Celebrating the First 50 Years of Wolf - Moose Research

“I WAS ESPECIALLY INTERESTED IN ISLANDS AS RESEARCH AREAS, WHERE THE ANIMALS YOU ARE COUNTING AND STUDYING DO NOT WANDER AWAY.”

Durward Allen, Founder of Isle Royale Wolf-Moose Study

National Parks and federally-designated Wilderness areas enhance our understanding of nature by facilitating scientific research. Isle Royale attracts a wide variety of researchers interested in many topics. The park’s status as a Wilderness and its location as an isolated archipelago in the largest freshwater lake in the world provide a unique opportunity to study species behavior, community structure, and terrestrial and aquatic systems in the absence of most of the human influences that exist on the mainland.

Why is that important? When scientists design a research project, they formulate questions to be answered based on collecting specific data. While designing a project, the researcher may find that there is no straightforward way to control variables and eliminate outside influences unless they are working in an artificial environment, a laboratory. But what if the questions can’t be answered in a laboratory? One solution is to find a location where many extraneous variables and influences don’t exist—a location that is isolated, yet still accessible. For some that place is Isle Royale National Park.

Isle Royale serves as an “island laboratory,” attracting a diverse array of long-term research projects including the study of boreal chorus frogs, island forest composition and structure, and watershed nutrient cycling. The park is most widely known for an ongoing study of the interactions of wolves and moose, which began in 1958 with Durward Allen of Purdue University. This year marks the 50th anniversary of the beginning of the Isle Royale wolf - moose study. This project, now headed by Rolf Peterson and John Vucetich, is a cooperative effort between the National Park Service and Michigan Technological University. It has grown into the longest running predator–prey study in the world.

Research projects lasting 10 years or more are relatively rare, usually due to lack of funding or changes in the study site. Many research questions, evaluating a specific change in an animal population or determining the impacts of pollutants for example, require long term study. Fifty years of studying wolves and moose at Isle Royale have provided the opportunity for many lessons. The wolf research has contributed greatly to scientific knowledge of the grey wolf and redefined traditional thought about the persistence and viability of a small wolf population, including its resilience in the face of genetic deterioration over time. Scientists have learned that seemingly simple isolated systems are actually very complex, with many interrelated components (wolves, moose, weather, vegetation, parasites) which interact in unpredictable and subtle ways. Single random events such as the introduction of parvovirus have been found to cause long lasting consequences. Natural systems are very dynamic, making it very difficult to predict what may happen in the future. The wolf moose study has advanced scientific understanding of both species beyond the park’s borders and informed natural resources research and management nationally and internationally. Continued study will further expand our knowledge and understanding of the natural world around us.

This year Isle Royale National Park and our partners are celebrating the contributions of all the scientists, individuals and organizations like the National Science Foundation and Earthwatch who have supported the wolf - moose study since it began fifty years ago. Anniversary events on the island and in the Great Lakes region are being planned so we can share what has been learned.

To find out more about the Isle Royale wolf-moose study and special anniversary events, go to the 50th anniversary website, www.wolfmoose.mtu.edu and the wolf study site, www.isleroyalewolf.org.

Jean Battle, Chief, Natural Resources Division
Liz Valencia, Chief, Interpretation and Cultural Resources Division
Saltwater Virus Threatens Superior Fisheries

Isle Royale visitors play an important role in keeping invasive species away from the Island. But what happens when the invader is a virus that can devastate fish populations if it gets into the Lake Superior basin? It may only take wind and waves and an opportunistic hitchhiker to move into Park waters. The virus does exist and we are doing all we can to keep it from getting into Lake Superior. Isle Royale joined with the other National Parks on Lake Superior and the Grand Portage Band of Ojibwa to create a prevention and containment plan for this recent aquatic invader, viral hemorrhagic septicemia (VHS). The disease does not affect humans, but it can kill thousands of fish in a single incident. The VHS virus, now in the lower four Great Lakes, has affected 28 additional species of fish since its introduction from the Atlantic Ocean. On Isle Royale, the coaster brook trout population is estimated at approximately 900 individuals. Three lake trout phenotypes, distinct to Isle Royale, have yet to be studied. These special trout populations and others could be at risk if VHS enters Lake Superior.

