

paid for him to be out there on the refuge running the study?

A. I do not know.

Q. In talking about your transects to gather this empirical evidence, how long a period of time would you need before you could have sufficient empirical evidence of the habitat, the damage to it, identify the vegetation, and the degree of damage to the vegetation for a place of some 5900 acres?

A. Minimally, you would want at least one annual cycle's collection of data.

Q. How long would it take you, personally, to collect one annual cycle of data?

A. On that refuge?

Q. 5900 acres.

A. Well, it would take one year.

Q. One year, working every day?

A. I would not be certain. It would depend on many variables, weather, field conditions, and so forth.

Q. One hour one day, two hours another day? I mean how many man-hours do you think, how many man-hours do you estimate, based on your own knowledge of how fast you work and how expert you are, would it take you to collect the empirical evidence only that you have said our refuge manager should have had at Great Swamp before he considered recommending a public hunt?

A. You are speaking now of one single individual?

Q I am speaking of you, sir.

A I could not make an estimate of that.

Q Could you have done it in a day?

A No.

Q Could you have done it in two days?

A No, sir.

Q Could you have done it in a week?

A Well, the question --

MR. MADDEN: May it please the court, he answered that it would take a year. Now, I don't see what counsel is pushing at here.

THE COURT: Well, I don't either, but I think it is an appropriate question. I am going to permit him to ask it.

THE WITNESS: What is implied here is that it would involve consistent activity of a year's period. Therefore, one day or two days would not be appropriate.

What you would want would be a consistent collection of data perhaps at weekly intervals through an annual cycle.

BY MR. WERDIG:

Q All right.

Now, how many places on this 5900 acres would you recommend that this data be collected from on a weekly basis over a period of a year before a decision was made to recommend a hunt?

A Great Swamp in particular?

Q Yes, sir. That has been described, I believe, earlier

as 3000 acres of brush and timber, swamp; 600 acres of marsh; 1200 acres of upland timber; and 800 acres of farm, pasture, and haylands.

To provide you with that empirical evidence that you feel would be necessary, how long would it take you -- excuse me -- in how many places would you need to collect that data?

A. You would want data collected from the primary habitat that is being utilized by the deer. Part of this would be an instinctive judgmental feeling that only the refuge manager, or whoever was in charge of it, would have to make.

Q. That is not very empirical, is it, instinctive? He would have to select the primary place where the deer herded together?

A. Where the habitat was utilized. In fact, evidently he had done so in terms of counting deer on that one-third of the refuge where the bigger population was evident.

Q. But if there were more than one local gathering place of the deer, would he have to go to each of those places?

A. On the basis of habitat selection, yes, sir.

Q. So if there were 15 places where the deer had localized, he would go to each of those 15 habitat areas?

A. He would establish in his judgment what he felt would be the necessary number of transect lines.

Q. All right. If he saw an extensive browse line throughout the whole forest, would that help him any?

A. Certainly, it would.

Q. Now, you are speaking of accurate estimates of the herd and using reliable techniques. Now, I am anticipating what your response will be to this, but I imagine when you did one of these studies on one of the refuges, you were involved in census-taking?

A. Yes.

Q. Of deer?

A. Yes.

Q. And what technique did you use and at what refuge?

A. In the case of -- well, in all cases, and particularly Blackbeard, these were drive censuses based on visual sighting and based on consistent --

Q. Now, I don't understand what you mean by a "drive census".

THE COURT: I assume that it is something like a windshield appraisal in the real estate trade.

MR. WERDIG: Is that comparable to a moan and a groan, Your Honor?

MR. MADDEN: I don't want the witness to be frightened of the court here. I don't think that is what it means at all, and I would like him to say so.

THE COURT: Certainly.

BY MR. WERDIG:

Q. When you speak of a drive census, are you speaking

of someone driving past --

A. Exactly.

Q. You are not talking about herding the animals together and driving them through a central location?

A. Not in this case, no.

THE COURT: You just drive around the refuge?

THE WITNESS: You take a set route and travel it on a regular basis and do actual counts.

BY MR. WERDIG:

Q. Well, isn't that what was in this hypothetical that was propounded to you, particularly: the refuge manager arrived at his population estimates by basically road counts conducted by riding around the main roads of the refuge?

A. Yes, sir, it was.

Q. And that is not accurate; that is not a reliable technique?

A. It is --

Q. Or is it a reliable technique?

A. It is not the best estimate. There never is a best estimate. Combinations of techniques, of course, are much more reliable.

Q. All right. But you are saying that these refuge managers did not have sufficient data. Now, that is what I am trying to find out from you: what you consider to be sufficient data.

Now, you said we had to have reliable techniques when we were making these decisions.

You have said that this drive census was one of the techniques that you used, and I presume that your group was using the best techniques available, were they not?

A. Well, this was not -- how do I want to say it? We were not running the refuge. We were simply in a short time actually participating in one kind of technique that is used, sir.

Q. What are the other techniques, Mr. Bridgwater?

A. Actually, aerial survey in many cases is a good one. In fact, that was called for by the refuge manager of the refuge in question.

Q. Oh, you are aware that there was an aerial survey?

A. Not with reference to the hunt that was in question. I do understand that there was a request for an aerial survey that was not done.

Q. Are you aware of the aerial survey that was done, Mr. Bridgwater?

A. Not the results of the data.

Q. All right. I will get back to that.

Now, you say the road count, the drive census, and the aerial survey. Now, what other reliable techniques are used, sir?

A. A number of techniques such as pellet counts, trapping

and marking, track counts.

Q Trapping and marking?

A With re-observation or retrapping.

Q All right.

A All of which imply the use of some sort of statistical measure; either a simple ratio like an index or in some cases some elaborate statistical analysis.

Q Now, Mr. Bridgwater, in your experience at the Blackbeard in your drive census, did you ever subsequently attempt to verify how accurate your drive census was?

A No, sir.

Q All right. Have you ever been involved in trapping a wild deer?

A A wild deer, no.

