

H.R. 4807 and H.CON.RES. 408

LEGISLATIVE HEARING

BEFORE THE

SUBCOMMITTEE ON FISHERIES CONSERVATION,
WILDLIFE AND OCEANS

OF THE

COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

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June 12, 2002
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C O N T E N T S

	Page
Hearing held on June 12, 2002	1
Statement of Members:	
Gilchrest, Hon. Wayne T., a Representative in Congress from the State of Maryland	1
Prepared statement of	2
Underwood, Hon. Robert A., a Delegate in Congress from Guam	3
Statement of Witnesses:	
Gloman, Nancy, Chief of the Division of Conservation Planning and Policy, National Wildlife Refuge System, Fish and Wildlife Service, U.S. Department of the Interior	4
Prepared statement on H.R. 4807	6
Kilby, William, President, Cecil Land Trust, Collora, Maryland	7
Prepared statement on H.R. 4807	10
Letter submitted for the record from Wayne H. Bell, Ph.D., Center Director, Washington College, Center for the Environment and Society.	11
Pittenger, David, Executive Director, National Aquarium in Baltimore, Maryland	22
Prepared statement on H.Con.Res. 408	24
Rapp, James L., Director, Salisbury Zoological Park, Salisbury, Maryland, on behalf of the American Zoo and Aquarium Association	17
Prepared statement on H.Con.Res. 408	20
Additional materials supplied:	
Busby, Virginia R., Department of Anthropology, University of Virginia, Charlottesville, Virginia, Letter submitted for the record	30

**LEGISLATIVE HEARING ON H.R. 4807, THE
SUSQUEHANNA NATIONAL WILDLIFE REF-
UGE EXPANSION ACT; AND H.CON.RES. 408,
HONORING THE AMERICAN ZOO AND
AQUARIUM ASSOCIATION FOR THEIR CON-
TINUED SERVICE TO ANIMAL WELFARE,
CONSERVATION EDUCATION, CONSERVA-
TION RESEARCH, AND WILDLIFE CON-
SERVATION PROGRAMS**

**Wednesday, June 12, 2002
U.S. House of Representatives
Subcommittee on Fisheries Conservation, Wildlife and Oceans
Committee on Resources
Washington, DC**

The Subcommittee met, pursuant to call, at 2:05 p.m., in room 1334, Longworth House Office Building, Hon. Wayne T. Gilchrest [Chairman of the Subcommittee] presiding.

**STATEMENT OF THE HONORABLE WAYNE T. GILCHREST, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF
MARYLAND**

Mr. GILCHREST. The Subcommittee will come to order.

We have two pieces of legislation this afternoon. The first bill is H.R. 4807, the Susquehanna National Wildlife Refuge Expansion Act, and the second bill is House Resolution 408 honoring the American Zoo and Aquarium Association and its accredited institutions for their continued service to the United States and the rest of the world.

I ask unanimous consent that my statement be submitted for the record, and what I would like to do is very briefly summarize.

The first bill deals with a rather magnificent place on the Susquehanna River, the headwaters of the Chesapeake Bay known affectionately to local people in Cecil and Hartford County as Garrett Island. It has been settled to some degree since the 1600's. It is now a place of refuge for a myriad of wildlife of which I would be very happy to help, with the Kilby family, host the Fish and Wildlife Service people to paddle out to Garrett Island on a trusty Old Town canoe, walk around the island and see its magnificence.

What we would like to do—and Mr. Kilby will expound upon this. He is the one person who has been a strong advocate. And certainly to develop a refuge system, Fish and Wildlife understands the need for them throughout the country for ecological and refuge purposes. The local community is in great favor of this island being preserved.

There are a number of other things happening in the region, one of which is a conservation corridor from Virginia to Pennsylvania. That is a forested corridor that we are looking to preserve habitat for wildlife—the full range of wildlife that a particular ecosystem can support in this region of the United States and, in particular, neotropical migrating birds, waterfowl, anywhere from woodchucks to fox and beaver and deer and osprey.

Osprey, for example, and bald eagles make their homes on Garrett Island, so a conservation corridor on the land and an island corridor throughout the Chesapeake Bay watershed, including Susquehanna river. This is one of the capstones of that particular concept.

We look forward to the hearing today to listen to Mr. Kilby and the people from Fish and Wildlife, and we also want to thank Jim for coming back here again. You were here a couple of weeks ago, and we thank the American Zoo and Aquarium Association for all of the things they have done to serve this country in understanding and appreciating the rather dynamic complex organisms that populate the planet and their relationship in the ecosystems.

One of the things that I think Garrett Island could be useful for is an ecological study area for local schools that the Baltimore Zoo could take advantage of as a field site. Certainly the Salisbury Zoo could come up and play a role in the northern part of the shore as a field study area to understand, let us say, the mechanisms of the brain of an ant, which is some pretty extraordinary things that Ian Wilson has done for a number of years. But instead of traveling to Brazil to do that, we can do that on Garrett Island.

Anyway, Jim, we appreciate your attendance here this afternoon; and at this point I yield to the gentleman from Guam, Mr. Underwood.

[The prepared statement of Mr. Gilchrest follows:]

**Statement of The Honorable Wayne T. Gilchrest, Chairman,
Subcommittee on Fisheries Conservation, Wildlife and Oceans**

Good afternoon, today, the Subcommittee will conduct a hearing on two pieces of legislation which I have sponsored. The first bill is H.R. 4807, the Susquehanna National Wildlife Refuge Expansion Act.

As the Co-Chairman of the Susquehanna River Basin Task Force, I was pleased to introduce this measure to designate Garrett Island as a unit of the Susquehanna Refuge. I have visited Garrett Island on several occasions and its rich history, geographic location and wildlife resource values must be preserved for future generations.

Garrett Island was the site of Maryland's second settlement in the 1600's, it is the only rocky island in the tidal waters of the Chesapeake Bay system and it is a link between the river and the bay. According to one of its current island owners, "people tend to take places like this for granted until they're about to lose them".

Until the terms of my legislation, the Secretary of the Interior would purchase the island from existing funds and it would be managed as a component of the Susquehanna National Wildlife Refuge. The purposes of the refuge unit would be to support the conservation corridor demonstration program, to conserve, restore and manage habitats and aquatic resource values, achieve the objections of the Chesa-

peake 2000 Agreement, conserve the archeological resources of the island and permit appropriate public access.

The second bill we consider is H.Con.Res. 408, honoring the American Zoo and Aquarium Association (AZA) and its accredited institutions for their continued service to animal welfare, conservation research, and wildlife conservation programs.

AZA facilities have been in the forefront in maintaining animals in public display. They have developed and implemented the highest of standards for the care and maintenance of these animals. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service recognize these standards as the "professionally accepted standards" on which public display facilities must base their education and conservation programs.

Millions of Americans visit zoos and aquariums every day. For many of these visitors this is the only opportunity they will have to see marine mammals or other exotic species. Seeing these animals firsthand educates them on the needs of animals in the wild and can give them an appreciation for captive and wild animal populations they might not otherwise have. This personal interaction has grown into support for these facilities, through direct contributions and State and Federal funding, that allows AZA institutions to coordinate with academics, State, Federal, and international institutions to conduct premier research on captive and wild populations. The contributions made by these facilities through research and field conservation have helped maintain populations of African and Asian elephants, great apes, rhinoceros and tigers. In addition, a greater understanding of marine mammal populations has occurred and has helped in the rehabilitation and release of stranded marine mammals.

I look forward to the testimony of the witnesses here today. I am now pleased to recognize the distinguished Ranking Democratic Member for any opening statement he may have on the legislation.

**STATEMENT OF THE HONORABLE ROBERT A. UNDERWOOD, A
DELEGATE IN CONGRESS FROM GUAM**

Mr. UNDERWOOD. Thank you, Mr. Chairman; and if we can figure out the operations of the brain of an ant we can figure out a lot of things that go on around here.

Thank you, Mr. Chairman. I look forward to this afternoon's hearing; and I will be brief in my remarks.

You referred to the island as a magnificent island. I thought you were going to talk about the magnificent legislation that will help keep this island around forever.

Our wildlife refuge system is one of the Federal Government's best-kept secrets and functions as our only network of lands and water set aside exclusively for the conservation of fish wildlife and plant resources. The 94 million acres of habitat within the refuge system protects hundreds of endangered species and safeguards millions of migratory birds and conserves premier sports fisheries for over 35 million Americans who visit the system annually.

It is no surprise to me that the system has now grown to over 535 refuges located across the Nation. It is my understanding that President Bush's administration has decided that this legacy has expanded perhaps a little too much and the time has come to curtail any further expansion or additions to the refuge system. In light of the chronic operations and maintenance budget backlog affecting the refuge system, I can partly understand this reasoning. If you are struggling to maintain what you already have, why add to it?

Nevertheless, such a change represents a significant and potentially troubling shift in policy. If this Subcommittee is to be able to fairly assess the merits of Chairman Gilchrest's legislation to add Garrett Island to the Susquehanna National Wildlife Refuge, the Administration is encumbered by the responsibility to first fully

articulate and support the details of its new policy before we dispatch H.R. 4807 to one of many, many pieces of legislation that have good intentions but are not going anywhere. That is only fair.

In addition, if it is the policy of the Administration to postpone any further expansion of the refuge system until the operations and maintenance backlog is rectified, I hope that the Administration would consider adjusting its own internal budget priorities to achieve this worthy goal and to allow the system to grow where needed in the future.

Mr. GILCREST. Thank you, Mr. Underwood.

Mr. GILCREST. Our first witness this afternoon is Ms. Nancy Gloman, Chief of the Division of Conservation Planning and Policy, National Wildlife Refuge System, U.S. Fish and Wildlife Service.

Thank you for coming. Ms. Gloman, you may begin.

STATEMENT OF NANCY GLOMAN, CHIEF OF THE DIVISION OF CONSERVATION PLANNING AND POLICY, NATIONAL WILDLIFE REFUGE SYSTEM, U.S. FISH AND WILDLIFE SERVICE

Ms. GLOMAN. Mr. Chairman, I ask that my written statement be included for the record.

Mr. GILCREST. Without objection.

Ms. GLOMAN. Thank you.

Mr. Chairman and members of the Subcommittee, I am Nancy Gloman, Chief of the Division of Conservation Planning and Policy for the National Wildlife Refuge System. I appreciate the opportunity to provide views and comments on H.R. 4807 on behalf of the U.S. Fish and Wildlife Service. H.R. 4807 authorizes the expansion of the National Wildlife Refuge to include Garrett Island. This undeveloped island, located in Cecil County, Maryland, has generated protection and acquisition interest from the Maryland Department of Natural Resources and the Cecil County Land Trust, a local environmental group. Before stating our views on the legislation, I would like to give you a brief summary of the Service's involvement in the Susquehanna River National Wildlife Refuge, our activities in the proximity of Garrett Island and what we currently know about the natural resources associated with the island.

The Chesapeake Marshlands National Wildlife Refuge Complex includes Blackwater National Wildlife Refuge, Martin National Wildlife Refuge and Susquehanna National Wildlife Refuge. Susquehanna National Wildlife Refuge is located approximately 100 miles north of the administrative office of the complex, which is in Cambridge, Maryland. The refuge was initially established as a Migratory Bird Waterfowl Closed Area because of its outstanding submerged aquatic vegetation habitat, which concentrated large numbers of diving ducks, primarily canvasbacks.

With the disappearance of the expansive submerged beds in the 1970's, the Presidential Order creating the Waterfowl Closed Area was rescinded in 1978. This rulemaking left only Battery Island as the National Wildlife Refuge; Since that time Battery Island has eroded to about 1.5 acres in size, with very little habitat value for the Service's trust resources. Consequently, Susquehanna National Wildlife Refuge has not been a protection priority since 1978, is

rarely visited by Service personnel, and in fact has been considered by the Service for transfer to some nongovernmental organization.