We need your help. As an angler, educate yourself on how you can help slow the spread of this disease by visiting the following websites: www.dnr.wi.gov/fish/vhs; www.michigan.gov/dnr/; www.mctu.org/web%20graphics/VIRAL; www.usgs.gov/newsroom/article.asp?ID=1856. As a boater, please review how you can disinfect your boats prior to heading to the Island. Stay aware of how this disease is progressing through the lower lakes and identify high risk waters for extra cleaning if you move between the Great Lakes. If we can slow the progress of this disease, we will provide an opportunity for research to help us better understand how to mitigate its effects. Scientists indicate it is typical for “naïve populations” (not previously exposed to VHS) to suffer catastrophic losses when faced with a new, highly infectious disease. Humans have the capability to not be naïve about diseases that affect resources they care about. For information on Park efforts to reduce the spread of this disease visit our website at www.nps.gov/isro. Please learn about VHS and help us keep it away from Isle Royale.

Phyllis Green
Superintendent

The National Park Service cares for special places saved by the American people so that all may Experience Our Heritage

Rock Harbor Lodge and Windigo Store

Lodge Rooms
Sixty rooms are available; each accommodates four and offers private bath. Available 6/1 thru 9/6.

Housekeeping Rooms
Twenty duplex cottages accommodate six and are furnished with utensils, dishware, private bath, double bed and two bunk beds. Available 5/1 thru 9/6.

Gift Shop and Dockside Store
Gift Shop offers handcrafted gifts, apparel, photo supplies, postcards, souvenirs, daily fishing licenses, and tackle. The store offers groceries, freeze-dried foods, fishing tackle, stove fuel, camping, hiking, and boating accessories, showers, laundry facilities, and sundries. Gift Shop 6/1 thru 9/6 – Store 5/23 thru 9/6

Lodge Dining Room & Greenstone Grill
Hearty meals, including fresh Lake Trout. Visitors welcome for breakfast, lunch, and dinner. Food service open daily, 6/1 thru 9/6.

Marina and Water Taxi
Offers 40 feet of dock space in Rock Harbor, accommodating boats up to 65 feet. Electrical, fresh water hook-up, sewage pump-out, gasoline, and diesel fuel, motorboat, canoe, and kayak rental available. Water taxi service drops off or picks-up visitors, canoes, or kayaks at many island docks. Available 5/1 thru 9/6.

Fishing Charters and Sightseeing
Charters are fully equipped. For details on sightseeing trips refer to page 4.
“I christen thee Ranger III,” announced Mrs. John Bennett on June 21, 1958 as she smashed a bottle of champagne on the bow of Isle Royale National Park’s new package freight vessel. As the 165 foot long ship slid down into the water, a twenty year old dream finally became a reality. Back in 1936, a report to the Park Service Director recommended the recently authorized Isle Royale National Park addressed the need for a safe vessel to accommodate park operations and visitor transportation. At that time, the original Ranger, a 75 foot surplus Coast Guard cutter, had just been acquired. The ship was heavily used by the Civilian Conservation Corps, but its condition soon deteriorated to the point when it became unsafe. Ranger II, a larger 144 foot ship, was surplus from the military to the park in 1948 and in 1951 was granted permission to transport the visiting public to the island – it could accommodate a grand total of sixteen passengers.

The need for a reliable and safe ship that could meet the specific needs of Isle Royale National Park was undeniable. Michigan congressman John B. Bennett sponsored the funding bill for Ranger III under the Mission 66 program. The Mission 66 program provided special funds to upgrade the National Park System infrastructure over a ten-year period beginning in 1956 and ending with the Park Service’s 50th anniversary in 1966. Total cost of Ranger III was $1,160,000. Ranger III was custom designed specifically for Isle Royale by marine architects from R.A. Stearn Inc. of Sturgeon Bay, Wisconsin. The ship was also built in Sturgeon Bay by Christy Corp. in 1958 and delivered to the park in September.

The mission of the ship then, as now, was “to service the logistical needs of Isle Royale National Park”. The maiden voyage to Isle Royale was made on October 10, 1958. The ship ran into a notorious Lake Superior gale, forcing it to seek shelter in Thunder Bay, Ontario. It arrived safely at the park the following day. Since then, the ship has safely made over 4,400 crossings of Lake Superior, a testament to its design, durability, and dedicated maintenance program. This year Isle Royale National Park will celebrate 50 years of Ranger III service.