Q From --

A Only as an observer. I have never had the problem forced on me.

Q Have you been in the locale where wild deer were being trapped?

A Yes, sir.

Q Did you ever follow a procedure all the way through from when the deer was found in the forest and brought in and trapped?

A That question is not clear to me.

Q How long, based on your own personal observation,

did it take to trap one deer, on the average?

A. I do not know.

Q. Two minutes?

A. I don't think there is a --

THE COURT: He said he did not know, Mr. Werdig.

Go on to the next question.

BY MR. WERDIG:

Q. Based on your personal observation, how many people were required to trap one deer?

A. Minimally, two.

Q. And maximally, based on your own observation?

A. Any number. It is obvious you would not need 100 people. The actual physical --

Q. What is the greatest number of people you ever saw attempting to trap a deer?

A. Well, that, you do not reduce the deer by that means. You resort to devious live traps, and this means that the deer goes in when the deer wants to go in. It does not require any attendance there.

Q. What kind of live traps did you see used?

A. Box traps.

Q. And did you observe any animals in those box traps?

A. Not in a wild situation, no.

Q. During your reading of the literature, have you read any descriptions of what happens to a deer when it gets into a

box trap?

A. Not that I recall, no.

Q. Do you know how much a box trap costs?

A. In today's prices?

Q. Well, let's say in June and July of 1970's prices.

A. My guess is in the neighborhood of \$200 to \$300.

Q. And if you had a place that was 5900 acres large, how many box traps would you recommend being used there at \$200 to \$300 each?

A. I could not make that estimate based on the data that is available.

Q. What data are lacking, sir?

A. The movements of the herd on the refuge, the concentration of animals in given spaces, and so forth.

Q. Well, at a minimum, how many traps would you put out to get this accurate estimate of the herd population over 5900 acres?

A. Again, it would depend on what your objectives were, how many animals you wanted to trap and remove, how many animals you wanted to trap and mark and release.

Q. How many animals --

A. There are -- well, all right.

Q. Excuse me. You are talking about an accurate estimate, sir.

A. Yes.

Q You previously testified that the people who are responsible at these refuges did not have adequate data. Now, how many animals would you want trapped before you thought you had an accurate estimate of the number of animals on this piece of property?

THE COURT: On 5900 acres, you mean?

MR. WERDIG: On 5900 acres.

THE WITNESS: What is the population? What will you accept, 500 deer? I think the range is 360 to 500 as an estimate now.

Ideally, you would hope to get 15 to 20 per cent of that number marked with some sort of a device.

BY MR. WERDIG:

Q And then you project, do you not?

A Then you make consistent observations. If it happens to be a radio tagging device, it may be a little easier.

Q How much does a radio tagging device cost by current prices?

A I don't have a recent figure. They are much cheaper than they used to be.

Q Based on your review of the literature in the field, what is your best recollection of the most recent price?

A I don't know.

Q But you would be satisfied if you could get about 15 to 20 per cent of what you anticipate the herd would be, is

that correct?

A. In terms of developing an index to use in estimating population, yes.

Q. Is there any truly accurate way of counting wild deer in the woods?

A. No, sir, there is never any absolutely accurate way. There are only best techniques.

Q. Now, considering the refuge manager at Great Swamp, with 5900 acres, plus or minus, making road counts, do you think he could make an accurate estimate of the herd?

A. I --

Q. Using road counts alone?

A. I do not believe so.

Q. Now, if I told you that he counted pellets, would that make his estimate more accurate, together with the road counts, sir?

A. Yes, that certainly would.

Q. If I told you that he saw tracks and added that to the pellets and the road count, would that help as to the accuracy of the data he had available?

A. It is difficult to say.

Q. Well, I thought you suggested that those were two of the things that you used?

A. Yes, those are techniques that can be used.

Q. Now, if I told you that a helicopter count was taken

of the herd at Great Swamp and the refuge manager came out with a margin of error not equal to five per cent, would you say that his estimates had been pretty good previously by using road counts, pellet drops, counting tracks?

A. You would have to make that conclusion.

Q. But you cannot assist this court as an expert in telling us how much time and money was spent on Dr. Klimstra's project, and you can't give us any estimate of how many box traps you would use on this refuge to get more accurate information than the refuge manager had when he made his decision? You have no dollar prices?

A. Well, I think it would be foolish for me to render that kind of a judgment without being on the area.

Q. All right. Now, if you were a refuge manager and you had a limited budget that did not provide for a helicopter; that did not provide for hours of checking deer out to see if they were male or female or to read their teeth to determine their age; and you did not have the ability to put out \$200 to \$300 box traps at various locations, how would you make an estimate of how many deer you had?

A. I think it would depend on the amount of time that was available.

Q. And you had to run a migratory waterfowl refuge and you had to have bird watchers come in and high school kids come in and kindergarten kids and the rest of the public. How would

you predict what your herd size was?

A. This, again, is one man that has to do this whole shooting match? There are no assistants? There are no --

Q I will give you four assistants, if you need them.

MR. MADDEN: Well, may it please the court, while we are on this, there are 20 people there. The witness might as well know it, too, since you are asking him what he would have done, had he been there.

MR. WERDIG: I beg to differ with that.

MR. MADDEN: Well, there was testimony the other week that there were, I thought, 20 personnel there.

MR. WERDIG: Your indulgence, Your Honor.

MR. MADDEN: I am sorry. It is approximately 10 permanent personnel.

MR. WERDIG: And there were probably eight permanent personnel at the time.

MR. MADDEN: Ten permanent and ten temporary; that is 20.

THE COURT: Do you want to rephrase your question, Mr. Werdig?

MR. WERDIG: Yes, Your Honor.

THE COURT: All right.

BY MR. WERDIG:

Q With eight to ten permanent personnel on that area, how would you determine the size of your herd?

A. Without finances?

Q. Available for any other methods.

A. For any other methods?

Q. That is right.

MR. MADDEN: May it please the court, I want to object. There is no record that there were not finances. The Federal Government has not shown that it botched up the job because it did not have enough money to do it right. I think this line of questioning is not proper or fair. There is no foundation laid for it for cross-examination. We did not get into the question of financing or anything else on direct.

