

A stylized world map with black silhouettes of various animals placed on different continents. In the bottom left corner, there is a silhouette of a man in a hat and a child standing together, looking at the map. The animals include bears, deer, birds, insects, reptiles, and various mammals like elephants, kangaroos, and penguins.

Biological diversity refers to the variety of living organisms and the ecological systems in which they occur. As you know, the National Park System contains many of our nation's great historical and cultural sites and artifacts. The System also contains some of our nation's critical and irreplaceable ecosystems and the living organisms that comprise them. These natural systems, processes, and species are also part of our American heritage.

Preservation of biological diversity is central to the mission of the National Park Service. This should also be central to the personal mission of each of us. It relates to the basic reasons why many of us are members of the Isle Royale Natural History Association: a love of wild things and wild places and a continuing fascination with the mystery of how it all works. Expressed in simple feelings, this is what biological diversity is all about.

Look at it this way. Biological diversity is the Earth's most important natural resource. We must be concerned about the welfare of the intricately balanced relationships of myriad plants and animals around the globe that sustains life on our planet, including our own.

Ever-increasing demands of human societies have led to an abnormally high loss of biological diversity. Habitat destruction and over-exploitation of natural resources are the primary causes of this loss. In the last 200 years, the rate of species extinction has greatly accelerated. Usually extinction is a slow process, with new species taking the place of old. But, on a geological scale, current losses are catastrophic. Scientists estimate that the worldwide rate of species loss is greater than species replacement. The variety of life forms on our planet is diminishing. What is equally, if not more critical, is the loss of the variety of ecosystems. Loss of biological diversity is one of the greatest challenges to the integrity and future of the United States National Park System.

Man has just begun to understand the critical importance of the Earth's biological diversity and the urgent need to stop its loss. As a result, the effort to respond to this crisis is also recent. Biological Diversity affects each of us personally. From the great storehouse of genetic material contained in millions of species of plants and animals now sharing our biosphere, comes food to sustain us, fibers to clothe us, energy to warm and transport us, resources for our industries, pets for companionship, and medicines to heal us. It extends to the terrain we hike upon, the animals we watch, and the fish we catch.

Seemingly without cost, the array of ecosystems on our planet regulate climate, maintain soil stability, recycle nutrients, and maintain air and water quality—all free services essential to human life. But are they truly free? No. We now realize they have a cost. That cost is wise and careful use. If the cost is continually postponed, our children will be left to pay a large and unforgiving debt.

Scattered throughout the 350 units of the National Park System are representatives of at least one-half of the United States' plant species and probably an even higher percentage of animals. Some of America's most endangered or threatened species live in national parks. Because the mission of the National Park Service is preservation and management of natural ecosystems for future generations, national parks—like Isle Royale—play a vital role in maintaining our country's biological heritage.

SUPERINTENDENT'S CORNER

I want to wish the entire membership a very happy new year and thank you for your continuing support. We are looking forward to the 1989 operating season at Isle Royale with a sense of positive anticipation. Funding is more scarce for this year's operations; however, many quality activities and projects are being planned for both visitor services and resources management.

We are entering the third and final year of our peregrine falcon reestablishment project. This has been an extremely successful program during the past two years. Ten young peregrine chicks have been released so far and as we release more birds this year we are especially looking for returning nesting birds from these earlier releases.

Intense work is being conducted by Dr. Rolf Peterson, NPS contract researcher, relating to the decline of the park's wolf population. This year's winter study will reveal the present size of the population and provide answers for understanding the mystery of the decline (from 50 animals in 1980 to 12 animals in 1988).

Ongoing resources management projects include air quality monitoring from Mt. Ojibway, the parkwide soil survey, and atmospheric deposition and soil nutrient studies.

Isle Royale Natural History Association

87 North Ripley Street, Houghton, MI 49931

A nonprofit membership organization that assists Isle Royale National Park by publishing and selling educational materials to park visitors. Gifts, bequests, memorials and memberships are U.S. tax deductible.