Bill Hanrahan
Captain, Ranger III

Three critical organizations partner with the National Park Service to preserve and protect Isle Royale for present and future generations: the Isle Royale Institute (IRI), the Isle Royale Natural History Association (IRNHA), and the National Parks of Lake Superior Foundation (NPLSF). Each overlap in their missions to assist the National Park Service with research and education, but the three are unique in their specific focus and the expertise they offer.

The Isle Royale Institute is a partnership between the National Park Service, Michigan Tech University, and the University of Minnesota Duluth. IRI offers educational courses and resources for teachers, youth, and others who traditionally have not had easy access to Isle Royale. A cornerstone of IRI programs are teacher institutes; groups of teachers spend a week camping in the wilderness, work alongside researchers to study the science and history of Isle Royale, and develop lesson plans to help all teachers bring the wonders of Isle Royale to their classrooms. To further the highest quality research at Isle Royale, IRI has launched a review of current and past research in the park in two phases: 1) organizing the park’s research documents into a searchable electronic library, and 2) convening a blue ribbon panel of national experts to assess and guide Isle Royale’s research program. This will aid in IRI’s goal of securing funding and building partnerships to address Isle Royale’s highest research priorities. IRI is funded primarily by grants and contributions from its three partner organizations.

The Isle Royale Natural History Association has partnered with Isle Royale for over 50 years, publishing educational books, brochures and other products, and providing funding to assist with educational programs and cultural and natural resource protection projects. Every year IRNHA provides critical funding to assist with educational programs and more. In 2007 and 2008 NPLSF is working with the park to raise funds and enlist volunteers to build a new dormitory in Windigo to house researchers, volunteers, park staff, and others who work on resource protection and educational programs for Isle Royale. Funding for the NPLSF comes from private and business donations.

For more information on these organizations, visit their websites:
Isle Royale Institute, www.iri.mtu.edu
Isle Royale Natural History Association, www.irnha.org
National Parks of Lake Superior Foundation, www.nplsf.org

Jill Burkland, Executive Director
Isle Royale Natural History Association
Ann Mayo Kiely, Executive Director
Isle Royale Institute

2008 – Your Guide To Isle Royale National Park
Interpretive Activities

Enjoyable and educational programs are offered on Isle Royale at Rock Harbor, Daisy Farm, and Windigo, and they are also presented on the National Park Service vessel, Ranger III. In addition, guided excursions explore such areas as Passage Island and Lookout Louise near Rock Harbor. Ranger guided programs are free, although those involving the tour boat MV Sandy include a transportation fee. Check at local bulletin boards for further details. For outdoor activities, dress for the possibility of cold or rain and wear sturdy footwear. Trails are slippery and muddy during or after wet weather; wear shoes with good ankle support, weatherproofing, and soles that grip well. Come join us!

**MY SANTY TOURS FROM ROCK HARBOR**

The trails on guided tours are rocky and uneven with some steep climbs and descents; trails may be slippery. Be prepared for cold temperatures and the possibility of rain.

For all tours and programs involving the MV Sandy, obtain tickets and information at the Lodge Registration Office. MV Sandy Tours will operate from June 3 through September 5. Fare rates for the various tours are available at the Rock Harbor Lodge and Rock Harbor Visitor Center; children under 12 are charged half-price for the MV Sandy. Please Note: Sandy Tour modifications may occur if extremely low lake levels are experienced in 2008.

• All times are Eastern Daylight Time
• $ = transportation cost
• ** = indicates tours with a park ranger

### ROCK HARBOR AREA

<table>
<thead>
<tr>
<th>ROCK HARBOUR AREA</th>
<th>SUNDAY</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
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<tbody>
<tr>
<td><strong>Rock Harbor Visitor Center</strong></td>
<td>Information, books, maps, educational sales materials, camping permits, dive permits, user fee payments, and Jr Ranger Program.</td>
<td>Daily 8:00 a.m. to 8:00 p.m. – July and August Reduced schedule in May, June, and September.</td>
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| **Interpretive Programs** | Join a park representative for an exploration of Isle Royale’s natural and cultural history. | Check the bulletin board for program schedule. | | | | |

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### DAILY FARM

**RAILFARM**

Information, books, maps, educational sales materials, camping permits, dive permits, user fee payments, and Jr Ranger Program.

**Interpretive Programs**

Join a park representative for an exploration of Isle Royale’s natural and cultural history.

Check the campground bulletin board for program schedule.

### WINDIGO

**WINDIGO VISITOR CENTER**

Information, books, maps, educational sales materials, camping permits, dive permits, user fee payments, and Jr Ranger Program.