THE COURT: The objection is overruled. You may answer.

THE WITNESS: The consistent use of visual observation counts, driven day after day after day at the same time, preferably with the same individual involved, and, again, on a regular day-to-day basis, would probably be an acceptable device.

The whole thing depends on consistent observation, consistent recording; not once a week or once a month, or whenever.

BY MR. WERDIG:

Q. In your testimony earlier, you said that the prime sex ratio in adult deer, I presume we are speaking of, is one male to three females, is that correct?

A. Beginning with a one-to-one ratio at birth.

Q I was going to get to that later.

A Well, that is where it starts.

Q You were speaking of the prime sexual ratio as one to three?

A Through the second year it is down slightly. The males are moving out, so it is closer to one to two. It goes to one to three. It can go higher.

Q And the ratio at birth is generally 50/50?

A It is actually something like, I think, a four or five per cent edge to the benefit of the males.

Q Now, if you have a natural birth rate that is roughly 50/50, 54/46, and a prime sex ratio of one male to three females, what do you do with the other males? What good are they?

MR. MADDEN: May it please the court, is that two questions?

MR. WERDIG: I will ask him one at a time.

MR. MADDEN: All right.

BY MR. WERDIG:

Q What good are they to the herd?

A That surplus or excess of males are essentially croppable animals.

Q And what do you do with them?

A Or they repopulate or move out, emigrate.

Q What do you do with them? Do you keep them there?

A In areas where hunting is permissible, this is the

whole basis for hunting: that excess crop of a population.

Q Now, Dr. --

A Don't.

Q Excuse me. I am anticipating your future success.

Mr. Bridgwater, based on your reading of the literature, have you come across ^{an} allegation that hunters prefer to shoot buck as opposed to doe?

A I do not recall an allegation of that sort.

Q All right, sir. I am talking about reports or writings which lend support to this theorem?

A No empirical evidence. Males are generally what is taken because that is where the excess animals are concerned. They are useless to the population on a year-to-year basis. If population control or the actual reduction in numbers to a manageable level is concerned, then females are necessarily to be taken.

In fact, one of the devices that can be used, when this becomes necessary in a public herd of deer, is to have a buck season and utilize one day as a doe season.

There are several psychological advantages here: that the hunter may try through the week for the male trophy head, and, if unsuccessful, he is much more anxious to get a deer. This is evidence, I would guess, that there is a tendency to desire a trophy rather than the opposite.

Q But, in that regard, is not the hunter desiring to

get that portion of the herd which is surplus for herd management
— and growth?

A. I do not believe you can make that generalization.

Q. But you do agree that there are unnecessary stags
in the forest?

A. I agree with that, yes, sir.

Q. You referred to the male, actually, as a crop, did
you not?

A. Yes, sir.

Q. To be grown and harvested, correct?

A. No, I referred to it as a crop, not grown and har-
vested.

Q. What would you do with the crop, other than harvest
it, Mr. Bridgwater?

A. Well, the word stands by definition.

Q. It is something that is grown for harvesting, is it
not?

A. Yes.

Q. Are you familiar with the cost of feeding -- you
have testified earlier that hunting was not the only way that
these animals could -- that some sort of management could have
been done to them.

May I ask you if you would advise the court and myself
what would you have done at Great Sweamp, given the data that Mr.
Madden has given you, as opposed to permitting the public to

hunt?

A. What would I have done at Great Swamp?

Q. Yes, sir.

A. As opposed to allowing the public to hunt?

Q. Right.

A. With reference to what?

Q. Controlling the deer herd which has been given to you
in the following sequence in the hypothetical:

That in 1964, it was between 120 and 110;

In 1965, it was between 240 and 200;

In 1966, it was between 260 and 200;

In 1967, it was between 380 and 320;

In 1968, it was between 380 and 320;

In 1969, it was between 460 and 360;

In 1970, it was between 550 and 360.

Does this indicate to you a growing herd on 5900 acres,
sir?

A. Certainly.

Q. And would you have just merely let the herd continue
to grow?

A. No, you could not do that. What I would have done
as an alternative, I really cannot answer, because I am not
familiar with what my legal or lawful authority would be in that
regard.

Q. But you would not have permitted public hunting because

you have testified that it is inconsistent with the principles of sound wildlife management. What would you have done, sir?

A. I would have developed a controlled hunting situation.

Q How do you mean, sir? You would have developed a controlled hunting situation?

A. In terms of utilizing paid people to come into that refuge and crop a specific number of animals, and do it efficiently and hopefully with some sort of data back-up.

Q How long do you think it would have taken?

A. I have no idea.

Q Now, Mr. Bridgwater, we have talked about the physical make-up of this refuge, and we have seen a growth from a herd in 1964 of 110 to 120, to a peak in 1970, in six years, running between 360 and 550, almost a quintuplication in six years.

THE COURT: Finish your question.

MR. WERDIG: I am trying to think of what it was, Your Honor.

THE COURT: Well, then, maybe you should go on to the next one.

MR. WERDIG: No, I can't go on, because I have gotten it.

THE COURT: You know, you have been at this for half an hour, Mr. Werdig.

MR. WERDIG: I understand, Your Honor.

THE COURT: All right.

BY MR. WERDIG:

Q Do you have any measure in your own mind of how many deer should be on the Great Swamp Refuge, having been given a physical description of it?

A I could not make that statement based on the amount of data that is available here. If you figure it out as a ratio, it is about one deer per five acres or six acres, and there are all sorts of deer-to-acre figures, and it is a function of how much cropland there is.

Q But your figure is one to six, is that correct?

A I just say that as an estimate. Apparently here, you have 500 into 6000 acres.

Q To you, is that a comfortable deer-to-acreage proportion?

A It depends on the make-up, again, of the habitat, sir.

Q Well, we have given it to you, 3000 acres of brush and timber.