Membership Categories

Single Membership	\$ 5.00
Husband and Wife Membership	8.00
Supporting Membership*	35.00
Life Membership*	150.00
Corporate Sponsor**	1,000.00
Corporate Patron**	5,000.00

[Life memberships may be paid for in two annual installments of \$75 each]

* Includes a gift copy of *Isle Royale—Moods, Magic and Mystique*.

** Includes a premium gift of a beautifully framed photoprint of an Isle Royale scene (16" x 20").

Board of Directors: Charles Eshbach, *Chairman*, Chris Gale, Bob Hakala, Paul Hinzmann, and Marcia Young; Thomas Hobbs, *Ex-Officio*.

Staff: Bruce Weber, *Coordinator*; Becky Bach, *Business Manager*; Ellen Croll, *Mail and Membership Clerk*.

The two-year Visitor Transportation and Distribution Study conducted by the NPS's Denver Service Center will be completed with computer model testing in the park this summer. This will help us to anticipate visitor impacts and better manage the flow of visitors to docks and campgrounds, and along trails.

The final draft of the Rock Harbor Development Concept Plan is complete and in Washington for final review and approval. We plan public distribution during January and February. The plan will eventually lead to improvements in the appearance and function of the Rock Harbor developed zone in our wilderness park.

1989 marks the 200th anniversary of the U.S. Lighthouse Service and special programs and interpretive exhibits will be presented marking this milestone. Isle Royale has four major lighthouses.

We will continue to complete the exterior restoration of the Edisen Fishery. However, the interior of the historic Pete Edisen Home may not be completed due to limited funding.

.....Tom Hobbs

OUR SPECIAL THANKS TO:

Mr. and Mrs. John Titmus of Henderson, North Carolina for their generous donation towards the publication of our new book *"Isle Royale—Moods, Magic and Mystique."*

Mr. and Mrs. Chuck Boyle of Marinette, Wisconsin, for their donation towards the work of the Association.

NEW BOOK OUT BY MARCH

Well, we didn't complete publication by Christmas as we would have wished, but all indications are that our long awaited book, *"Isle Royale—Moods, Magic and Mystique,"* will be in our hands by March. Designer Christina Watkins of Tucson, and printer Bob Peterson of Lorraine Press in Salt Lake City have received the contribution of \$10,000 worth of fine paper from Mead Corporation and they are busy merging Jeff Rennie's wonderful manuscript with stunning photographs submitted by some of the nation's top photographers.

The Board, under the leadership of Chairman Charles Eshbach, voted to borrow \$28,000 to complete this project. Some of this will come from interest-free loans. We'll have a supply of 10,000 copies so get ready to order (\$7.95 plus postage and handling) for yourself, or your business (contact business manager Becky Bach for exciting bulk/wholesale rates).

Now that we are coming down to the finish line, we who have worked on this project for three years can't hold back saying "thanks" to all of you who contributed to the project in some way, especially to the leadership at the Mead Corporation regional office in Escanaba, which boosted our faith and saved us much money by donating the quality text and cover paper. We've never had such a splendid publication as this.

NEW BOARD MEMBERS NEEDED

The size of our Board of Directors will be increased from five to seven members in accord with the approved changes in our by-laws. Therefore, we need to hear from all of you who would consider becoming candidates for election this spring. The increase will give the association Board a better cross section of skills and experience to draw upon. Board meetings are held two (or three) times a year and provide an excellent way for you to share your business knowledge and love of Isle Royale. Publishing educational materials for park visitors is our principal function and if you'd like to help us, contact Chairman Charlie Eshbach for details about the upcoming election.