**Interpretive Programs**

Join a park representative for an exploration of Isle Royale’s natural and cultural history.

Check the bulletin board for program schedule.

### HOUGHTON

**HOUGHTON**

Information, trip planning, books, maps, and other educational sales materials, Ranger III group camping reservations, boat camping permits, dive permits, and user fee payments.

Open year-round, Monday through Friday 8:00 a.m. to 4:30 p.m., closed for fall and winter holidays. 6/9 through 8/16 open 8:00 a.m. to 6:00 p.m. Monday through Friday, Saturday 11:00 a.m. to 6:00 p.m. 8/19 through 9/13 open 8:00 a.m. to 10:30 p.m. Monday through Friday, Saturday 2:00 p.m. to 4:30 p.m.

**Interpretive and Educational Programs**

While onboard, park staff and guest speakers, weather permitting, will explore Isle Royale’s natural and cultural history or topics related to the Lake Superior Basin. Park staff will assist in trip planning, answer questions, and issuing backcountry camping permits.
Wilderness Use

During Isle Royale's early history, visitors risked much to get there. They did not come to vacation; they came to tame the wilderness through mining its copper, harvesting its fish, and logging its timber. The island was never tamed, the Sharon Islands were wiped out, but its landscape holds the scars of these early attempts.

Today Isle Royale has reverted back to a primitive wilderness. The environmental consequences of that frontier trend are now attracting a new clientele.

Today's visitors, as in the past, can still adversely affect this sensitive resource. To minimize your impact on park resources and other visitors, please practice “Leave No Trace” (for additional information request a copy of the park’s Leave No Trace booklet or visit www.Int.org). Where you place your feet is as important as how you treat and dispose of waste. Be part of the solution: help maintain the sense of solitude and preserve the wilderness flavor that has the potential to change your life. Proper wilderness use begins with reading, respecting, and putting into practice the information following.

Camping

Permits are required for all overnight stays at campgrounds, cross-country sites, docks, or anchor, regardless of group size or method of travel.

Party Size Defined

The party size for camping at Isle Royale is divided into two categories. “Individual” parties are defined as a group of six or fewer people. “Group” parties are defined as seven to ten people. There are different requirements outlined below based on party size.

Individual Camping Permits – parties of six or fewer

Camping is available at islands and individual parties is on a first-come, first-serve basis. Individual parties can get permits onboard the Ranger III or upon arrival at Rock Harbor or Windigo Visitor Centers. For trip planning assistance call (906) 482-0984; write to Group Reservations, Isle Royale National Park, 800 East Lakeshore Drive, Houghton, Michigan 49931, or E-mail ISRo_ParkInfo@nps.gov.

Group Camping Permits – parties of seven to ten

Advance reservations are required for group camping. For reservations and trip planning assistance call (906) 482-0984; write to Group Reservations, Isle Royale National Park, 800 East Lakeshore Drive, Houghton, Michigan 49931, or E-mail ISRo_ParkInfo@nps.gov.

Where to Camp

All campgrounds on Isle Royale offer tent sites and/or three-sided shelters. Shelter and tent sites are available on a first-come, first-serve basis. Shelters may not be reserved and may not be used solely for cooking or storage of gear. Tents may not be erected at shelter sites. Be gentle with screen doors on shelters to minimize intrusive noise and to prevent damage.

Expect crowded conditions at park camping sites during mid-July through August. When counting the full, we ask campers to double up and share empty tent pad space. Campers must stay in established camp sites unless off-trail (cross-country) arrangements are made at the time the reservation is obtained. Off-trail hiking and camping is difficult at Isle Royale, and is only recommended for experienced campers.

Commercial Groups

Organizations that charge trip participants a fee for cross-country, compensatory maps, and/or trip leaders in any way are commercial groups under federal law. This applies to both non-profit and for-profit organizations. Commercial groups must apply for and receive a Commercial Use License to conduct trips in the park. There is a fee for this permit. Applications are only accepted between January 2 and May 15; contact the park’s Chief Ranger’s Office at (906) 487-7148.

“Quiet, Please”

Most visitors come to Isle Royale to hear the sounds of a wilderness. Excessive noise disturbs wildlife and other visitors. Sound travels easily over the water and on the trail. During quiet hours, between 10:00 p.m. and 6:00 a.m. EDT, people in adjacent campgrounds can hear your activities, you are being too loud.