A I have no knowledge of crop production.

Q 800 acres of farm pasture and haylands; 1200 acres --

A I would not make that judgment based on this data that is here.

Q But you have made a judgment that a proposed public hunt was not consistent with the principles of sound wildlife

management in this area, based on this information.

A. That is correct.

Q. And you say that you would use feeding as an alternative to hunting, is that correct?

A. No, I did not say that. I offered it as an alternative which can be used in conjunction with other devices which might, in fact, reduce the need for management by killing. Just to throw out an example again -- it is one that is used a lot -- they have had a deer herd at Crab Orchard for many years.

Q. Where, sir?

A. Crab Orchard, the place we were referring to with respect to Dr. Klimstra. Unless something has happened within the last year, they have only been forced to have one controlled cropping during that period of time.

It is a well-run refuge, and there are a lot of techniques going on in combination. But I did not say that feeding, buffer feeding, was a viable alternative, used alone.

Q. All right.

A. I merely offered it as a technique.

Q. It is only one alternative to public hunting, is that correct?

A. It is a technique that, used in combination with other devices, may well, in fact --

Q. Like what?

A. Again, trapping and removal, the controlled removal of animals by shooting them where you know what you are doing and what kind of a population you are dealing with and how many you should get out with the least possible damage and stress to the habitat and organisms in the habitat.

Q. Have you ever shot a deer?

A. No, sir, I have not.

Q. Have you seen a deer at 50 yards?

A. Many.

Q. Many?

A. Yes.

Q. Could you tell me the ages or could you tell the ages of the deer when you saw them at that distance?

A. In broad categories.

Q. Could you do it by year?

A. No, by age classes.

Q. You mean fawn, doe?

A. Fawn, yearling.

Q. Is a yearling a male?

A. No, a yearling is just a yearling animal.

Q. Does it have certain distinctive markings on it which designate it as a yearling or something?

A. No, I would do it by physical appearance.

Q. By what, sir?

THE COURT: By physical appearance, he said.

MR. WERDIG: Thank you, Your Honor.

BY MR. WERDIG:

Q What with respect to the physical appearance would tell you what year it was?

A Size in a comparative range of sizes of deer.

Q Does diet affect their size?

A Certainly.

Q So you could have a skinny two-year-old and a fat one-year-old, and they would still look alike, would they not, at 50 yards?

A It is quite possible.

Q Now, talking about trapping, are you aware through the professional literature where any deer that were trapped on the Great Swamp Refuge would have been taken to?

A I don't see how you could derive that from the literature.

Q Do you not have statistics of what deer populations are in the various states, what their population dynamics are in various states? Isn't that in the professional literature, Mr. Bridgwater?

A You are getting into a very difficult area, because, talking about individual genetic pools and the question of whether it would be desirable to dump a group of deer from here to there, it is just a judgment that I cannot make at random.

Q Are you familiar with the deer herds in New Jersey,

how abundant they are or how lacking they are?

A. Not in specifics, sir.

Q. Have you ever transported a deer that had been trapped, or have you made the arrangements for it? Perhaps as curator, would you not have made arrangements for the transportation of these animals?

A. The transportation of animals by trapping from a wild population?

Q. Yes.

A. I have never had any responsibility for that, no, sir.

Q. You have never seen any cost estimates of how much it would cost to trap an animal and transport it to another location?

A. I have no idea.

MR. MADDEN: Nowhere in this case have we ever proposed that they should have trapped or transported. We do not propose it now, and I don't see why he would propose it. It does not follow the direct examination.

THE COURT: I am inclined to think you are right, Mr. Madden.

MR. WERDIG: Your Honor's indulgence.

THE COURT: All right. Mr. Werdig, let us proceed.

MR. WERDIG: Your Honor, Count 10 of the complaint reads as follows, making reference to a letter attached to, and

incorporated in, the complaint. One of these attachments is entitled, "Fact Sheet, Great Swamp Refuge Deer Hunt." It contains the following paragraph:

"All alternatives known were considered with regard to the best way to remove the surplus deer: trapping for release in another area." (Quoted as read)

Plaintiff then comes in and complains that neither the Interior Department letter, nor any of the supporting and explanatory attachments to it, make any mention whatever of the possibility of utilizing a limited number of expert riflemen.

We have the issue, and in the depositions taken by Mr. Madden the question was presented whether we considered trapping.

MR. MADDEN: That was in respect to -- that was one of the few things that they did consider, and they did not consider this other, which is the gravamen of the lawsuit.

MR. WERDIG: And Mr. Madden's witness today has indicated --

THE COURT: I realize that there are alternatives to hunting, including trapping.

In all deference to you, Mr. Werdig, I think all of this cross-examination could have been completed at least 15 minutes ago. Both of the other counsel said they could do it within 15 minutes.

MR. WERDIG: After I got finished.

THE COURT: Well, I am going to give you ten more minutes, Mr. Werdig. You have already had 40.

BY MR. WERDIG:

Q. Do you have any alternatives, based on the information that has been given to you in this hypothetical question, of what you would have done in the alternative at Eastern Neck, as opposed to a public hunt?

A. I think the material we have already been over might very well apply there. We have been talking about techniques and the development of good baseline data on which to make a sound judgment. The same alternatives would apply.

Q. And in the case of Eastern Neck we are talking of an area that is 2200-plus acres, correct?

A. 2300, I believe.

Q. 2300 acres?

A. Yes, sir.

Q. What would you have done as an alternative to having a public hunt there?

A. I repeat --

THE COURT: You repeat the same thing you said before?

THE WITNESS: That is correct.

THE COURT: All right. Next question.

BY MR. WERDIG:

Q. And the same thing at Chincoteague?

A. No, sir. That is a different set of data. What is available indicates that here a population has been in decline from, we would have to assume, either overhunting or other matters. There you are dealing with a different population trend, sir, downward instead of upward.

The data collection, the development of baseline data, again, should be applied there. I can see, based on what has been said here, that there would be no need for the public hunt called for --

Q And you would have no idea --

THE COURT: If you keep on asking these questions, you are going to get more of those answers that you do not like.