Garrett Island is located in the Susquehanna River, approximately five miles north of what remains of the Susquehanna National Wildlife Refuge. Because it is mostly privately owned, the Service has not conducted a survey of the island to assess the Fish and Wildlife resource value. However, we have viewed the island from the water and noted a mature, predominantly hardwood forest with a rocky shoreline. In fact, I saw a nice picture of it, just before giving my testimony, that confirms that it is predominantly hardwood forest.

The Service's Maryland Fisheries Resource Office has sampled the fishery resources in the Garrett Island vicinity and report that it supports a typical assemblage of fish that are expected in the river in that area. The Service's Division of Ecological Services reports no listed threatened or endangered species in the area, and the Maryland Department of Natural Resource's Heritage Program has no records of State threatened or endangered species.

The Service has limited funds with which to purchase land and acquire easements and to provide protection and management to trust resources following the purchase. Therefore, the Service must be strategic in identifying lands for inclusion in the National Wildlife Refuge System and must set priorities for purchase. The Service recognizes that one of the most important challenges that we have in the land acquisition process is the development of integrated national and regional Fish and Wildlife goals.

When planning acquisitions and setting priorities, the Service considers known sites of threatened or endangered species and communities; areas important to the ecological health of the land; areas that provide habitat corridors and areas that are priority for wildlife species. Other factors we look at are the size of the proposal, the relationship to existing wildlife refuges, and potential operations and maintenance costs, and also the relationship to species and habitat conservation plans. These acquisition priorities must be juxtaposed with the Service's ability to provide resources that are needed to administer these lands.

The Service has an extensive list of possible acquisitions in the Northeast Region. Within the Chesapeake Bay, our highest priority is the Blackwater National Wildlife Refuge in Maryland. We are currently developing a comprehensive conservation plan for the Blackwater refuge that will consider whether to recommend enlargement of the boundary for that refuge. We are working in close cooperation with the State and local government and our other partners, of course; and continuing efforts in the area will allow us to link up important habitats providing valuable wildlife corridors, including the wildlife corridors that you talked about in your opening remarks.

This Administration is committed to taking care of what we have. We have identified \$1.1 billion in refuge operational needs and \$663 million in pending maintenance projects for the National Wildlife Refuge System. In the Chesapeake Marshlands National Wildlife Refuge Complex alone, there are 35 deferred maintenance projects in our maintenance management system costing \$1.7 mil-

lion and 17 projects totaling \$2 million in our priority Tier 1 refuge operational needs system.

We are very appreciative that you and your constituents would turn to the Fish and Wildlife Service as custodians of Garrett Island. Unfortunately, given our priorities and funding constraints, we cannot support H.R. 4807. Nevertheless, the Service does offer a number of grant programs and other opportunities for technical assistance; and we would be more than willing to work with you, Mr. Chairman, your constituents, and the State of Maryland to identify various options and avenues for the protection of Garrett Island.

Mr. Chairman, this concludes my prepared statement; and I would be pleased to answer any questions you may have.

Mr. GILCHREST. Thank you, Ms. Gloman.

[The prepared statement of Ms. Gloman follows:]

Statement of Nancy Gloman, Chief, Division of Conservation Planning and Policy, National Wildlife Refuge System

Mr. Chairman and members of the Subcommittee, I am Nancy Gloman, Chief of the Division of Conservation Planning and Policy for the National Wildlife Refuge System. I appreciate the opportunity to provide views and comments on H.R. 4807, on behalf of the U.S. Fish and Wildlife Service (Service). H.R. 4807, authorizes the expansion of the Susquehanna National Wildlife Refuge to include Garrett Island in the National Wildlife Refuge System. This undeveloped island, located in Cecil County, Maryland, has generated protection and acquisition interest from the Maryland Department of Natural Resources and the Cecil County Land Trust, a local environmental interest group. Before stating our views on this legislation, I would like to give you a brief summary of Service involvement in the Susquehanna National Wildlife Refuge, our activities in proximity to Garrett Island, and what we currently know about the natural resources associated with the island.

The Chesapeake Marshlands National Wildlife Refuge Complex includes Blackwater National Wildlife Refuge, Martin National Wildlife Refuge, and Susquehanna National Wildlife Refuge. Susquehanna National Wildlife Refuge is located approximately 100 miles north of the administrative office for the Complex, which is located in Cambridge, MD. The refuge was initially established as a Migratory Bird Waterfowl Closed Area because of its outstanding submerged aquatic vegetation habitat, which concentrated large numbers of diving ducks, primarily canvasbacks.

With the disappearance of the expansive submerged grass beds in the 1970s, the Presidential Order creating the Waterfowl Closed Area was rescinded in 1978. This rulemaking left only Battery Island as the refuge. Battery Island has since eroded to approximately 1.5 acres in size, with little habitat value for Service trust resources. Consequently, Susquehanna National Wildlife Refuge has not been a protection priority since 1978, is rarely visited by Service personnel, and in fact, has been considered for excess by the Service, or transfer to a non-government conservation organization.

Garrett Island is located in the Susquehanna River, approximately 5 miles north of what remains of the Susquehanna National Wildlife Refuge. Because it is mostly privately owned, the Service has not conducted an on-site visit to Garrett Island to assess fish and wildlife resource values. However, Service personnel have viewed the island from the water and noted a mature, predominately hardwood forest with a rocky shoreline. The Service's Maryland Fisheries Resource Office has sampled the river in the Garrett Island vicinity and report a typical assemblage of fish species for the area. The Service's Division of Ecological Services has no records of Federally-listed threatened or endangered species in the area. The Maryland Department of Natural Resource's Heritage Program has no records of state threatened or endangered species.

The Service has limited funds with which to purchase lands and acquire easements and to provide protection and management to trust resources following purchase. Therefore, the Service must be strategic in identifying lands for inclusion in the National Wildlife Refuge System, and must set priorities for purchase. The Service recognizes that one of the most important challenges in the land acquisition process is the development of integrated national and regional habitat goals and ob-

jectives. When planning acquisitions and setting priorities, the Service considers known sites of threatened or endangered species and communities; areas important to the ecological health of lands already owned (e.g., areas that protect the quality and quantity of water for wetlands, provide habitat corridors between existing conservation lands, or are of sufficient size of contiguous lands to protect viable populations); and, areas important for priority wildlife species (e.g., critical stopover habitat for migrating birds). Other factors considered include the size of the proposal, the relationship to existing refuges, potential operations and maintenance costs, and the relationship to habitat and species conservation plans. These acquisition priorities must also be juxtaposed with the Service's ability to provide resources requisite for adequate administration of potential new refuge lands.

The Service has an extensive list of possible acquisitions within the Northeast Region. Within the Chesapeake Bay, our highest priority is the Blackwater National Wildlife Refuge in Maryland. We are currently developing a Comprehensive Conservation Plan for the Blackwater refuge that will include consideration of whether to recommend enlargement of the boundary of the refuge. We are working in close cooperation with State and local governments and partners in that process. Continued efforts in the Blackwater area will allow us to link important habitats providing valuable wildlife corridors.

This Administration is committed to taking care of what we have. We have identified \$1.1 billion in refuge operational needs and \$663 million in pending maintenance projects for the National Wildlife Refuge System. In the Chesapeake Marshlands National Wildlife Refuge Complex alone, there are 35 deferred maintenance projects in our Maintenance Management System at a cost of \$1.7 million and 17 projects, totaling \$2 million in our priority Tier 1 Refuge Operational Needs System.

We are appreciative that you and your constituents would turn to the Fish and Wildlife Service as custodians of Garrett Island. Unfortunately, given our priorities and funding constraints, we cannot support H.R. 4807. Nevertheless, the Service does offer a number of grant programs and other opportunities for technical assistance, and we would be more than willing to work with you, Mr. Chairman, your constituents, and the State of Maryland to identify the various avenues for protection of Garrett Island.

Mr. Chairman, this concludes my prepared statement. I will be pleased to respond to any questions you may have.

Mr. GILCHREST. I would like to recognize Mr. Bill Kilby from Cecil County, dairy farmer extraordinary, who has pursued with his family a lifetime of improving agricultural practices and preserving the landscape in that most precious part of our State. Mr. Kilby.

**STATEMENT OF WILLIAM KILBY, PRESIDENT,
CECIL LAND TRUST**

Mr. KILBY. Thank you, Mr. Chairman.

The Cecil Land Trust is a 4-year-old, all-volunteer nonprofit with the mission to preserve farmland, woodland, natural habitats and historical rural communities and to provide assistance to those interested in land conservation.

We have working agreements with the Maryland Environmental Trust and The Conservation Fund. We have five donated easements, a 16,000-acre rural legacy area, an outreach program that has produced three studies, including an Ag Land Preservation and Protection Task Force report and a Farm Link Program. Our interest in the permanent protection of Garrett Island comes from our role of providing assistance to those interested in land conservation.

Over 2 years ago, we were approached by two conservation-minded individuals who were concerned about Garrett Island being sold for yet another development scheme. With each sale, the price is increasing. They asked for our help.

A business arrangement, the Garrett Island Limited Liability Company, was formalized. It enables the Cecil Land Trust to purchase the interest of other members as funds are raised with the goal of permanent protection, public access and a comprehensive educational program. House bill 4807, to include Garrett Island in the Susquehanna National Wildlife Refuge, fits our vision of the island's future.

We applaud Congressman Gilchrest for bringing to the attention of Congress that Garrett Island is both historically significant and ecologically unique. Its historical significance predates the establishment of the State of Maryland as the Virginia Company's most northernmost fur trading post in the Chesapeake Bay. Its history and prehistory represents every resource-based industry, and it is fitting that we should be here in this room.

It represents agriculture, fur trading, fish packing, ice storage, logging and mining. Every one of those has taken place on the island for the past 400 years. It has witnessed the history of transportation from canoes to barges, and its land mass supports both a road and a railroad. Its uniqueness as a rock island in the tidal waters at the head of the Chesapeake Bay allows a walk of a half mile to take you from a tidal marsh to the summit of a 114-foot volcanic core.

Since the Susquehanna River from the Conowingo Dam to Garrett Island is open most of the winter, it serves as a haven for many kinds of birds. The Audubon Society's New Year's Eve count has spotted 44 species, including 14 kinds of ducks and a number of eagles. Spring and fall migration also includes Canadian geese, common loons, the tundra swans. A cove on the island's southeast corner has an active heron roost. Havre de Grace High School students will be placing and monitoring wood duck boxes on the island for the many wood ducks that nest in the area.

Both freshwater and anadromous fish are abundant around the island. Game fish include striped bass, large mouth, small mouth bass, white and yellow perch and catfish. One of the local groups that works with us, the Bassing Bunch fishing club, a group that has adopted the island as one of its projects, reports that the sand bar on the island south is an extremely important spawning ground for striped bass. The island also supports a year-round herd of about 20 deer.

Congressman Gilchrest, for the benefit of those who don't know it, has made two visits to the island to see for himself what is there. His last was to assist us in our spring clean-up effort.

Other educators have visited the island, including Dr. Wayne Bell, who is the Director of the Center for the Environment and Society at Washington College. Dr. Bell writes, "the potential for educational and public outreach programs dealing with the environment, archeology and cultural history is outstanding."

He continues in his letter, "I am especially excited about program development for the region's kindergarten through 12 schools." he says, "Garrett Island will be a wonderful opportunity for undergraduates to pursue environmental education internships that would assist in the interpretation and presentation of information to teachers, young people and the general public. Such opportunities are far too rare on the Upper Eastern Shore."