Respect Wildlife

Observe, photograph, and enjoy park wildlife from a safe distance. Use binoculars or a zoom lens “to get closer” to wildlife. If animals flee, become defensive, or change their natural activities in your presence, you are too close! Loons are especially susceptible to disturbance, and may abandon their nests when approached too closely by boats. Cow moose with calves, particularly in the spring, and bull moose during the fall rut can be dangerous, give them a wide berth.

Keep wild animals wild by discouraging them from approaching humans. Practice proper food storage and keep a clean camp. It is illegal to feed, touch, or intentionally disturb wildlife, their homes, nests, or activities. Animals, particularly fox and otter, when habituated to human food, may become hot and dry, and creeks that once flowed with clear, cold water become hot and dry, and creeks that once flowed with clear, cold water becomeigar and soil and disguise it with natural materials. Urinate on durable surfaces, such as rocks, gravel, or fallen logs; away from camp sites and water sources. Pack out all used feminine hygiene products, carrying them in plastic bags, doubleed to confine odor.

Showers

The concession operation offers token-operated shower facilities at Rock Harbor (5/23 – 9/6) and Windigo (6/3 – 9/8).

Waste Water Disposal

Cleaning Cookware

Most cookware can be cleaned with hot water, a little elbow grease, and sand or other natural scrubbers. Clean cookware at least 200 feet (75 steps) from lakes, streams, trails, galleries, or camp sites. Soap is unnecessary for those who are washing dishes. Even biodegradable soaps take a long time to degrade. Use these products sparingly and keep them at least 200 feet (75 steps) from water sources.

Use a small strainer or screen to remove food bits from the water and pack them out with your garbage. The remaining gray water should be scattered or broadcast over a wide area away from camps and water sources.

Bathing/Cleaning Clothes

When bathing use soap only if necessary and use it sparingly. Get wet, if used- apply soap, and rinse on land at least 200 feet (75 steps) away from water sources or camp sites. Rinse water can be carried in collapsible containers or pots. Clothes can be cleaned by taking them away from water sources and camp sites and thoroughly rinsing them with plain water.

Drinking Water

Pots of water are only available at Rock Harbor and Windigo. All surface lake and stream water should be considered contaminated with natural parasites. Drinking contaminated water can make you very sick. Water collected in the park should be boiled for at least one minute or filtered only from the cleaner water on top. The concession operation offers token-operated shower facilities at Rock Harbor (5/23 – 9/6) and Windigo (6/3 – 9/8).

Drinking Water Notice

Last year, blue-green algae blooms occurred in Lake Riche and Chickenbone Lake. Blue-green algae blooms can be toxic, but due to the large variety of blue-green algae species and individual conditions of each bloom, we can’t predict if a particular bloom is toxic or not. Filtering water if it appears to have a cloudy blue-green cast, or looks like “pea soup” or green paint. If you see an algae bloom while in the backcountry, please write to the visito...er center. If algae blooms occur in the future, we will have the latest occurrence information available at our visitor centers. For more information on blue-green algae, visit the MN Pollution Control Agency website, http://www.pca.state.mn.us/water/clmp-toxicalgae.html

Hantavirus

There have been no reported cases of Hantavirus at Isle Royale National Park. Generally, there is a low probability of infection. However, the death rate is very high among infected individuals. The first symptoms are flu-like, the primary symp...tom is difficulty in breathing and quickly progresses to an inability to breathe. The deer mouse is the primary carrier of the virus. An infected mouse carries the virus in its urine, saliva, feces, and in the carcass. The primary human ways be infected is through breathing in the virus. Infection can also occur by touching the mouth or nose after handling contaminated materials. To minimize risk, avoid coming into contact with rodent droppings and burrows, avoid sleeping on bare ground, and store food and garbage in rodent-proof containers. For additional information on Hantavirus contact the Centers for Disease Control and Prevention at 800-532-9929.

Pack It In, Pack It Out

It starts at home. Through careful meal planning and repackaging of food items, you can reduce food leftovers and trash in the backcountry. Please pack out everything, including food wrappers, beach balls, food-...rps, orange peels, nuts, apples, corns, ties, candy wrappers, fishing line, and cigarette butts must be packed out. If you have food leftovers, either save and eat them later or pack them out. Do not burn, bury or place trash, food scraps or garbage in outhouses. Please help keep the backcountry clean by packing out what you packed in.