MR. WERDIG: I think I can judge my receptivity of the answers.

THE COURT: All right. What you forget is that I happen to be the judge.

MR. WERDIG: I understand that, also.

THE COURT: All right. Well, let us proceed.

MR. WERDIG: Thank you, Your Honor.

BY MR. WERDIG:

Q Were you aware that in 1963, there were 1050 Sika deer on this 2000 acres?

A. I have read that figure, yes, sir.

Q Does that sound reasonable to you?

A. That is what, a 9000-acre refuge?

Q. 2000 acres, in 1964.

A. Chincoteague?

Q. Yes, sir.

A. Chincoteague is not. That is 9400 acres, I believe, not 2000.

Q. All right. I withdraw the question.

If the deer habitat were 2000 acres, would that be a nice figure, 1050 deer in that area of 2000 acres? Would the maintenance of that number of deer in that limited amount of acreage be, in your mind, consistent with the principles of sound wildlife management?

A. I don't understand the question.

Q. A thousand deer in 2000 acres?

A. With reference to what?

Q. Is that a good balance to have in the environment, the ecological environment?

A. 1000 deer on 2000 acres?

Q. Yes.

A. Of course not.

Q. All right.

Are you familiar with Starker Leopold, with the report that was prepared by him, or under his chairmanship?

A. I am familiar with several things he has done. What report, specifically, sir?

Q. I am speaking of the National --

A. May I see it?

Q. (Continuing) -- the National Wildlife Refuge System Report submitted in 1968.

A. May I see it?

Q. Certainly.

A. Yes, sir, I am familiar with this.

Q. Do you agree with it?

A. I would not answer that categorically at all.

Q. All right. Do you agree with the statement in it that public shooting on parts of the refuges is another important function?

A. Would you read it in total context?

Q. The paragraph begins: "This board recognizes the primary importance of protecting and perpetuating migratory waterfowl as subjects of hunting and as objects of great public interest. Public shooting on parts of the refuges is another important function." (Quoted as read)

Would you agree that public shooting on parts of refuges is an important function of the refuge?

A. That does not --

THE COURT: He is going to ask you what kind of public shooting you are talking about. That does not say that.

THE WITNESS: Yes, Your Honor.

THE COURT: Any other questions?

MR. WERDIG: Your Honor's indulgence.

THE COURT: I have been indulging you for too long.

MR. WERDIG: I am finished, Your Honor.

THE COURT: All right. Mr. Stein, you may have the next opportunity.

MR. STEIN: Thank you, Your Honor.

CROSS-EXAMINATION

BY MR. STEIN:

Q. Mr. Bridgwater, you will agree with me, will you not, that the word "pristine" means original or primitive? The word "pristine" was used. You will agree with me that its meaning is in an original or primitive condition, isn't that correct, sir?

A. In all honesty, I can't really understand the question.

Q. You do not know the meaning of the word?

A. I know generally, but I could not give a precise answer.

Q. And that was one of the adjectives used in giving the criteria for the use of the refuge, isn't that correct? You heard it used?

A. I equate the word with a natural area.

Q. But you do not know the precise meaning of the word, is that correct?

A. I could not give it to you.

Q. Pardon?

A. No, I could not give you that.

Q. And is it not true that if the -- strike that. There are certain people who have a bias against killing animals, isn't that true?

A. I would certainly agree that there are, yes.

Q. And among those people who have a bias, they feel that anything should be done to avoid killing animals, isn't that true?

A. In some cases, yes.

Q. And there are other groups of people who do not have a bias against killing animals, isn't that true?

A. Agreed.

Q. And among those people, the killing of animals with firearms or bows and arrows is one of the means for reducing a herd, isn't that true?

A. No, I could not --

Q. Well, a herd is reduced every time an animal is killed, isn't it?

A. Are you talking about today's number or what happens to the herd in terms of the population dynamics of the annual cycle?

Q. No, I am talking in simple language. It is a self-evident fact, is it not, that if the herd is 100 animals and somebody comes in with a bow and arrow and kills one, the herd is then 99 animals, is it not?

A. Taken in that context, on that given day, that is correct, but that --

Q. And everybody is in agreement that where the herd is circumscribed, it is in a fixed area, and the area is not expandable, that a time is reached when the herd must be reduced, isn't that true?

A. In a fixed area, with no availability for emigration.

Q. We are in agreement, are we not?

A. Not quite, in terms of --

Q. You agree with me that in the New Jersey area the herd is growing, isn't that true?

A. The herd evidently is growing by the numbers reported.

Q. And it is going to reach a point where it is going to have to be reduced or nature will reduce it, isn't that true, sir?

A. That is correct.

Q. And nature reduces it by starvation and other means, isn't that true?

A. I dislike the order in which you put those. Nature has been able to control its own self pretty well cyclically.

Q. Yes, but is not disease a factor?

MR. MADDEN. Your Honor, may the witness be permitted to finish his answers?

MR. STEIN: Fine. Excuse me.

THE COURT: I think he has been.

BY MR. STEIN:

Q And disease and hunger are factors in nature's reduction of the herd, isn't that correct?

A Absolutely.

Q You say absolutely?

A Yes, sir.

Q And disease and hunger in many cases terminate in death, do they not?

A In a certain amount of circumstances, yes.

Q And there are in your mind better ways of reducing the herd than permitting public hunters to come in and use firearms and bows and arrows, isn't that true?

A I am saying there are more efficient ways of doing it with reference to the particular areas in question.

Q There are more efficient ways?

A Yes.

Q And there is a most efficient way, isn't that true?

A We keep looking for it.

Q I draw your attention to the fact that we are dealing with a matter of degree, are we not?

A With reference to what, sir?

Q To reducing the herd. There is a most efficient way, whatever that may be, and there are less efficient ways, which do in effect, reduce the herd, isn't that true?

A Now, again, you have to take into context some

peripheral purposes here.