In addition to Washington College, two other regional groups share an active interest in the permanent protection of Garrett Island. One is the Northern Chesapeake Chapter of the Archeological Society of Maryland. They state in a report, *The Archeological Importance of Garrett Island*, that, beyond the archeological records it contains, the island itself is an artifact, an integral part of the natural and cultural landscape, bearing both local through national level historical and cultural significance.

The Society would like to develop a multi-year project on the island geared toward providing a management plan for guiding future research and preservation efforts.

The newest interest group on the island is the Lower Susquehanna Heritage Greenway, one of Maryland's few certified greenways. The Cecil Land Trust has obtained a conditional grant of up to \$300,000 in matching funds through the LSHG and the Maryland Heritage Area Authority's Target Investment Zone Program. The acquisition of Garrett Island for permanent protection in its natural state is an important part of LSHG's linkage concept, the preservation-conservation of heritage resources and natural features within the Susquehanna Valley.

The calls for the island's permanent protection depends on the determination of its fair market value and accurate acreage account. There have been two appraisals in the past 3 years using development scenarios to determine the value. The value range is \$3,000 to \$3,400 per acre. The problem in using this type of valuation system is that there are no local comparables.

Cecil Land Trust has obtained additional information to support the value of \$3,400 an acre. We obtained a certificate of elevation to meet FEMA requirements, soils determination for health department requirements, and after searching through a dozen islands on the East Coast that were developed but only had water access, we found an island in the Susquehanna River in New York State that is entirely comparable to Garrett Island, including its history and its present use. It sold at public auction in 1988 for \$3,447 an acre.

The Cecil Land Trust has raised \$150,000 to acquire partner shares of Garrett Island. It would take an additional \$600,000 to purchase the remaining interest of the Garrett Island Limited Liability Company. We have the commitment of \$300,000 from the Maryland Historical Area Authority, and if we can reach a mutual agreement on value and acreage—if we had an additional \$300,000 in Federal matching funds, we would be able to—if they were available, Cecil Land Trust would encourage the Garrett Island Limited Liability Company to accept a price of \$600,000 in State and Federal funds in exchange for the title to Garrett Island.

The Cecil Land Trust, the Northern Chesapeake Chapter of the Archeological Society of Maryland and the Lower Susquehanna Greenway would request input into the management plan for the island.

The opportunity for the Federal recognition and funding through House bill 4807 will not only demonstrate the importance of permanent protection for Garrett Island, it will also show how local groups can partner with the government to protect a community legacy.

Thank you.

Mr. GILCHREST. Thank you, Mr. Kilby.
 [The prepared statement of Mr. Kilby follows:]

Statement of William Kilby, President, Cecil Land Trust

Cecil Land Trust is a four year old, all volunteer non-profit, with a mission to preserve farmland, woodland, natural habitats and historic rural communities and to provide assistance to those interested in land conservation.

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We applaud Congressman Gilchrest for bringing to the attention of Congress that Garrett Island is both, historically significant and ecologically unique. Its historical significance predates the establishment of the state of Maryland, as the Virginia Company's northernmost fir trading post in the Chesapeake Bay. Its history and prehistory represents every resource-based industry—agriculture, fur trading, fish packing, ice storage, logging and mining. It has witnessed the history of transportation from canoes to barges. Its land Mass supports both a road and a railroad. Its uniqueness as a rock island in the tidal waters of the Chesapeake Bay allows a walk of a half mile to take you from a tidal marsh to the 114 foot summit of a volcanic core.

Since the Susquehanna River from the Conowingo Dam, to Garrett Island, is open most of the winter, it serves as a haven for many kinds of birds. The Audubon Society's New Years Eve count has spotted 44 species, including 14 kinds of ducks and a number of eagles. Spring and fall migration also includes Canadian Geese, common loons and tundra swans. A cove on the island's southwest corner, has an active heron roost. Havre de Grace High School students will be placing and monitoring wood duck boxes on the island for the many wood ducks that nest in the area.

Both freshwater and anadromous fish are abundant around the island. Game fish include striped bass, large mouth and small mouth bass, white and yellow perch, and catfish. The Bassing Bunch fishing club, a group that has adopted the island as one of its projects, reports that the sand bar, at the island's south end, is an extremely important spawning ground for striped bass. The island also supports a year round herd of about 20 deer.

Congressman Gilchrest has made two visits to the island. His last was to assist in our spring clean-up effort. Other educators have visited the island including Dr. Wayne Bell, director of the Center for the Environment and Society at Washington College. Dr. Bell writes, "the potential for educational and public outreach programs dealing with the environment, archaeology and cultural history is outstanding." He continues in his letter, "I am especially excited about program development for the region's K-12 schools. Garrett Island will be a wonderful opportunity for undergraduates to pursue environmental education internships that would assist in the interpretation and presentation of information to teachers, young people, and the general public. Such opportunities are far too rare on the Upper Eastern Shore."

In addition to Washington College, two other regional groups share an active interest in the permanent protection of Garrett Island. One is the Northern Chesapeake Chapter of the Archaeological Society of Maryland. They state in a report, The Archaeological Importance of Garrett Island, "beyond the archaeological record it contains, the island is itself an artifact—an integral part of the natural and cultural landscape—beating local through national level historical and cultural significance." The Society would like to develop a multi-year project on the island geared toward providing a management plan for guiding future research and preservation efforts. The newest interest group is the Lower Susquehanna Heritage Greenway (LSHG), one of Maryland's few certified greenways. The Cecil Land Trust has obtained a conditional grant of up to \$300,000 in matching funds through LSHG and the Maryland Heritage Area Authority's Target Investment Zone Program. The acquisition of Garrett Island, for its permanent protection in its natural state, is an

important part of LSHG's linkage concept, the preservation-conservation of heritage resources and natural features within the Susquehanna Valley.

The cost for the Island's permanent protection depends on the determination of its fair market value and accurate acreage count. There have been two appraisals in the past three years using development scenarios to determine value. The value range is \$3,000 to \$3,400 per acre. The problem in using this type of valuation system is that there are no local comparables. Cecil Land Trust has obtained additional information to support the value of \$3,400. We obtained a certificate of elevation to meet FEMA's requirements, soils determination to health department requirements, and after searching through a dozen island on the East Coast that were developed, but had only water access, we found an island in the Susquehanna River in New York State that is entirely comparable to Garrett Island, including its history and its present use. It sold at public auction in 1988, for \$3,447 per acre.

The Cecil Land Trust has raised \$150,000. It would take \$600,000 to purchase the remaining interest in the Garrett Island LLC. We have a commitment of \$300,000 from MHAA, if we can reach a mutual agreement on value and acreage. If \$300,000 in Federal matching funds were available, the Cecil Land Trust would encourage the Garrett Island LLC to accept a price of \$600,000 in state and Federal funds in exchange for the title to Garrett Island. The Cecil Land Trust, The Northern Chesapeake Chapter of the Archaeological Society of Maryland and The Lower Susquehanna Heritage Greenway would request to have input into a management plan for the island.

The opportunity for Federal recognition and funding through H.R. 4807 will not only demonstrate the importance of permanent protection of Garrett Island, it will also show how local groups can partner with government to protect a community legacy.

[The letter referred to by Mr. Kilby from Wayne H. Bell, Ph.D., Center Director, Washington College, Center for the Environment and Society. follows:]

WASHINGTON COLLEGE

CENTER FOR THE ENVIRONMENT AND SOCIETY

300 WASHINGTON AVENUE

CHESTERTOWN, MARYLAND 21620-1197

25 JANUARY 2001

M. Jayne Wright, Esquire
Law Offices of M. Jayne Wright, LLC
201 St. John Street
P.O. Box 939
Havre de Grace, MD 21078

Dear Ms. Wright:

I am writing on behalf of the new Center for the Environment and Society at Washington College in support of the initiatives underway for program development at Garrett Island.

It was my pleasure to have a guided tour of the Island in July, 2000. The potential for educational and public outreach programs dealing with the environment, archaeology, and cultural history is outstanding.

Garrett Island is unique physically, historically, and environmentally. Its location at the mouth of the Susquehanna River places it at the threshold of the source of 60% of the freshwater flow and sediment load into Chesapeake Bay. It is also near the top of the Delmarva Peninsula at a point where migratory routes of land birds and waterfowl are compressed. The mature forests on much of the island reflect changing commercial and agricultural land use and constitute a unique "natural" laboratory for learning the ecology of both native and introduced plant species. Others more qualified than myself can speak to the archaeology of Garrett Island, but I found it to be a treasure trove of artifacts from Native American and Colonial days. Not only are these artifacts in desperate need of protection; they also are in desperate need of interpretation and appreciation.

The Center for the Environment and Society is especially interested in the potential of Garrett Island as a multi-disciplinary educational resource. I see it as an opportunity for Washington College students to conduct field studies in the Island's unique ecology and history that would include both aquatic (water quality monitoring, fish and waterbird population dynamics) and terrestrial (land use patterns, breeding bird surveys, ecology of introduced species) projects.

I am especially excited about program development for the region's K-12 schools. Garrett Island will be a wonderful opportunity for undergraduates to pursue environmental education internships that would assist in the interpretation and presentation of information to teachers, young people, and the general public. Such opportunities are far too rare on the Upper Eastern Shore.

The professional expertise that the Garrett Island initiative has mustered to guide program development is impressive. I look forward to becoming part of that resource in the months and years ahead. Please do not hesitate to contact me if the Center for the Environment and Society can be of service,

Sincerely yours,

Wayne H. Bell, Ph.D.
Center Director



Mr. GILCHREST. I think what we will do, we will begin the questioning of Ms. Gloman and Mr. Kilby; and after that we will move on to Mr. Rapp and Mr. Pittenger.

Ms. Gloman, I understand the situation that Fish and Wildlife is backlogged in maintenance, limited budget. You have set priorities; and you are dealing with maintenance costs, backlog in maintenance costs, et cetera, plus a new policy in Fish and Wildlife to limit special, legislatively new refuges. I am not sure how you limit refuges from us, but we are going to try to work with you as a team on this.

If we look at this from a priority perspective, it seems to me that what is going on in the Chesapeake Bay watershed in the States of Maryland and Virginia in particular and all the efforts to begin to create a situation where agriculture is profitable, communities are economically viable and there is habitat for wildlife, which is the chief reason for extinction today, loss of habitat, and with the efforts being pursued to create conservation corridors on the land, to create island corridors in a number of places, that Fish and Wildlife would look at this region from the Susquehanna River down to the Blackwater Refuge and beyond and see the broader, longer timeframe of an area that would require preserving this kind of habitat.

Because we will continue to lose it. We might as well get it when we can before it is gone for a corridor for a number of species. So I would like to work with Fish and Wildlife to tell you that, yes, Garrett Island should be one of the priorities.

I know available funding is always an issue, and it is an issue now I guess because of all of the backlog that Fish and Wildlife has and the kind of attention that receives and then the potential new costs for new acquisitions. But here is what I would say today, and I would just like your response.

I think Garrett Island, from what you have seen, and no one really from Fish and Wildlife—and it is private property, and you haven't been on the island, but I think an invitation can be at hand from Mr. Kilby and myself to bring Fish and Wildlife on the island within a month, I would say, to take a look at what the resources

are. Available funding for this I think is probably minimal, considering other acquisitions to actually acquire the island.

I need to be educated on this third point. That is, I don't see any maintenance costs on Garrett Island. Garrett Island can be categorized as—I don't know—a designated wilderness area or an ecological study area or something like that. But I don't think we really need any structures on Garrett Island. Maybe Garrett Island can be connected to Blackwater Refuge; and people in Blackwater can monitor the ecological health of it, along with the support of the local community.