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For additional information, refer to the park’s Group Camping brochure.
Distance - Elevation - Change - General Comment

Malone Bay - Siskiwit Lake - 0.3 miles, 40' Gradual Slope

Siskiwit Lake - Intermediate Lake - 0.4 miles, 40' Gradual

Intermediate Lake - Lake Richie - 0.6 miles, 120' Hilly and wooded

Lake Whittlesey - Lake Whittlesey - Lake Richie - 0.6 miles, 80' Rolling

Lake Whittlesey - Chippewa Harbor - 0.6 miles, 140' Steep grades and rocky

Chippewa Harbor - Lake Richie - 1.2 miles, 160' Hilly

Chippewa Harbor - Lake Richie - 2.0 miles, 120' Gradual but very long

Lake Richie - Lake LeSage - 0.6 miles, 100' Steep grades, wet

Lake LeSage - Lake Leather - 1.4 miles, 80' Steep grades, wet

Lake Leather - Lake Leather - 0.6 miles, 100' Steep grades, wet

Lake Leather - Lake Leather - 0.6 miles, 100' Steep grades, wet

Chickenbone Lake - McCargoe Cove - 0.6 miles, 80' Hilly

Pickerel Cove - 0.1 miles, 100' Short and sweet

Lane Cove - Stockly Bay - 0.1 miles, 100' Short and sweet

Five Finger Bay - Duncan Bay - 0.2 miles, 80' Short and sweet

Duncan Bay - Tobin Harbor - 0.3 miles, 100' Extremely steep

Tobin Harbor - Rock Harbor - 0.2 miles, 40' Up and over

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NOTE: Because of Isle Royale's geology, north-facing slopes are much steeper than south-facing slopes.
FISHING REGULATIONS

<table>
<thead>
<tr>
<th>Species</th>
<th>Seasons</th>
<th>Minimum Size</th>
<th>Daily Possession Limit</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Trout, Rainbow Trout and Salmon Lake Superior and Siskiwit Lake</td>
<td>April 16 to October 31</td>
<td>10&quot; except 15&quot; for lake trout</td>
<td>5 in any combination, but no more than 3 of any one species</td>
<td>*1</td>
</tr>
<tr>
<td>Coaster Brook Trout Lake Superior</td>
<td>May 1 to Labor Day</td>
<td>N/A</td>
<td>Catch and release only in park’s Lake Superior waters</td>
<td>*2</td>
</tr>
<tr>
<td>Brook Trout Streams and Hidden Lake</td>
<td>Last Saturday in April to Labor Day</td>
<td>N/A</td>
<td>Catch and release only — No possession allowed</td>
<td>Artificial lures *3 and barbless hooks *4 only on all streams and on Hidden Lake See Greenstone article page 10 for details</td>
</tr>
<tr>
<td>Rainbow Trout Streams</td>
<td>7&quot;</td>
<td>5 fish with no more than 1 fish over 15&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellow Perch Lake Superior and Inland Lakes</td>
<td>April 16 to October 31</td>
<td>No minimum size</td>
<td>50</td>
<td>Recommend daily limit of 10</td>
</tr>
<tr>
<td>Northern Pike Lake Superior and Inland Lakes</td>
<td>May 15 to October 31</td>
<td>15&quot;</td>
<td></td>
<td>Artificial lures only on interior lakes *3 and streams *4</td>
</tr>
</tbody>
</table>

For additional fish species, seasons, and creel limits, please review the Michigan Fishing Guide

*1 Park boundaries extend 4.5 miles out into Lake Superior from the outermost land areas of the park.
*2 For additional trout/salmon fishing information, review the Michigan Fishing Guide.
*3 Artificial lure means any lure or fly manufactured in imitation of, or as a substitute for natural bait. It is unlawful to use or possess live bait, dead or preserved bait, organic or processed food, or scented material on interior lakes or streams.
*4 Only barbless hooks may be used for fishing the park’s rivers, creeks, and streams, and Hidden Lake. Barbed hooks are allowed on all other inland lakes in the park.