Q. You do not agree with my statement?

A. Would you repeat it?

Q. That there is a most efficient way for reducing the herd, once we are in agreement that it has to be reduced. Perhaps it is with a rifle; perhaps, it is with an airplane; perhaps it is with traps. I don't know what it is, but there is a most efficient way. You will agree with that as an abstract principle, will you not?

A. I will agree with that.

Q. Then, there are lesser efficient ways, isn't that true, as an abstract proposition?

A. Good, better, best, that sort of thing.

Q. Yes. We are dealing with a matter of degree here. We are not dealing with absolutes, isn't that true?

A. I would hate to leave it at that, when we are dealing with a dynamic population of organisms, and you can do it irreparable damage.

Q. You used the word "irreparable". The herd can do irreparable damage to the shrubbery and -- let us use the word -- the pristine condition of the area, isn't that true?

THE COURT: Well, do not use the word "pristine," Mr. Stein, because the witness has said he does not know what it means.

MR. STEIN: Fine.

BY MR. STEIN:

Q If the herd gets too large, it can do considerable damage to the forest, can it not?

A Over the carrying capacity, yes, sir.

Q And it takes a long time for the forest to correct itself, maybe 10 or 20 years, isn't that true?

A It depends on the degree of damage, obviously. I would not generalize on that.

Q And we are in agreement that none of the deer in the three hunts under consideration are an endangered species, isn't that true?

A We would agree.

MR. STEIN: I have no further questions.

THE COURT: All right. Mr. Lenzini.

CROSS-EXAMINATION

BY MR. LENZINI:

Q Mr. Bridgwater, in your courses in wildlife management did you utilize the textbook by Aldo Leopold entitled "Game Management"?

A Not as a text, no.

Q Are you familiar with the book by Leopold, Aldo Leopold, entitled "Game Management"?

THE COURT: What he means by that is: Have you ever read it?

THE WITNESS: No, I have never read the thing through

in its entirety, certainly.

BY MR. LENZINI:

Q Who is Aldo Leopold?

A Junior or Senior?

Q Aldo Leopold, Aldo Leopold.

A Well, there are both a father and a son involved here.

The father is now dead.

Q Yes.

Who is Aldo Leopold?

A Okay. He was, well, in my own personal opinion, one of the primary fathers of sound wildlife conservation, and --

Q Are you familiar with his definition of "game management," Mr. Bridgwater?

A At one time I was. I don't recall it precisely at this time.

Q If I were to read to you his definition, that it is the art of making land produce sustained annual crops of wild game for recreational use, would that refresh your memory?

A Yes.

Q What do you understand --

MR. MADDEN: Counsel, would you read it again? I want to get it down. It is short.

MR. LENZINI: Game management is the art of making land produce sustained annual crops of wild game for recreational use.

THE WITNESS: Used in the sense that he was using it in that book, I absolutely agree. That is the whole name of the game.

We now have some new concepts and maybe the whole philosophy here has changed.

BY MR. LENZINI:

Q Do you believe that the basis of wildlife management is to benefit man?

A We do it.

THE COURT: Is your answer yes or no? I don't understand you.

THE WITNESS: That is a very difficult question to answer on a direct basis, but that is what is happening: that we are managing wildlife for our benefit.

BY MR. LENZINI:

Q What is your understanding of wildlife management, sound wildlife management?

A It depends on the particular area in question, what the primary objective is, and what kinds of peripheral spinoffs you can get from that.

Q Would you agree, Mr. Bridgwater, that you cannot say that there is one sound wildlife management principle that applies for every acre of land or different types of land; are you saying that it depends upon the objectives of the particular land?

A. Yes

Q. Can you tell us something about population dynamics of white-tailed deer?

THE COURT: That is a pretty broad question, counsel. Can you confine it a little more?

MR. LENZINI: Indeed.

BY MR. LENZINI:

Q. Can you tell us, Mr. Bridgwater, the extent to which a herd of white-tailed deer will increase under favorable range conditions from one year through the next?

A. No, sir, I cannot, without your giving me a series of givens.

Q. Well, did I understand that you are generally familiar with the literature in the field?

A. Well, I can't answer that question until I have data to work with.

Q. Well, are you familiar with Van Edders on the annual increment of a population of white-tailed deer?

A. I have read that, yes. I don't recall the detail of it.

Q. Do you distinguish, Mr. Bridgwater, between herd reduction and herd maintenance in terms of public hunting?

A. Herd reduction --

Q. And herd maintenance.

A. If I understand what you mean by the terms, yes.

there is a difference.

Q. What is the difference, Mr. Bridgwater?

A. Well, when you use the term "herd reduction," I am assuming that we are talking about the calculated control of the population over subsequent years, and the reduction of that term in a very calculated way.

Herd maintenance, on the other hand, would be to achieve a sustained yield.

Q. Where does cropping fit in? You talked about cropping in your answer to Mr. Madden in reference to the Great Swamp planned hunt. Does cropping fit in with herd maintenance or herd reduction?

A. Cropping is an attempt or effort to take out, selectively, in a calculated way, portions of a population in order to make sure of its long-term survival and compatibility with the habitat.

Q. Any particular portion of the population?

A. If the idea is to reduce the population this way, you would have to turn your attention to females. Wherever possible, you would like to take off some of the upper-end age classes, and so forth, perhaps excess bucks.

Q. Pardon me?

A. Perhaps excess bucks.

Q. What do you mean, Mr. Bridgwater, by the term "upper-end age classes"?

A. Just old animals. That is all.

Q. Pardon me?

A. Old animals.

Q. What are old animals? How old are old deer?

A. It is hard to say.

Q. Would you expect to find older deer in a well-managed herd?

A. Oh, it depends on what is old. Categorically, I would say --

Q. It is your word.

A. You have to tell me what "old" is.

Q. I am sorry. It is your word.

A. An old deer might be considered in the natural population to be an animal, say, in excess of ten years. The prime reproductive time, I think, for females might be considered five to six years.