The Federal funds for this match, what has already been done, I think it can be fairly minimal.

Last point is there is a lot going on in this particular region. In the farm bill, there was in section G a Delmarva Conservation Corridor Pilot Project to not only enhance agriculture but to enhance and preserve wildlife habitat. So I think it can be a significant part of that.

So we will continue to pursue this approach, and I would like to ask you if you would like to continue to work with us to see how we can continue to preserve the island and is there any interest from Fish and Wildlife to pursue a study in order to acquire the island as an initial step?

Ms. GLOMAN. Well, I think we are really interested in and we think it is very important to assess what the Fish and Wildlife resources are on that island. However, the Administration didn't include that in their budget request, and it is also not included in our base budget at this time to complete the study.

Mr. GILCHREST. We need to include that legislatively for a study. The Administration in their budget request doesn't have money for a study, so that is something we would need to take a look at.

Ms. GLOMAN. That would be your decision, and if you did that we would certainly carry through with the study.

Mr. GILCHREST. So you wouldn't object to a study.

Ms. GLOMAN. If you decided to put that in our budget, we would—

Mr. GILCHREST. If we provided the resources for a study, Fish and Wildlife wouldn't object to the study.

Ms. GLOMAN. We would follow through and do it, yes.

Mr. GILCHREST. Mr. Kilby, can you give us at this point some dollar figure that would be required for Fish and Wildlife? I know there has been a lot of—in your testimony you talked about a range of possibilities for the assessment. Can you give us any round figure indication as to the amount that should be authorized for purchase of Garrett Island by Fish and Wildlife and would you object to Fish and Wildlife pursuing a study to determine whether or not it would be a priority?

Mr. KILBY. I would certainly welcome a study. I know that there is an endangered turtle in the area that shows up on the map, not exactly on the island itself but on the adjoining shore. But I do know there is an endangered species. I am not sure what the turtle's name is. But I would welcome a study. It would be helpful to know.

I know that no study has been particularly done. I know when Dr. Bell was out there he brought an associate with him who was

interested in the type of—I think the variety of species of trees and plants that were both native and introduced. So there is a possibility that there are some plant—some kind of plants that are not native to the area that might be of interest. So I think a general study would be important.

As far as a figure is concerned, I mentioned \$300,000 of Federal matching funds. I think that is a figure that will work as long as we can agree upon an appraisal.

As I say, we have had some problems with the appraisals because they are not comparables. We looked for comparables, and we found several. I think in the additional information that I have with my testimony, I brought in one—actually, from Fish and Wildlife's magazine called Bird Scapes. They have an article in there from a land trust that mentions an island called Walden Island in Puget Sound that Fish and Wildlife didn't pay for it, but the land trust in the area had to pay \$5,400 an acre for it.

So there is definitely—there are some comparables out there, and that is basically what we are looking for, a figure that everybody can feel comfortable with. Because one of the concerns for the island is that it is only water accessible, which we consider that to be a good thing. But when an appraiser looks at it, he considers that to be a bad thing. So we have to come to some terms on whether it is a good thing or bad thing.

Mr. GILCREST. Let us hope it works to your favor.

I yield down to Mr. Underwood.

Mr. UNDERWOOD. Thank you, Mr. Chairman; and thank you for your testimony.

Mr. Kilby, I assume that you are very familiar with the island that we are talking about and all the possible developments and ideas that might be circulating in the area. Is there any anticipated use of the island by the owners that we should be mindful of or we should be aware of in terms of consideration in considering this legislation?

Mr. KILBY. Yes. What has happened is two other people who put up the money—the two conservation-minded people cannot possibly keep their money in it forever.

It is kind of a standard practice with land trusts to go looking for people who are willing to invest in short term in pieces of property and then trying to buy it from them as soon as possible. It is a way that we get money because banks won't normally lend you money on these kinds of speculative things. So those two people are becoming a bit anxious in trying to get their money back, and they have to consider some kind of limited development scenarios. In other words, it is within critical areas, which limits the amount of development that can be done on it, but, given the acreage, they could build four homes on it. We don't want this to happen, but it is something that the land trust as a minority owner cannot stop.

The majority owners, if we are not able to come up with the money within a period of time, that they will have to do something with it, yes.

Mr. UNDERWOOD. So other than the development—other than building a few homes, is there any other anticipated development or are the local and State kind of procedures keeping that from happening?

Mr. KILBY. Yes, to a degree. It is zoned open space. There has been some talk about annexing it into the local city, which is Havre de Grace, which would enable them to change the zoning. I mean, in other words, I know what they have considered doing, and they have been willing to work with us so far to this point, but they are becoming a little bit anxious about the money.

Mr. UNDERWOOD. Thank you, Mr. Kilby.

Ms. Gloman, in your statement of nonsupport for this legislation, you know that the Service has an extensive list of potential acquisitions in the Northeast and you also know that there has been some refuges that have been established recently through legislation passed by Congress. Is it the Administration's intent to oppose all refuges that are being proposed by Congress or is this on a case-by-case basis? And what criteria will be used in those assessments?

Ms. GLOMAN. No, it is not the Administration's position to oppose all new refuges. The position is that our first priority should be taking care of what we have in light of our significant maintenance and operations backlog, while strategically growing the National Wildlife Refuge System—the operative term there being strategic. There is no moratorium. We still believe we need to grow the National Wildlife Refuge system. It is very important for us to accomplish our mission, but we want to be more strategic and want to set priorities, and we want to keep in mind how much it costs to operate those refuges.

Some of the things that we think about when we are deciding which refuges to pursue—which I mentioned in my written testimony, are: how important is that habitat to trust resources? Is it in a recovery plan? Is it in a joint venture? We look at how it is connected to other lands. We look at other refuges in the area. What is the size? How much it will cost? So there are a lot of criteria.

In fact, we are in the process right now of clearly articulating those criteria and developing some interim guidance; and I am sure that we would be pleased to comment more fully as we get them developed and talk to you a little bit more about what we are doing to decide how to strategically grow the National Wildlife Refuge System. But we are definitely not saying we are not going to do any more.

Mr. UNDERWOOD. I appreciate the fact that you have outlined some of the criteria in your response, and you referred to strategically growing the refuges. Is there an emerging statement, you know? I mean, we are all on the same side. I mean, is there an emerging statement on this strategy?

Ms. GLOMAN. We are working on an emerging statement. In fact, I was participating in a meeting last night. So, yes, we are working on trying to put that all down on paper and get that out with everyone.

Mr. UNDERWOOD. Now as I understand it—and you referenced the \$1.7 billion backlog, which is significant. Then as part of the creation of the National Wildlife Refuge Centennial Commission Act of 2000, Congress included a requirement for the Commission to develop and submit to the Congress a unified long-term plan to address priority operation and maintenance and construction needs of the refuge system. As I understand it, the Commission has ap-

parently no intent to comply with this provision to report on that or to work on that provision. To your knowledge, is that correct or am I misinformed or under what authority would the Commission not engage in that?

Ms. GLOMAN. I really don't have any knowledge of the Commission's intentions about the plan. We have prepared a draft plan, but I don't know—

Mr. UNDERWOOD. Is there a way you could provide the Subcommittee information on that?

Ms. GLOMAN. We can certainly check the status on that and get back to you.

Mr. UNDERWOOD. Thank you.

I would propose a swap between the Guam Fish and Wildlife Refuge for Garrett. If you are willing to engage in that, Mr. Chairman, I would be prepared to do it.

Mr. GILCREST. Thank you, Mr. Underwood.

Mr. Underwood lives on an island in the South Pacific a little bit—not a whole lot larger than Garrett Island.

Just a couple closing questions. It is my understanding, Ms. Gloman, that Fish and Wildlife at this point does not have a specific, cohesive policy for refuge expansion—

Ms. GLOMAN. That is correct.

Mr. GILCREST. —and the Administration is now working to look at what is out there and what its policy should be?

Ms. GLOMAN. Correct.

Mr. GILCREST. So about how long will that take?

Ms. GLOMAN. I think we are looking toward having interim guidance sometime this fall, but there is still kind of the long-term issue. Part of what we are doing is looking at habitat goals and objectives, looking at what is needed, what is already protected, what needs to be protected and what our role is in that protection; and that is going to take perhaps several years to really get those habitat goals down.

Mr. GILCREST. So you wouldn't expand the refuge until all that is complete?

Ms. GLOMAN. Not necessarily. We would go by this interim guidance that would be done in the fall; and then we would have a better, stronger idea in another couple of years. But, to my knowledge, there is no intention to wait until we—2 years down the line until we get this big strategic plan done to move on any of these. We are going to use the interim guidance.

Mr. GILCREST. Will the interim guidance be published in the Federal Register?

Ms. GLOMAN. Yes.

Mr. GILCREST. I can appreciate the idea that Fish and Wildlife should have a strategic plan. There should be priorities. You can't have everybody for legitimate reasons or maybe less legitimate coming up with legislation to pop up refuges all over the country. But I would like to specifically invite you and certainly Glen Carlin from Blackwater to visit and maybe even Jim Rapp right here to visit Garrett Island and see how it is another piece in this corridor of protected areas for the flora and fauna of our region, and we would like to do all we can to protect this land.

We are likely to continue to pursue this legislation—in fact, we are going to continue to pursue this legislation, but what we would like to do is work with your office, provide the resources for a study, take you out in person to the island, show the broader plan for the region. I think that, as you develop your interim strategy, you will see that it is strategic. It is not only our priority, but I think it would be your priority as well. It will be minimal, if any, maintenance costs to this. I think we could turn it over to Mother Nature. But I really appreciate your testimony and your frankness with us today.

Ms. Gloman or Mr. Kilby, any last comment?

Mr. KILBY. No. Just thank you for the opportunity to be here.

Mr. GILCREST. Thank you, Mr. Kilby; and thank you, Ms. Gloman.

Ms. GLOMAN. Thank you, and I look forward to that visit to Garrett Island.

Mr. GILCREST. Yes, ma'am. We will put it up.

Mr. Kilby and Ms. Gloman, you may both leave if you want to. You are certainly welcome to stay.

Bill, if you want to head up to my office, we won't be too long here. We can chat a little bit further if you have the time. Thank you very much.

Mr. GILCREST. Mr. James Rapp, Director of the Salisbury Zoo in Salisbury, Maryland—thanks again for your visit, Jim. We appreciate it—and Mr. David Pittenger, Executive Director, National Aquarium in Baltimore. I am sort of excited about the potential for both of you to sort of select certain ecological study areas in the region of the Chesapeake Bay where you could pursue some field trips and field studies.

Mr. GILCREST. Jim, thanks for coming; and you may begin.

**STATEMENT OF JAMES L. RAPP, DIRECTOR,
SALISBURY ZOOLOGICAL PARK**

Mr. RAPP. Look forward to that trip to Garrett Island.

Thank you, Mr. Chairman, for the opportunity to testify today on House Concurrent Resolution 408 which recognizes the American Zoo and Aquarium Association and its members' contributions to animal care, conservation education and research. AZA greatly appreciates your tremendous support for fish and wildlife conservation and for accredited zoos and aquariums.

My name is Jim Rapp, and I am Director of the Salisbury Zoo in Salisbury, Maryland. I have worked at the zoo for 11 years. The zoo is a 12-acre facility that displays 100 different wildlife species from the new world, and we host an annual attendance of about 200,000 visitors, which includes 15,000 schoolchildren.

The zoo has been an accredited member of the AZA since 1972. I currently serve on the AZA's Government Affairs Committee.