SAFETY TIPS

- The island’s Wilderness and Lake Superior present challenges and potential hazards to the inexperienced or ill-prepared.
- Basic emergency services are available on the island, but contacting rangers for assistance can be difficult. Emergency response and evacuation may take time, requiring you to rely on your own skills and equipment. Most private boaters on Lake Superior have radios and can contact park rangers in an emergency.
- Bring a good first aid kit, a sufficient supply of any needed medications, and clothing appropriate for the time of year.
- Filter with chemical treatment or boil all surface water. Drink plenty of water. When dehydrated, you tire more quickly, don’t think clearly, and are more prone to fall.
- Weather and lake conditions can deteriorate quickly and unexpectedly. Hypothermia can occur any time of the year, especially near Lake Superior, where water and air temperatures are cool to cold year-round. Fog and waves can quickly create dangerous conditions for boaters, especially for paddlers.
- Many people underestimate hiking travel times and overestimate their abilities. Plan shorter, realistic travel days; don’t turn your wilderness trek into a forced march.

Visitor Notice:
- Due to ongoing dock projects at McCargoe Cove and Malone Bay, docks may be inaccessible. For an update, please call 906-482-0984.
- Lake Cove campground will be closed from mid-June through mid-July. Please call 906-482-0984 for up-to-date information.
Wilderness Use

Leave What You Find

Enjoy your discoveries and take them home via photographs, drawings, and memories. Natural objects of beauty or interest such as mose antlers, plants, driftwood, cultural or archeological resources, greenstones, agates, datolite and others, including those found in Lake Superior must be left where they are so others can experience the same sense of discovery. Removing, possessing, or disturbing park resources is prohibited. This may seem like a harsh act, but the cumulative effect of many people doing the same can be quite damaging to park resources. Picking small quantities of berries and wild edibles for personal consumption is permitted.

Insects

Expect mosquitoes, black flies, gnats, and other insects to peak in June or July. During wet summers, mosquito populations can continue well into August. Bring insect repellent, netting, or other suitable barrier. Dry summers will produce an abundance of yellow jackets. Bring an epinephrine kit if you or a member of your party is allergic to bee stings. For others, over-the-counter antihistamines may help counter minor swelling and itching.

Minimize Use of Fires

Campfires are permitted at only a handful of campgrounds. A backpacking stove is a must; these stoves are lightweight, dependable, easier to use, and less damaging to the park than wood fires. Twig-burning backpacking stoves are permitted. Where campfires are allowed, a metal fire ring is provided; never build your own ring. Gather only dead and down wood away from the camp area. Use small diameter wood no larger than an adult’s wrist, as this will burn completely and will eliminate the need to pack a hatchet or saw. Collect wood from a wide area and away from the immediate vicinity of camp. This keeps the camp area from becoming depleted of wood and potential nutrients. Do not break branches or cut bark from standing or dead trees, live or dead. Resist the temptation to gather driftwood or wood from beaver dams or lodges. Do not import firewood; insects and pathogens from an infected wood source could devastate Isle Royale’s forests. Do not burn trash in any form. The fire should be kept small. Once finished, make sure the flames and coals are dead out and cold to the touch, double check before going to bed or leaving camp.

Canoeing/Kayaking

Lake Superior is well known for its cold temperatures, fog, and sudden squalls that can generate waves that could easily swamp a canoe. This along with care outside or shore landing sites adds to the potential danger. Small, open vessels are discouraged from entering these cold waters and are encouraged to use the numerous miles of waterways that the inland lakes provide. Canoists and kayakers should be familiar with weather patterns and check the marine forecast at visitor centers before embarking. Be prepared to adjust your schedule to the weather. A portable marine radio is recommended.

Portages – Canoe routes and portages are on the northeast half of the Island. Portages are marked with a yellow “P” on a blue circle. Every canoeist and kayaker must have a U.S. Coast Guard approved personal flotation device. Wear it, your life may depend on it.

Boat Rental – Canoe, kayak, and motorboat rentals are available at Windigo and Rock Harbor. For more information contact the Rock Harbor Lodge. (Refer to page 2).

Loons

Isle Royale National Park is the summer home for over 100 nesting pairs of Common Loons, supporting the only known population which still breeds on Great Lakes waters. These birds nest on land very close to the shoreline, making them highly susceptible to population loss. Once a loon who tremolos (the laughing call) is sending a message that you are too close. From mid-May through July (loons nesting season) visitors to stay at least 50 feet away from island nesting areas may be used to loon nesting, please check at the visitor centers for updated information.

Non-Native Species

Isle Royale waters, like all Lake Superior waters, face a growing threat from the invasion of non-native species. Once species like sea lamprey, zebra mussels, or spiny water fleas enter an area, they out-compete native species, causing large-scale changes in the ecosystem.