Q. Would you feel that females who are older than five to six years would be unable to reproduce young?

A. Of course, they could produce young.

Q. Why would you want to take old deer out of the population?

A. Well, if you are talking about expendable animals that are no longer necessary to the dynamics of the population -- but might be putting pressure on the habitat, nature does it, and in your cropping you are trying to duplicate this to some

degree.

Q. Would you expect --

THE COURT: You have seven minutes, counsel.

BY MR. LENZINI:

Q. Do you think it would be possible, Mr. Bridgwater, to set up a hunt in which does only were taken?

A. Possibly, yes.

Q. In which only does were permitted to be taken?

A. It is possible.

THE COURT: He has answered it.

BY MR. LENZINI:

Q. Would you be able to differentiate, Mr. Bridgwater, in the field between antlerless male deer and does?

A. I would not expect the average hunter in the field to be able to do that, no.

Q. Would you expect the average biologist in the field to be able to do that?

THE COURT: We are not talking about biologists. Ask your next question.

BY MR. LENZINI:

Q. Mr. Bridgwater, you mentioned that there are more efficient ways to reduce the population at the Great Swamp. Is it my understanding that you believe that the population at the Great Swamp needs reduction?

A. I am simply assuming that, according to the hypothetical

question, this was the reason for the hunt.

Q What is your view, though, from the facts as given? Do you believe that the population needs reduction?

A In Great Swamp?

Q Yes.

A Again, without seeing the land, I would hesitate to speculate.

Q Well, you mentioned --

THE COURT: Then, is it your position, Mr. Bridgwater, that you really do not have an opinion on that question as to the Great Swamp area?

THE WITNESS: With the data available, yes, sir.

THE COURT: All right.

BY MR. LENZINI:

Q Now, Mr. Bridgwater, you mentioned that, if reduction were necessary, buffer feeding would be a possibility in controlling the population, is that correct?

A I used it as an alternative in conjunction with other techniques that could be explored in order to eliminate the necessity of public hunting.

Q Would you explain to me what you mean by "buffer feeding"?

A Well, this is a development of crop production which can be used as a management tool.

Q Would you expect that feeding would reduce the popula-

tion?

A. No, it would enable you perhaps to manage it at an optimum without the necessity -- at an optimum for the visitors to a given area to see. And in such a way it is not always necessary that you have to hunt to produce this.

Q How would buffer feeding control the population?

A. By the management of the movement on the refuge and the control -- I am trying to get the word -- by designation of damage to the habitat.

Q I am sorry. In what sense did you use the damage to the habitat? I did not follow you. Pardon me.

A. By restricting or taking the pressure off of a given section of the habitat.

Q Does a deer herd tend to increase in numbers, Mr. Bridgwater, in the wild under favorable conditions and under buffer feeding?

A. It is cyclic. There are increases and decreases, sir.

Q Well, if buffer feeding were utilized at the Great Swamp, would it be your belief that the herd would increase in size or be reduced in size?

A. It would depend on what other techniques were being applied in association with that.

Q What other techniques would you suggest as being effective ways to reduce the herd?

A. I think I have answered that question three or four or five times.

Q. Well, I have heard the answer of live trapping, which we have subsequently dispensed with. I don't really know any other ways you have suggested besides buffer feeding, Mr. Bridgwater.

A. As an alternative to public hunting?

Q. As an alternative to public hunting.

A. I suggested, I think, three times, that, armed with some good, basic data, a calculated removal of deer through a controlled process would be a better alternative than public hunting.

Q. What is the controlled process? What do you mean by "a controlled process"?

A. As I mentioned a couple of hours ago, that taking into consideration the time of the year, taking into consideration the expertise of the individuals involved, taking into consideration what is going on in that refuge at the same time, such as waterfowl migration, then you devise a system of removing these animals, using the most efficient tools that are at hand and taking advantage of all the seasonal and other population behavior.

Q. I believe you mentioned that it would be a desirable time to hunt when the leaves were off the trees, is that correct, sir?

A. I used that only as a way of illustrating that there were times of the year that would make the taking of deer easier than other times.

Q. Would you understand that the leaves are off the trees in mid-December?

A. Certainly. That was, again, an illustration. In one of the cases, in point of fact, the hunt did come early. That is all I am illustrating.

Q. In your familiarity with the literature in the field, have you read articles or have you any understanding as to whether or not public hunting during either-sex seasons has been effective in reducing and maintaining deer populations, Mr. Bridgwater?

A. Well, that is the whole name of the game in terms of deer herd management where hunting is involved.

Q. But has it been effective?

A. For the purposes for which that herd is being

managed, yes, sir.

MR. LENZINI: I believe that is all, Your Honor.

THE COURT: Any redirect?

MR. MADDEN: No, Your Honor.

THE COURT: May this witness be excused? Any objection? The court hears none. Thank you, Mr. Bridgwater. The

court wishes you a good trip back to Minnesota.

THE WITNESS: Thank you.



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL
PROTECTION

January 15, 1973

DIVISION OF
FISH, GAME AND SHELL FISHERIES
RUSSELL A. COOKINGHAM
DIRECTOR

PLEASE REPLY TO
P. O. BOX 1809
TRENTON, N. J. 08625

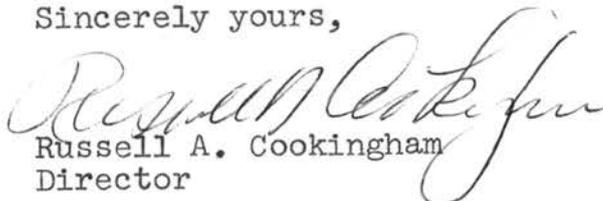
Mr. Donald D. Bridgwater, Director
Minnesota Zoological Garden
Veterans Service Building
Columbus Circle
St. Paul, Minnesota 55155

Dear Mr. Bridgwater:

I appreciate the material you have presented to me,
which will be very helpful in justifying our not
issuing a permit to a private citizen for possession
of a lion.