Before I briefly discuss some specifics about AZA and its members, I would like to commend the members of this Subcommittee for their far-sighted vision in passing the Great Ape Conservation Act during the last Congress and reauthorizing the Asian elephant, African elephant, and Rhino/Tiger Conservation Acts in this Congress.

I am here on behalf of the 205 accredited institutions of AZA which draw over 135 million visitors annually. Collectively, our institutions teach more than 12 million people each year through education programs that focus on, among other things, the devastating effects of habitat loss and illegal trade in endangered species parts and products. AZA members invest an estimated \$50 million annually in research and support over 1,300 field conservation projects in 80 countries.

There is one important distinction between AZA member institutions and the over 2,500 animal exhibitors currently licensed by the Department of Agriculture—accreditation. AZA is the leader in establishing and maintaining high standards for zoos and aquariums through its accreditation process. Only 205 zoos and aquariums have met AZA's strict standards to become members of the association and are, therefore, the premier zoological parks and aquariums in North America. Accreditation involves a peer review and inspection process by which zoos and aquariums are evaluated in order to become AZA members. Accreditation examines animal collection, veterinary care, safety and security, finance, staff and education programs, conservation and research, among other things. It is a rigorous and difficult process to attain AZA accredited status but one that affords tremendous professional credibility.

Mr. RAPP. There are many priorities for AZA-accredited institutions, but the most important are constantly improving the level of care for our animals, conserving animals in the wild, and educating the public about the urgent need for species conservation.

Along these lines, AZA institutions have established the Species Survival Plan, or S S P, a long-term plan involving genetically diverse breeding, habitat preservation, public education, field conservation, and supportive research to ensure survival for many endangered species. Currently AZA members are involved in 97 S S P programs, featuring 140 species throughout the world. A majority of those S S Ps cover species which are listed under the Endangered Species Act and CITES, including great apes, elephants, rhinos, and I believe Guam rails.

In addition, AZA administers the Conservation Endowment Fund, a competitive funding mechanism which supports conservation initiatives. In the past 10 years, the C E F has awarded over \$2 million in grants to preserve species and their habitats, educate the public, and stimulate conservation action locally and in the home ranges of the species concerned.

And while AZA zoos and aquariums have become the last stronghold for some species, we fully realize that we cannot save them by zoo propagation alone. AZA members continue to work with Congress, Federal and State agencies and others to conserve our fish and wildlife heritage.

Mr. Chairman, a quarter of the world's mammal species could face extinction within 30 years, according to a recent U.N. Report. It is therefore vital that more people become involved in efforts to conserve our imperiled environment. I would like to briefly focus on a few initiatives which AZA has been involved with to help address some of these issues.

The Bushmeat Crisis Task Force was established in 1999, and has accomplished much in a very short period of time. The offices

of the Task Force are based at AZA. The Task Force consists of 34 supporting members dedicated to the conservation of wildlife populations threatened by the commercial hunting of wildlife, including elephant, chimpanzee, and bush pig for sale as meat. This is an unprecedented collaboration among different conservation organizations to try to get a handle on this incredibly complex issue. The mission of the Task Force is to facilitate the work of members and their partners in identifying and implementing effective solutions to the commercial exploitation of endangered species through the bushmeat trade primarily in Africa.

Last week AZA announced the formation of the Butterfly Conservation Initiative, a program designed to bring together organizations and government agencies to aid the recovery of imperiled butterflies in North America. AZA, in cooperation with the U.S. Fish and Wildlife Service and the National Wildlife Federation, founded this initiative in response to the alarming recent decline in butterfly populations.

Butterflies and other insects are excellent indicators of the overall health of an ecosystem. What the general public might not realize is that insects pollinate the vast majority of all food plants on Earth. The loss of butterflies would be an aesthetic and biological disaster. Butterflies are threatened by habitat loss due to urbanization, the widespread use of pesticides, and the introduction of invasive species. The Butterfly Initiative will aim to recover imperiled butterfly populations by raising public awareness about habitat protection and by undertaking restoration efforts where appropriate.

I would also mention briefly our relationship with the National Wildlife Refuge System, which was discussed here today. Over the years, AZA and the U.S. Fish and Wildlife Service have made great strides for wildlife conservation together, especially through endangered species education, recovery, and reintroduction. We also have a number of strong partnerships that have developed among the Service's national wildlife refuges and AZA zoos and aquariums. For example, the Salisbury Zoo works with Blackwater National Wildlife Refuge to promote birdwatching on the Delmarva Peninsula. This not only promotes the use of our local refuge system, but brings tourism dollars to our local economy.

As mentioned, the U.S. Fish and Wildlife Service is rapidly approaching its 100th year anniversary. This is America's only network of Federal lands dedicated to wildlife conservation. Established in 1903 by President Theodore Roosevelt, the system includes more than 535 refuges, encompassing 93 million acres of prime wildlife habitat. Despite their importance to animals, a small percentage of Americans know about these national treasures.

One of the areas that AZA is pursuing with the Service is to educate the 135 million visitors to our facilities about the beauty and diversity of the wildlife refuge systems in this country and their valuable role in wildlife conservation. We hope that a broader partnership among AZA member institutions and refuges will open up a whole new spectrum of cooperative efforts to share audiences, expertise, resources, and technology.

Mr. Chairman, AZA member institutions are involved in a number of important issues, continually striving to improve the welfare

of the animals in our care, serving on the interface between the general public and conservation messages, and working in the field and within our own institutions to protect and conserve our valued fish and wildlife species. AZA member institutions will continue to work on those endeavors in order to bring focus to the myriad threats that face wild animals worldwide and to search for reasoned and workable solutions.

Thank you again for this opportunity to appear before the Subcommittee, and thank you, Mr. Chairman, for your continued support of AZA and its members, and I would be happy to answer any questions you may have.

Mr. GILCHREST. Thank you, Mr. Rapp.

Mr. RAPP. Thank you.

[The prepared statement of Mr. Rapp follows:]

Statement of James L. Rapp, Director, Salisbury Zoological Park

Thank you Mr. Chairman, for the opportunity to testify today on House Concurrent Resolution 408 which recognizes the American Zoo and Aquarium Association and its members' contributions to animal care, conservation education and conservation research. AZA greatly appreciates your tremendous support for fish and wildlife conservation and for accredited zoos and aquariums.

My name is Jim Rapp and I am the Director of the Salisbury Zoological Park in Salisbury, Maryland. I have worked for the Zoo for eleven years serving in a number of capacities. The Salisbury Zoo is a twelve-acre facility that displays nearly 100 different wildlife species over 350 specimens. We host an annual attendance of 200,000 visitors, including 15,000 local school children.

The Zoological Park has been an accredited member of the American Zoo and Aquarium Association (AZA) since 1972. I currently serve on the AZA Government Affairs Committee.

Before I briefly discuss some specifics about AZA and its members, I would first like to commend the members of this Subcommittee for their far-sighted vision in passing the Great Ape Conservation Act during the last Congress and reauthorizing the Asian Elephant, African Elephant, and Rhino/Tiger Conservation Acts in this Congress. These are all critical components of the Multinational Species Conservation Fund program and international wildlife conservation programs in general. AZA has worked together with other non-governmental organizations to secure passage of these important conservation measures and to push for increased appropriation for the funds.

I am here on behalf of the 205 professionally managed and accredited institutions of AZA which draw over 135 million visitors annually and have more than 5 million zoo and aquarium members. Collectively, our institutions teach more than 12 million people each year in living classrooms and dedicate an estimated \$50 million annually to conservation education programs that focus on, among other things, the devastating effects of the loss of vital species habitat and the illegal trade in endangered species parts and products. AZA members invest an estimated \$50 million annually in scientific research and support over 1300 field conservation and research projects in 80 countries.

There is one important distinction between AZA member institutions and the over 2500 animal exhibitors currently licensed by the U.S. Department of Agriculture accreditation. AZA is the leader in establishing and maintaining high standards for zoos and aquariums through its accreditation process. Only 205 zoos and aquariums have met AZA's strict accreditation standards to become members of the Association, and are therefore the premier zoological parks and aquariums in North America. Accreditation involves a thorough peer review and inspection process by which zoos and aquariums are evaluated in order to become AZA members. Accreditation examines all aspects of an institution's operation, including the animal collection (including animal acquisition and disposition), veterinary care, physical facilities, safety, security, finance, staff, governing authority, support organization, education programs, conservation and research. It is a rigorous and difficult process to attain and retain AZA accredited status but one that affords tremendous professional credibility from peer review.

There are many functions and priorities for AZA accredited institutions but the most important are: constantly improving the level of care and husbandry for the

animals in our care; conserving animals in the wild; and educating the public about the urgent need for species conservation.

Along these lines, AZA institutions have established the Species Survival Plan (SSP) program a long-term plan involving genetically diverse breeding, habitat preservation, public education, field conservation and supportive research to ensure survival for many threatened and endangered species. Currently, AZA members are involved in 97 SSP programs featuring 140 species throughout the world. A large majority of those SSPs cover species which are listed under the Endangered Species Act or CITES, including all the great apes—chimpanzees, gorillas, orangutans and bonobos, African and Asian elephants, Siberian and Sumatran tigers and black, white, Sumatran and greater one-horned rhinos.

In addition, AZA administers the Conservation Endowment Fund (CEF) a competitive funding mechanism which supports conservation, scientific and educational initiatives of AZA member institutions and their partners. In the past 10 years, the CEF has awarded over \$2 million in grants to 138 projects in 27 countries to preserve species and their habitats, educate the public, stimulate conservation action and support breeding and reintroduction of threatened and endangered species.

And while AZA zoos and aquariums have become the last stronghold for some species, we fully realize that we cannot save them by zoo propagation alone. AZA members continue to work with Congress, the Federal/state agencies, conservation organizations, the private sector and the countries of origin to conserve our fish and wildlife heritage.

Mr. Chairman, a quarter of the world's mammal species could face extinction within 30 years according to a recent UN report. According to other estimates, as much as 20 percent or more of the world's biodiversity could disappear in the next two decades, primarily due to habitat fragmentation and alteration and the over-exploitation of threatened and endangered species. It is therefore vital that more people, governments, institutions and organizations become involved in efforts to conserve our imperiled environment. I would like to briefly focus on a few initiatives which AZA has been involved with to help address some of these conservation issues.

Bushmeat Crisis Task Force

The Bushmeat Crisis Task Force was established in 1999, and has accomplished much in a very short period of time. The offices of the Task Force are based at AZA. The Task Force consists of 34 supporting members primarily North American conservation and animal protection organizations, natural history museums, zoological parks and scientific societies dedicated to the conservation of wildlife populations threatened by the commercial hunting of wildlife—including elephant, gorilla, chimpanzee, forest antelope and bush pig—for sale as meat. This is an unprecedented collaboration among different conservation organizations to try to get a handle on this incredibly complex issue. The mission of the Task Force is to facilitate the work of members and their partners in identifying and implementing effective and appropriate solutions to the commercial exploitation of endangered and threatened species through the bushmeat trade in Africa.

The primary activities of Task Force in the past year have been to increase awareness among key decision makers and the general public here in the United States; information sharing and analysis; facilitating collaboration among stakeholders including government, NGOs, universities, zoological parks and museums, and a variety of other organizations; identification of priority solutions; and support for member organizations and partners in planning, developing and implementing on the ground solutions to the bushmeat crisis.

Butterfly Conservation Initiative

Last week, AZA announced the formation of the Butterfly Conservation Initiative (BFCI), a program designed to bring together non-governmental organizations and government agencies to aid the recovery of imperiled butterflies in North America. AZA, in cooperation with the U.S. Fish and Wildlife Service (USFWS), the National Wildlife Federation, the Xerces Society and 35 AZA-accredited zoos and aquariums founded the Initiative in response to the alarming recent decline in butterfly populations.