WINTER STUDY UNDERWAY

Dr. Rolf Peterson, under contract with the National Park Service, will begin another winter season of monitoring the wolves and moose of Isle Royale. The study team, including NPS personnel, will fly to the Windigo end of Isle Royale around January 16. They will be based in the men's dormitory and most will remain there until around March 7. Weather and ice conditions have made arrival and departure times uncertain since Dr. Durward Allen of Purdue University began the study in 1959. Now—30 years later—the study continues, making it one of the longest continuous animal research projects ever

undertaken anywhere.

The study team goes to the Island in the winter because the moose and wolves are easier to spot at this time of year. The aspens, maples and birches have dropped their leaves. Fresh snow covers the rugged terrain and records the route of wandering animals. And lake waters freeze providing an ideal flat surface for the small research plane to land upon, and open areas for the wolves to trek and be observed. When weather permits, the study team keeps busy with aerial observations. On other days they often cross-country ski to remote locations to retrieve moose killed by wolves. In addition to this rugged outdoor fieldwork, they spend increasing amounts of time working on portable computers, boiling moose bones and doing the necessary housework to maintain their existence in this isolated, frozen landscape.

The declining number of wolves on Isle Royale will be a major focus for the investigators. As part of a special two-year study, four wolves were live-trapped, radio-collared and sampled last May. Laboratory results are still coming in. All four trapped wolves (two males, two females) appeared healthy when trapped and recent aerial surveys indicate that all four animals are still alive. Two of the four animals tested positive for canine parvovirus antibodies, and three tested positive for Lyme disease antibodies. Three of the four were positive for canine hepatitis, a common canid disease not thought to be a significant factor in the current situation. Parvovirus and Lyme disease have never previously been reported at Isle Royale, and concern focuses on these two diseases. In addition to the "disease hypothesis," investigators are still looking into the possibility that genetics and insufficient food may play a part in the wolf decline. Twelve wolves were found during last year's winter study, and Dr. Peterson expects fewer wolves this winter.

A meeting of wolf biologists, NPS scientists, and all scientific collaborators involved in the current investigation is scheduled for March in Minneapolis. NPS scientists and managers will use the ideas generated at this meeting to develop strategies for wolf management in the coming year, and begin to formulate alternatives for the longer term.



'All that lives beneath Earth's fragile canopy is, in some elemental fashion, related. Is born, moves, feeds, reproduces, dies. Tiger and turtle dove; each tiny flower and homely frog; the running child, father to the man, and, in ways as yet unknown, brother to the salamander. If mankind continues to allow whole species to perish, when does their peril also become ours?'

...World Wildlife Fund



Aesop's Fable of

THE DOG AND THE WOLF

After hours of unsuccessful hunting, the wolf was very tired and his stomach growled with hunger. Game was scarce that day, and what little there was had eluded his grasp.

Suddenly he noticed a large, well-fed hound loping along the trail. The wolf looked with envy on the shiny coat and bounding energy of the dog.

Curious about what the dog did to remain so well-fed, the wolf began to question him. Answering, the dog said, "I guard the house against intruders, but there haven't actually been any...I am loving and affectionate to the family...well, I don't actually do much, I suppose, but in return, I always have a dry, warm bed and plenty of food."

That sounded heavenly to the cold, tired, hungry wolf, and he decided to try this new life style. He was ready to stop risking his life for meals, to stay warm in winter, and to be able to rest and relax in peace.

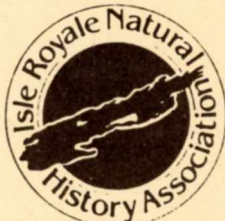
As they trotted along toward the dog's home, the wolf noticed a place on the dog's neck where the hair had worn thin. "What is that?" he asked. "Nothing, really, just the spot where my chain and collar rub," said the dog. "What! Do you mean that you are not free to come and go as you please?" said the wolf. "Well, not really," said the dog, "but occasionally I escape, so what difference does that make?"

"Oh, much, my friend—more than you will ever know," said the wolf, and he trotted off, still hungry, but proud, wild, and free.



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