It is very possible that this case might be appealed
to the Appellate court, in which case we will have to
prepare reasonable arguments to justify our stand.

Sincerely yours,

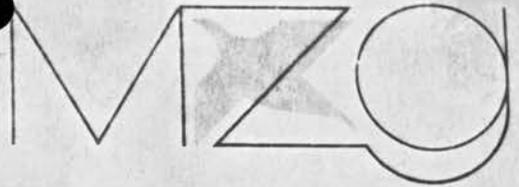

Russell A. Cookingham
Director

RAC:hh

cc--W. J. O'Hara, Humane
Soc. of the U. S.

Humane Soc

MINNESOTA ZOOLOGICAL GARDEN



December 27, 1972

Mr. Russell A. Cookingham, Director
Division of Fish, Game and Shell Fisheries
P. O. Box 1809
Trenton, New Jersey 08625

Dear Mr. Cookingham:

Mr. W. J. O'Hara, Executive Director of The Humane Society of the United States, New Jersey Branch, upon the advice of the national staff of this society, has written me a letter concerning an application to your division for a permit to keep a young lion cub as a household pet. It is my understanding that you have contacted Mr. O'Hara relative to the feasibility of issuing this permit. It is in this regard that I am writing you and perhaps the following comments will be of some assistance in reaching an objective decision.

I must first state that as a zoological garden professional, I am adamantly opposed to the keeping of non-domestic felines in private households. The exception to this feeling occurs only in very rare circumstances where the individual concerned has created a very specialized environment for the animal and has developed a long-term program with adequate caging, medical support and potential for reproduction for the animals in question. There are few such individuals. In general, keeping of an individual lion cub, tiger cub, etc. is initially a great kick for the owner bringing much publicity and a feeling of having accomplished something above the normal raising of a domestic species in the home. The sad thing is that such animals raised in this way become quite atypical psychologically and as they become older, stronger and physically mature, simply overpower the home through damage to property, objectionable odors, and more often than not, physical injury to the owner and/or his guests. The net result is that some facility equipped to handle the animal is finally sought, usually a zoo, etc. and at this point, the animal is introduced to more normally raised peers with great difficulty and because of early methods of raising may possibly never have a reproductive potential. In short, the long term future of the animal is jeopardized and responsibility for creating this future rests squarely on the potential owner.

I would suggest that if the permit applicant cannot be discouraged on the above basis that the permit be treated objectively through answers to the following questions:

- (1) The maintenance of at least one male and one female with a program designed to create reproduction potential for the species.
- (2) The provision of an adequate physical facility including both indoor and outdoor runs of sufficient size to maintain mature animals in a healthy way.

Mr. Russell A. Cookingham

- 2 -

December 27, 1972

- (3) The submission of an adequate nutritional program and the submission of an adequate medical health and care program including a competent veterinarian willing to provide such services.

The facility should then be visited by local individuals capable of judging their adequacy. These may be zoo professionals, members of your staff, etc.

If the permit applicant can demonstrate this serious intent with the animals, then I would have difficulty denying him the opportunity, but such cases as mentioned earlier are exceedingly rare.

I hope this letter will be of some assistance.

Sincerely,

MINNESOTA ZOOLOGICAL GARDEN



Donald D. Bridgwater
Director

gb

cc: W. J. O'Hara, Executive Director
The Humane Society of the United States
New Jersey Branch, Inc.
1140 East Jersey Street
Elizabeth, New Jersey 07201



THE HUMANE SOCIETY OF THE UNITED STATES

NEW JERSEY BRANCH, INC. 1140 EAST JERSEY STREET ELIZABETH, N.J. 07201 PHONE: 201 - 351-2475

Advisory Board

C. Douglas Dillon
Mrs. Walter Edge
Webster B. Todd

Mrs. John Kean
Thomas K. Frelinghuysen
Mrs. Hendon Chubb

Donald Mackey
Mrs. R. Stuyvesant Pierrepont
Miss Margot Roebling

Reeve Schley
Mrs. Paul Moore
John deC. Blondel

December 20, 1972

Dr. Donald Bridgewater
Minnesota State Zoo Garden
Veterans Service Building
Columbus Circle
St. Paul, Minnesota 55155

Dear Dr. Bridgewater:

A New Jersey resident has applied to our State Division of Fish and Game for a permit to keep a 14-week old lioness cub as a household pet. Mr. Russell A. Cookingham, the Division's Director, has contacted us for information regarding the feasibility of issuing such a permit.

In speaking with Mrs. Sue Pressman of our national staff on this subject, she suggested I immediately contact you for information on the proposed use of this animal.

We are opposed to the use of exotic animals as household pets and are trying to assist Mr. Cookingham with all available material from experts in the zoological field on the consequences and dangers of keeping an animal under such conditions -- both for the owner and animal. I know that Mr. Cookingham would welcome your evaluation and concepts, as well as any behavioral or psychological data relating to the exotic animal kept as a household pet. Would you be good enough to write him, with a copy to us, on this subject? His address is:

Mr. Russell A. Cookingham, Director
Division of Fish, Game and Shell Fisheries
P. O. Box 1809
Trenton, N. J. 08625

I realize that the demands on your time are many, and I would sincerely like to thank you for any assistance you may render.

Sincerely,

W. J. O'Hara
W. J. O'Hara
Executive Director

WJO:md

Officers and Directors

Fred L. Stevenson, President
Green Brook

Charles I. Clausing, Vice President
Marlton

Miss Serenne L. Everitt, Treasurer
Montclair

Miss Alice Blackburn, Secretary
Cherry Hill

Mrs. Basil Peter J. Andrews
Tenafly

A. Lloyd Davis
Marlton

Richard P. Dyckman
Plainfield

Mrs. Edward Krupp
Teaneck

Mrs. Thomas S. Maxwell
Oradell

James J. McTernan
Pittstown

Lloyd A. Moyer
Somerville

Mrs. R. Stuyvesant Pierrepont
Princeton

A. Michael Rubin
Wayne

William J. O'Hara
Executive Director
Shrewsbury