Butterflies and other insects are excellent indicators of the overall health of an ecosystem. What the general public might not realize is that insects pollinate the vast majority of all food plants on Earth. The loss of butterflies and other pollinators would be an aesthetic and biological disaster. Butterflies, like many invertebrates, are threatened by habitat loss due to urbanization, the widespread use of pesticides and the introduction of invasive species that out-compete obligate host plants.

Currently, there are 22 Federally-protected butterfly species that are listed as threatened or endangered, but that number is likely to grow without significant efforts to halt the decline. The Butterfly Initiative will aim to recover imperiled butterfly populations by raising public awareness about habitat protection and by undertaking restoration efforts where appropriate. The participating organizations will work together to involve the public in outreach, education and community conservation activities. The Initiative will focus initially on the Karner blue butterfly, an ideal start because the founding partners, including the Toledo Zoo, have already accomplished so much to aid in its recovery. AZA will work with its members and partners to develop a "matrix of needs" for all 22 imperiled species so that the Initiative targets its efforts and maximizes the impact of its butterfly recovery work.

National Wildlife Refuges

Over the years, AZA and the U.S. Fish and Wildlife Service have made great strides for wildlife conservation together, especially through endangered species education, recovery and re-introduction. We also have a number of strong partnerships that have developed among the Service's national wildlife refuges and AZA zoos and aquariums. For example, the Salisbury Zoo has been working with Blackwater National Wildlife Refuge and others to promote birdwatching on the Delmarva Peninsula. Through this partnership, we have produced a birdwatcher's guide to the region, and host an annual birding weekend. This not only promotes the use of our local National Wildlife Refuges, but brings tourism dollars to the local economy.

The U.S. Fish and Wildlife Service is rapidly approaching the 100th anniversary of the National Wildlife Refuge System, America's only network of Federal lands dedicated to wildlife conservation. Established in 1903 by President Theodore Roosevelt, the refuge system includes more than 535 national wildlife refuges across the country, encompassing 93 million acres of prime wildlife habitat. National wildlife refuges are best known as sanctuaries for endangered species of fish and wildlife or stepping stones for millions of migrating birds. They also provide great scenic getaways for the general public to enjoy the wonders of the outdoors. However only a small percentage of Americans know about these national treasures.

One of the areas that AZA is pursuing with the Service is to educate the 135 million annual visitors to AZA zoos and aquariums about the beauty and diversity of the over 535 wildlife refuges in this country, their valuable role in conservation and how AZA zoos and aquariums can make a significant contribution to the continued success of the refuge system. AZA hopes that a broader partnership among AZA member institutions and refuges will open up a whole new spectrum of cooperative efforts to share audiences, expertise, resources and technology, and create opportunities to work together on community outreach and volunteer recruitment activities.

Mr. Chairman, AZA member institutions are involved in a number of important issues continually striving to improve the welfare of the animals in our care; serving on the interface between the general public and conservation messages; and working in the field and within our own institutions to protect and conserve our valued fish and wildlife species. AZA member institutions will continue to work on these endeavors in order to bring focus to the myriad threats that face fish and wildlife species worldwide and to search for reasoned and workable solutions.

Thank you again for this opportunity to appear before the Subcommittee and thank you Mr. Chairman for your continued support of AZA and its members.

I would be happy to answer any questions that you may have.

Mr. GILCREST. Mr. Pittenger.

**STATEMENT OF DAVID PITTENGER, EXECUTIVE DIRECTOR,
NATIONAL AQUARIUM, BALTIMORE**

Mr. PITTENGER. Thank you, Mr. Chairman. I would ask that my written statements, if they could be, be included in the record.

Mr. GILCREST. Without objection.

Mr. PITTENGER. Again, I am Dave Pittenger. I am the director of the National Aquarium in Baltimore, and I again thank you for the opportunity to speak on behalf of House Resolution 408, recognizing the contributions of all the accredited AZA members. We haven't been around quite as long as the Salisbury Zoo. We opened in 1981, and were accredited in 1984, and have maintained that ac-

creditation and have been able to open the world of water really to 30 million people in the time that we have been open since 1981. And, as Jim mentioned, I would like to just emphasize the fact that 136 million Americans visit zoos and aquariums every year, and 5 million families are members of those zoos and aquariums. So, there is a great opportunity to open the world of water, the world of zoos and aquariums to the American public. And we really do focus on the effects of loss of vital species, loss of habitat, and also illegal trade in endangered species products.

One of the many conservation research programs that various zoos and aquariums undertake is the Marine Mammal Stranding Network. Again, I would like to thank the Members for authorizing in the last Congress some support for the Marine Mammal Stranding Network. The National Aquarium in Baltimore is responsible for any stranded mammals, turtles, or other creatures that come ashore in Maryland, Delaware, and Virginia, and it is a great opportunity to learn a lot about these really Ambassadors from the ocean. In some ways they are the canary in the mineshaft that tells us not always the best story for what is happening out there in the ocean. So we maintain a Marine Animal Rescue Program. And, again, thank you for your support there.

One of the other very important goals of AZA is a focus on conservation, education, and research. Our members are authorities on welfare, husbandry, and the behavior of the animals in their care. We have many broad-based education and research projects that we unfold to the public. Our primary goal would be to tap the expertise of AZA members on very important conservation issues, and I know the government and others do that.

We are very proud of the high-quality exhibits that we provide to the millions of people that visit us each year, and we feel that we can be a real showcase, bringing the work of other nongovernmental organizations and the governmental organizations to the public. We have a mission of educational exhibits and programming at all the AZA members, and it is an important part of our work in accreditation.

The National Aquarium of Baltimore has focused in on a number of initiatives, and, like the Salisbury Zoo, the Chesapeake Bay, which we are happy to be right on the Inner Harbor, the branch of the Chesapeake Bay, is an important initiative for us. And then we are working at Fort McHenry, at Barren Island, at Eastern Neck National Wildlife Refuge, and I think the opportunity to preserve these lands is an important one that we need to take, because people, when they go out to these areas, can become interested, can be mobilized, and really they really are unaware of what is out there, and I think it is an important role that we can play in providing that interface so people will learn more about these areas.

Research is in a very important—fundamental and applied research is very fundamental to all the AZA members and that we collaborate very broadly with colleges, universities, government agencies in advancing knowledge about wildlife both at our institutions and in the field. Many AZA-accredited institutions—in fact, recently it is now a requirement that conservation work be part of what you do; working with sea turtles, Project Seahorse, where we

are trying to reestablish stocks in the wild, many threatened fishery and marine mammals species, coral reef monitoring, protection in the Pacific Rim and the Caribbean of these vital resources, which is just like the land we are losing every day. AZA members were instrumental, for instance, in rescuing and rehabbing thousands of endangered sea turtles that were confiscated from a Malaysian ship headed for China. We are proud to be part of that with the research we do in the various areas, including everything from sharks and coral reefs to salt marsh restoration, and even breeding these beautiful frogs from South America.

So, I am very proud that over the past decade AZA zoos and aquariums have come a very long way not only in our responsibility to teach the public, but to be active out in the field in conservation.

So, again, I want to thank you, Mr. Chairman, for introducing this resolution and for your support for all that we are doing. Thank you.

Mr. GILCHREST. Thank you, Mr. Pittenger.

[The prepared statement of Mr. Pittenger follows:]

**Statement of David M. Pittenger, Executive Director,
National Aquarium in Baltimore**

Thank you for the opportunity to testify on House Concurrent Resolution 408 that recognizes the American Zoo and Aquarium Association and its members' contributions to animal care, conservation education and research and wildlife conservation we truly appreciate your efforts on behalf of fish and wildlife conservation and your support of accredited zoos and aquariums.

My name is Dave Pittenger and I am the Executive Director of the National Aquarium in Baltimore, Maryland. The National Aquarium in Baltimore is a global living classroom connecting thousands of visitors to the importance of preserving the world's most precious life-giving resource water. Since opening in 1981, we have welcomed over 30 million visitors from around the world and continue to host over 1.6 million visitors annually, including 85,000 Maryland school children that utilize our education program at no cost. We offer a variety of education opportunities, conservation and animal research as well as conservation field programs that are on the forefront of the future research and technology for the health and vitality of the world's water resources.

For twenty-one years, the Aquarium has encouraged research that advances its mission in education, exhibitry, and animal welfare. Animal studies, conducted by Biological Programs Department staff, are often outgrowths of daily husbandry routines, medical cases, or laboratory analyses and reflect the staff's dedication to providing quality care to all animals, large or small. Other projects demonstrate the Aquarium's commitment to protecting endangered species and their habitats. The National Aquarium in Baltimore has been an accredited member of the American Zoo and Aquarium Association (AZA) since 1984.

AZA represents 205 professionally managed and accredited institutions which draw over 136 million visitors annually and have more than 5 million zoo and aquarium members. Collectively, our institutions teach more than 12 million people each year in living classrooms and dedicate over \$50 million annually to conservation education programs that focus on, among other things, the devastating effects of the loss of vital species habitat and the illegal trade in endangered species parts and products. AZA members invest over \$50 million annually in scientific research and support over 1300 field conservation and research projects in 80 countries.

Marine Mammal Strandings

First, I would like to strongly commend the members of this Subcommittee for their far-sighted vision in passing the John H. Prescott Marine Mammal Rescue Assistance Act during the last Congress. This Act has provided critically needed funds to those members of the Marine Mammal Stranding Network like the National Aquarium and many other AZA members—which devote large amounts of their own time and resources to marine mammal rescue and rehabilitation efforts. These funds help to offset the enormous costs associated with these conservation activities. I am particularly pleased because this Act honors John Prescott, the former Execu-

tive Director and Director Emeritus of the New England Aquarium, a prestigious member of the AZA.

For years, scientists and experts have been frustrated in their attempts to restore to health the thousands of stranded marine mammals found sick and dying on beaches throughout the world. Today, members of AZA have the expertise and ability to offer much needed, practical assistance to these animals. The accumulated knowledge, collective experience, and resources of these facilities are the primary factors in these successful rehabilitation efforts. Indeed, AZA members provide millions of dollars in direct expenditures and in-kind contributions annually to support stranding programs.

The National Aquarium in Baltimore's Marine Animal Rescue Program (MARP) is responsible for the rescue and care of marine mammals and sea turtles in the coastal areas of Virginia, Maryland, and Delaware. MARP volunteers respond to calls 24 hours a day to care for sick and injured stranded animals. Assisting the professional Aquarium medical staff are specially trained paid and volunteer members of the Aquarium who collect of valuable data. The National Aquarium in Baltimore has responded to calls from the public, the Maryland and Delaware Departments of Natural Resources, the Virginia Marine Science Museum, and the United States Coast Guard. To date, the National Aquarium in Baltimore has rescued and rehabilitated approximately 150 animals.

Conservation Education and Research

AZA aquarium members represent the foremost authorities on the welfare, husbandry, and behavior of the animals in their care. AZA member institutions also play a critical role in the conservation of these animals in their natural habitats through the broad-based education and research activities briefly outlined below. We believe that our primary goal should be to tap into the experience and expertise of AZA member institutions on important conservation issues by directing, to the best of our abilities, the highest quality educational exhibits and fact-based conservation messages to the general public.

The effective conservation of wild species requires public education, the practice of conservation behaviors and the development of effective public policy. The public display of animals plays an integral role in this conservation effort, helping to preserve these magnificent species for present and future generations. Through exhibitry of ecosystems, education and conservation programs we can establish a personal connection between visitors and the animals. These personal connections foster learning about how the behaviors of each and every one of us affect wild species and the habitats in which they dwell.

The mission of educational exhibits and programming at AZA member facilities is to enhance the appreciation and understanding of animals and their ecosystems for our visitors. AZA members instill an awareness of ecological and conservation issues and a respect and caring for these animals and their environments. AZA members believe this respect engenders a strong, active commitment to species conservation and an understanding that each and every person can make a difference.

The National Aquarium in Baltimore is at the forefront of conservation education through our variety of programs focused on environmental issues and actions that the public, staff, and volunteers can undertake to effect change. We research and design projects that restore, protect, and manage critical species and or ecosystem. Further, we have a captive breeding program of threatened or endangered species and monitoring of wild populations.

The Aquarium's Chesapeake Bay Initiative has intensified its efforts to both educate visitors about the Chesapeake Bay and become involved in conservation actions. Through ACT! (Aquarium Conservation Team), we provide opportunities for volunteers to restore estuarine habitats around the Bay, learning first-hand about tidal wetland ecosystems by restoring habitat by planting beneficial marsh grasses, monitoring the function of created wetlands, including changes in water quality, evaluating habitat use of created wetlands by birds, fish, and other wildlife and coordinating restoration events for local community groups.

We have been instrumental in developing programs in partnership with various local and Federal agencies at Ft. McHenry, Barren Island and Eastern Neck National Wildlife Refuge. Our projects demonstrate the successful coexistence of wildlife and industry in an urban environment.

Knowledge acquired through research with animals in public display facilities, in tandem with field research, is another fundamental contribution to species conservation. Communicating this knowledge is one of the most effective means of ensuring the health of wild animals in this century. Much of this research simply cannot be accomplished in natural conditions.

Tens of millions of dollars are being spent on research at and by AZA member facilities that is essential in understanding the anatomy and physiology of animals and in learning to better manage and assist threatened and endangered species. Additionally, many AZA facilities collaborate with researchers from colleges, universities, and other scientific institutions that conduct studies important to species conservation and health. Over the years, this body of work has contributed significantly to the present knowledge about the biology, physiology, reproduction, behavior and conservation of many species. These studies have led to improvements in diagnosing and treating diseases; tests for toxic substances and their effects on wild species; and other health advancements.

In the field, AZA aquariums also have done a great deal of conservation work through such programs as sea turtle head-start, Project Seahorse, stock assessments of threatened fish and marine mammal species, and coral reef monitoring and protection in the Pacific Rim and Caribbean. In addition, AZA members were instrumental in rescuing and rehabbing thousands of endangered sea turtles confiscated from a Malaysian shipment headed to China.

Research at the National Aquarium has come in many forms both in situ and ex situ. Animal research at the National Aquarium in Baltimore focuses on studies of new diseases, medical conditions and parasites as well as innovations in husbandry and breeding. Our successful studies include such topics as captive octopus lifecycles, elasmobranch biology, parasites collection science, coral reef culture studies and the salt marsh restoration studies. Most of our studies are done in collaboration with investigators from regional academic and government institutions and with colleagues from other aquariums. Continuous studies are presented at national and international conferences, and completed research is published in scientific journals.

Over the past decade, AZA zoos and aquariums have come a long way and we realize that we still have a long way to go. Today, AZA-accredited members are being transformed into centers for conservation in their communities educating the public, involving their communities, advancing scientific knowledge about the animals in their care and carrying out conservation programs worldwide. House Congressional Resolution 408 recognizes this transformation and we sincerely thank you for your strong support.

Mr. GILCHREST. And you do have an extraordinary, wonderful facility there in Baltimore City that offers people, you know, just a great place to go and is just a great learning tool. And you have expanded it to many other portions of the Bay, which has been appreciated in your restoration efforts.

Mr. PITTENGER. Thank you.

Mr. GILCHREST. Jim, I just—and you do a great job down there at the Salisbury Zoo.

Mr. RAPP. Thank you, sir.

Mr. GILCHREST. And that facility down there provides the same type of education and eye-opening wonders that the aquarium does in Baltimore, and it is just a precious place on that end of the shore.

I just have a couple of—and we want to compliment you on your lifelong dedication to these issues, because it has a very positive impact on the policies that we develop up here, and certainly on the wildlife and their habitat.

We are going to have a hearing, I believe it is July the 11th, on the bushmeat crisis in Africa, and so we will keep you informed as we move through that process.

And, just—I was wondering, since you are involved in it, Jim, if you could give us just a snapshot of the difficulty that that issue has in the expansive continent of Africa that is generally ripped by war, drought, and disease and political instability; and, also a comment you might give us on butterfly conservation difficulties that you might have with that in places like Mexico or Latin America,

and what types of flowers we can plant in our back yard to help them on their route.

Mr. RAPP. Excellent.

Now, to answer your first question, the Bushmeat Crisis Task Force, I think, has a lot of conservation issues. The range of the animals that AZA and all the other partners are dealing with are in place and a lot of times, unfortunately, are politically unstable. There is war, there are many, many human concerns, but they also would be in the areas of highest diversity. So in these areas of Africa where, when a road goes into the forest and people start having easier access to getting into those areas, of course they have to feed themselves, and the most available source of protein, the most available source of food typically is the local wildlife.

I think one of the issues of bushmeat is it is actually now a commercial enterprise. I remind you, years ago in Debo, the commercial or market duck hunters. You know, it is very hard to sustain wildlife populations when you are hunting beyond subsistence but actually doing it for commercial enterprise. And, again, compound that in a country where the government perhaps isn't as concerned as we may be in North America.

But yet there are good people on the ground who we can work with through the other nongovernmental organizations. Of course, we partner with World Wildlife Federation and other groups like that who have people there, Conservation International. But a lot of the zoos and aquariums in AZA have people there as well. I mentioned in my testimony that there are several thousand field studies supported in 80 different countries. So, sometimes the zoo work that is done in those countries, it might be one of the oldest supported programs there.

So I think that through the work we can do together, of course, in educating the American public, which has a lot they can offer through not only charitable giving, but even establishing sustainable development—I mean, of course, it may be difficult in some of these countries now, but you look at countries like Kenya who have really capitalized on the tourism market and can create jobs through our affection and passion for wildlife, there is light at the end of the tunnel, I think. But it is very complex, and I think that since 1999 the Bushmeat Task Force has done a lot of work, but it is still very hard to get, I guess, our heads around that.

On butterfly conservation, I think it is very interesting. Once again, you mentioned Mexico and Latin America. I know the Salisbury Zoo, we have a partner, Pro Natura, sort of the Mexican Nature Conservancy, we have supported over the past few years, actually given financial contribution, supporting a park in the Yucatan called Punta Laguna, as known for its butterfly importance, but there are groups in Mexico and Latin America who are already on the ground doing this work.

I think that is the key thing is finding the partners who are doing the work where we can help facilitate or improve the resources we have, the work they are doing. Also, through the Salisbury Zoo, many of us within AZA are members of a group called Zoo Conservation Outreach Group, which—ZCOG for short—which basically is trying to get resources available to us, whether it is information, equipment, it could be technical journals that we have

extra copies of, to the field so they can use those tools better to help improve their own facilities, be it a zoo or aquarium or a field program.

And it is amazing, when you tap into what the AZA does—and their Website is excellent, aza.org, and through their annual report on conservation and science, and just see that—again, I think it is, what, 1,300 different programs that exist, many of which are in other countries, but a lot of which are right here in own back yard, which leads to what you can do in your own back yard for butterflies.

At the Salisbury Zoo, and indeed in my own yard, we have a basescape project right near our new restroom facilities, very important to the zoo visit. But it is a lovely garden that was funded through the Chesapeake Bay Trust, and it is all native plants, many of which are suitable for birds, butterflies, and other animals to use, and they are beautiful. So, it is not just the wildlife value, but the aesthetic value that those plants can offer that I think is part of that thing that makes people feel good about helping wildlife, which it can start right in your own back yard. There is no question.

Mr. GILCHREST. Thank you very much.

Mr. RAPP. Thank you.

Mr. GILCHREST. Mr. Pittenger, not to address a parochial question again, but I would certainly like to invite you along on that trip we take to Garrett Island to get your assessment of it.

Mr. PITTENGER. I would be very happy to do it. I know the area very well.

Mr. GILCHREST. Great. And I appreciate the time I spent with you planting marsh grass in a number of places on the Eastern Shore. It is very helpful, and it brings a lot of people together. That makes more and more and more people aware of the critical nature of this fragile blue planet that we live on and have to take care of. So I look forward to that visit.

I yield now to Mr. Underwood.

Mr. UNDERWOOD. Thank you, Mr. Chairman.

And first of all, I just wanted to congratulate the work of the AZA on tigers, rhinos, and elephants. I had the opportunity to go to Africa a couple years ago and observe many of the—how that issue is being worked out and how difficult it is, as you outlined. And I am pleased that we are having a meeting on bushmeat, although I thought at first it had political implications. I wasn't sure.

You know—and also I want to thank the work of the AZA on the polar bear issue. I think that one—at least one of the bears is in Baltimore now.

Mr. PITTENGER. It is.

Mr. UNDERWOOD. Probably rooting for the Orioles.

Mr. PITTENGER. He is the only one left.

Mr. UNDERWOOD. Well, he is going to have a tough time.

Mr. Pittenger, you mentioned in your testimony about the National Marine Fishery Service implementation of the Prescott Grant Program. Could you speak to that and tell us how that is going, how that is coming along?

Mr. PITTENGER. Which grant program are you—I mean, we have been involved with the National Marine and Fishery Service in a

number of programs, through our shark tagging program and several others, that—

Mr. UNDERWOOD. The emergency assistance program.

Mr. PITTINGER. I am sorry, I don't—is that in reference in my written testimony?

Mr. UNDERWOOD. The Prescott Grant Program, a program that was —

Mr. PITTINGER. I am sorry. Yes. Now I know what you are talking about. Yes.

The Marine Animal Rescue Program. I know it as the Prescott Program because Dr. Prescott was a mentor of mine, ran the aquarium, and was really the model for all the new modern aquariums.

The stranding program, which is usually what it is called, is a very broad-based volunteer program. For instance, we have one—literally just one paid staff member, and then, of course, supported by veterinarians and everything that take care of the program. But the literally hundreds of animals that we deal with—and this goes—and this is on both coasts. It is a huge volunteer effort, because when these animals come ashore, they are in need of really 24-hour support and care. And it is such a wonderful program at many levels because the volunteers are involved.

For instance, in Baltimore, the scientists and doctors at Johns-Hopkins come over and want to be involved with the animal care. And we learn—so it is not only a good animal welfare program as animals are taking care of, it is a wonderful volunteer program where people can become Ambassadors and go out and talk about it and the environments that these animals come from.

But there are some very important fundamental basic research that goes on. For instance, we have a very rare pigmy sperm whale that—very little known about this animal in the wild—come ashore. We rescued it. It would not eat. We found out that it had ingested a significant amount of plastic bags thinking that they were jellyfish, and we—scientists from Hopkins removed them, and we released the animal. But during that time we found out that this little whale makes the highest-pitched sound of any animal ever recorded in the world. And, again, this information is very fundamental basic research.

And I guess what I am saying is that the—and going back to the support—is that in many areas these programs are very much a shoestring operation. We have some facilities because we are an aquarium, a big aquarium, that others wouldn't have. But New Jersey—practically all the coastal States work very much on a shoestring. And so this is the kind of program where even a minimal amount of support that doesn't have to be huge dollars could really extend the work that these people do.

So I think, from my standpoint of view, we are certainly happy to see the support there and utilize that, but I think it would be very important in magnifying this huge volunteer effort.

Mr. UNDERWOOD. Thank you for that, and thank you for your work in that regard. I haven't been to the Salisbury Zoo, but I have been to the Baltimore Aquarium a couple of times, and it is a very fine facility and very educational, very well, thoughtfully and carefully laid out.

Mr. PITTENGER. Thank you.

Mr. UNDERWOOD. And has a very strong educational component to it, and I think it is—from my estimation—probably the best aquarium I have been to. Thank you very much.

Mr. GILCHREST. Thank you, Mr. Underwood.

Just a very quick follow-up, Mr. Pittenger. How did you know—what did you do to find out that that particular whale had plastic bags in his or her stomach, and then how did you get them out?

Mr. PITTENGER. The animal was acting normally except—in every way except it would not eat, and it was sort of kind of actually hunching up a little bit. And we suspected it, so we had a doctor who normally sticks an endoscope down human throats go down and look, and those little gizmos, you know, they have little pinchers on the end, and out it came. And the whale became known as Inky, because they put ink in the water to hide from predators.

And actually the Coast Guard was very helpful. They did a little documentary film. And someday, if you wake up at 2 in the morning, on some cable channel you will see the story of Inky, the whale. I happened to see it; I was out of town, and saw it at 2 in the morning.

Mr. GILCHREST. We will keep the TV on.

So that little camera also pulled the plastic bag out?

Mr. PITTENGER. Yeah. It has little pinchers. It has a bunch of different devices on the end there.

Mr. GILCHREST. That is good. That is wonderful.

Well, Jim, David, thank you very much for traveling to Washington and giving us your testimony.

Mr. PITTENGER. I look forward to the trip.

Mr. GILCHREST. Yes, sir.

Mr. RAPP. Thank you very much.

Mr. GILCHREST. The hearing is adjourned.

[Whereupon, at 3:20 p.m., the Subcommittee was adjourned.]

[A letter submitted for the record by Virginia R. Busby, Department of Anthropology, University of Virginia, Charlottesville, Virginia, follows:]

**Statement of Virginia R. Busby, Department of Anthropology,
University of Virginia**

The Archaeological Importance of Garrett Island

Garrett Island's archaeological importance derives from the convergence three factors of historical and cultural significance at local, state, regional, and national levels. These include: its unique environmental setting and geological characteristics; its witness of the majority of regional human history; and its association with important persons and events in state, regional, and national history, particularly the early colonial years. In addition to its pre-Columbian history reaching back over 5000 years, the island figured prominently in native/colonial interaction and subsequent colonial settlement. The establishment of a plantation and agricultural pursuits characterize the island's 18th through 19th century history. Twentieth century uses include those related to the fishing industry, ice packing, military activity, transportation, and recreation. The archaeological importance of the island has been recognized for over forty years, with minor surveys undertaken to investigate the physical manifestations of its entire range of history.

The island's unique physical characteristics, combining Piedmont outcrops and Coastal Plain sands, have been described as "little Maryland," presenting a unique microenvironment encompassing the state's geologic variation. Significant contributions to our understanding of human/environmental interaction can be gained from

studying how humans made use of the different resources offered by this varied geology.

Additionally, archaeological study of the long trajectory of human occupation of Garrett Island, dating as early as 6000 B.C., can inform our understanding of the human/land interface through changing environmental circumstances over a significantly long period of time.

In addition to the island's unique physical characteristics is its geographic position at the intersection of the Susquehanna River and Chesapeake Bay. Archaeological investigations of human use of this special natural environmental setting would contribute unique information to our understanding of regional history. In addition, the island's location within a major thoroughfare of human travel, presents an opportunity to study cultural interaction associated with such a position. This includes over five thousand years of pre-Columbian travel within this waterway, a major artery in the continent-wide trade and social networks of Native Americans.

The island also played a significant part in the ventures of colonial explorers, traders, militaries, and settlers plying the Susquehanna and Chesapeake Bay waters and was important to the subsequent use of this waterway from the 18th century to the present day. In addition to maritime travel, the island bears significance in the history of transportation in Maryland with important rail and roadway arteries spanning its surface.

In addition to those that traveled through, stopping at the island, several different Native American groups called this area home and made frequent use of Garrett Island. For them the island served a variety of uses including hunting and fishing, camping, a meeting place, and for trading. Positioned in an area of intersecting group territories, the island presents a unique opportunity to study human interaction, differential land and resource use, and different material culture traditions. In addition, promontories and islands are known places of high symbolic importance in Native American cosmology, and thus, the island with its basaltic outcrop may be able to shed light on this aspect of regional history and culture as well.

One of the most significant aspects of Garrett Island is the convergence of significant aspects of colonial history. Garrett (earlier known as Palmer's) Island was among the earliest northern extensions of the Virginia colony, being patented in the 1620s by Edward Palmer. In the 1630s, William Claiborne established a trading post here after receiving the island as a gift from the Susquehannock Indians. The Maryland colony subsequently took possession of the island in the 1640s and erected Fort Conquest for protection against Indian attacks.

Beyond the archaeological record it contains, the island itself an artifact-an integral part of the natural and cultural landscape-bearing local through national level historical and cultural significance. For these reasons, Garrett Island serves as a point of departure into Maryland's, the region's, and the nation's history and future and merits study and preservation within its geological and cultural setting.

History and Future of Archaeology at Garrett Island

The history of archaeological investigations at Garrett Island includes limited survey work conducted over the past forty years by avocational and academic archaeologists. Systematic investigation of the Native American occupations of the island were initiated in the 1960s and 70s by Paul Cresthull and George Reynolds of the Archaeological Society of Maryland. They identified several occupations spanning the Late Archaic period (circa 3500 BC) through the Late Woodland (circa A.D. 1600). In 1984, Eric Klingelhofer, a graduate student at Johns Hopkins University, initiated a survey to identify Claiborne's trading post and Fort Conquest. Although this initial survey failed to locate the 17th century occupations, it did identify several 18th and 19th century ruins.

With the acquisition of the island by the Cecil County Land Trust, the Northern Chesapeake Chapter of Archaeological Society of Maryland under the direction of PIs Virginia Busby and Robert Wall, and chapter directors William McIntyre and Dan Coates, have initiated a multi-year project at the island geared toward providing a management plan for guiding future research and preservation efforts. To this end, a grant from the Maryland Historical Trust is being sought to fund further survey work toward the preservation management plan for the next year.

With the increased interest on the island, the Northern Chesapeake Chapter has also planned a spring symposium for Maryland Archaeology Month that will present the status of their work and contextualize the results within broader regional culture and history.

Lower Susquehanna Heritage Greenway, Inc. (LSGH)

Goals Checklist
Goals

- Encourage a greater understanding of the LSHG's historical, cultural, natural and recreation attributes through interpretation and education.
- Enable visitors to have greater access to an understanding of the LSHG's heritage.
- Link small communities, as well as recreational and rural areas through scenic byways, water access routes, and pathways.
- Foster linkages among and between heritage attractions that encourage visitors to explore, linger, and sample the diverse offerings of the LSHG.
- Increase the economic activity associated with tourism, creating opportunities for small business development, job growth, and a stronger tax base.
- Enhance economic development and tourism while expanding recreational opportunities in the LSHG consistent with its heritage resources.
- Balance the impact of tourism activity with the quality of life enjoyed by residents.
- Encourage the preservation and conservation of heritage resources and natural features to protect the LSHG's vital ecological functions and many abundant resources.
- Encourage the adaptive reuse of historic structures and sites, conservation of natural areas important to the LSHG's character and environment, and preserve the continuity and authenticity of cultural arts, heritage attractions, and indigenous regional attractions.
- Enhance the visitor appeal and enjoyment of the LSHG's history, culture, natural environment, and scenic beauty by improving the overall "product" and visitor experience.
- Strengthen public / private partnerships that will interpret, communicate, publicize, protect, and restore the heritage of the LSHG and accomplish these goals via partnerships among local and regional leaders, nonprofit organizations, businesses, and state agencies.

The above criteria will be used to evaluate and select projects for funding on a competitive basis.

CECIL LAND TRUST

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Can an island in the Susquehanna River be permanently protected through a community effort, remain open for public use and support a successful comprehensive historical/ecological education program?

Those who participated in a field trip to Hiawatha Island, Apalachin, NY on May 7, 2002 were able to see first hand that it is entirely possible with broad-based community support. The trip included members of the Lower Susquehanna Heritage Greenway, the Paw Paw Museum, the Archeological Society of the Northern Chesapeake, the Fair Hill Nature Center, Maryland Environmental Trust, Maryland Dept. of Transportation, an environmental educator from Harford County and the Cecil Land Trust.

Hiawatha is comparable to Garrett Island, although it is smaller at 112 acres and is of glacial creation. Its history of occupation and ownership patterns are inclined to farming and recreation. The Native American Onondaga tribe used it as a trading site, it changed ownership a number of times and was farmed until the 1960s. The Owego Steamboat Company built a resort hotel on the island in 1876. The hotel served as a summer home for several owners, but was razed in 1932. In 1989, a nonprofit community group purchased the island at a public auction for \$386,100. The other interested bidders were a gravel pit operator and hotel resort developer.

The community group raised money in a variety of ways, first by mortgaging their homes then by collecting donations over a five year period to make their mortgage payments. They received assistance from the press, large corporations, foundations and many concerned citizens. Donations ranged from \$1 to \$50,000. Other fund raising activities included car raffles, purchasing a square foot of island and fund raising breakfasts and dinners held on the island.

After the island was paid for, a conservation easement was placed on the island with the Finger Lakes Land Trust and the island was then donated to the Fred L. Waterman Conservation Education Center.

Our host/guides for the day were Fran Dunbar, president of the Waterman Center board and head of the community group (Owego Historic Marketplace) that purchased the island in 1988 and Scott MacDonald, Waterman Center's executive director.

Since our group consisted of conservationists, naturalists, educators and anthropologists, Scott gave us a general tour of the Waterman Center (a converted church) and described their educational programs. They have three educational sites, Brick Pond, a 30 acre wetland, Apalachin Marsh, one of New York's best bird watching sites, and Hiawatha Island. Scott discussed the Center's arrangements with the business community in supporting public school outdoor education and their fund raising activities, including their first road rally to be held this year.

Fran Dunbar joined us at the landing for the shuttle to the island. A nine passenger pontoon boat, with a Coast Guard approved captain, is used to ferry people back and forth. Currently the boat docking facilities are being upgraded. The Susquehanna flows from east to west between Binghamton and Owego. The island has a high point of 50 feet on the east side while the west end is lower and within the 100 year flood plain. The island supports a herd of deer and is used by river beaver and waterfowl. The boat captain feels that the river quality has improved over the years and people are now able to catch an occasional trout.

Trails on the island are marked by color and have interpretive sites along the way. Historical sites including home, hotel, farm and dairy barn sites have been cleared mainly by volunteers. A springhouse, shed and icehouse have been preserved. All interpretive sites have signage. Scott explained how the sites related to different activities and described their "A Walk Thru Time" event. The island also includes an outhouse and heliport (it's never been used) for emergencies.

There is a picnic grove at the farm site surrounded by farm machinery from different time periods. A fund raising dinner is held at the site. We had a picnic lunch while Fran described the effort of the community group to protect the island. Fran and Scott were the perfect hosts sharing three hours of their time and answering our more technical questions on the ways in which they make their preservation/conservation education program work. For more information on the Center's programs or mission, visit www.watermancenter.org.

The similarities between Hiawatha and Garrett Island cannot be overlooked or understated. It would behoove the Cecil Land Trust and its community partners to continue to look to our sister island and its community for advice and guidance.