Two invasive species, the sea lamprey and the spiny water flea, have already established in Lake Superior. The spiny water flea is presently found only in Lake Superior. The park is concerned it may enter the inland lakes. Once established, its spines harm predator fish and they disrupt the zooplankton population, the basic food source for many fish species.

Zebra mussels have not established a presence on Isle Royale. Their potential to cause catastrophic problems cannot be overstated. If zebra mussels were to enter the inland lakes it is estimated they would cover nearly every habitable surface on an inland lake floor within two years.

What can you do to stop the spread?

Boaters

Drain live wells and bilge on land - remove transom water, lake water, and unwanted bait from your boat - wash equipment with warm water and use a high pressure spray or jet for five days before launching for Isle Royale.

Backpackers

Prior to departure, clean your camping gear, clothing, and boots.

Canoists and Kayakers

Remove weeds, algae, and other plant and animal materials from your boat - dry vessels before your island departure - clean and dry watercraft when moving from Lake Superior waters to inland lakes.

Anglers

Clean fishing gear before island departure - When moving from Lake Superior to inland lakes, clean gear and change line spoons.

Divers

Wash all dive gear in warm chlorinated tap water - Disinfect your wetsuit with a specific purpose shampoo - Dry all dive gear and wetsuit for seven days before island departure.

For additional information on invasive non-native species and the preventative measures that you can take request the park’s brochure “Aquatic Invasives: Stop the Spread & Spread the Word.” Also available online at www.irna.org.

Wheeled Vehicles/Devices

Wheeled vehicles (except for wheelchairs) or other mechanical forms of transportation are not allowed on trails. This includes bicycles and portaging devices.

Weapons, Traps, & Nets

The use or possession of weapons, traps, and nets is prohibited. Weapons include any implements designed to discharge a projectile or missile in the air or water. Fireworks are prohibited.

Pets

Dogs, cats, and other pets are not allowed. This includes pets on boats within the park boundaries, which extend 4 1/2 miles into Lake Superior from the outermost land areas of the park. Visitors bringing pets to Isle Royale will be required to isolate their children. Pets disturb wildlife and can transmit diseases, particularly to wolves. Special conditions apply to guide dogs. Please contact the park for further information.

Marine Warning

Boaters beware, Lake Superior levels are significantly down. Use caution in your travels, especially around docks and reefs.

Boating

All boaters staying overnight at anchor, at docks, or in campgrounds must first obtain a camping permit. Lake Superior offers challenging and often dangerous weather in the form of dense fog, high winds, waves, and thunderstorms. Combine this with rocky reefs, limited safe harbors, and Isle Royale’s remoteness, and it pays for you, your crew, and your boat to be shipshape.

For additional information on boating launch and trip planning please request the park’s Isle Royale Boating Guide. In addition to Houghton, Rock Harbor, and Windigo, boaters may obtain Isle Royale camping permits and pay user fees while using our on-line service at www.pasty.com/iso/tps.php. Please note: the U.S. Forest Service Ranger Station in Grand Marais, Minnesota has discontinued processing permits and collecting fees for Isle Royale National Park.

Restricted Water Activities

Water skiing and personal watercraft including vessels commonly referred to as jet skis, wave runners, seadoo, wet bikes, or surf jets are prohibited. Since all of the park’s inland lakes are located within designated Wilderness, they can only be explored by paddling. Vessels with motors (even if not in use) are prohibited on inland lakes and streams.

Portable Generators, Electronic and Motorized Devices

Operation of electronic and motorized devices such as stereos, televisions, radios tuned to commercial stations and portable generators is not permitted except in developed and open-water motorized zones. Developed areas include the Windigo and Rock Harbor developed areas, and the Motz Island Headquarters area. Open water motorized use may include Lake Superior waters outside of designated “quiet/no wake” zones.

On-Board Generators

The operation or use of permanently installed (by the boat manufacturer) on-boat generator is allowed between 6:00 a.m. and 10:00 p.m. Eastern Daylight Time in developed zones and at the following docks: Beaver Island, Isle de Isle, Caribou Island, Hay Bay, Malone Bay, Rock Harbor, and Windigo. On-board generators may not be operated or used at the following public docks: Birch Island, Chippewa Harbor, Daisy Farm, Duncan Bay, Duncan Narrows, McGregor Cove, Merritt Lane, Moskey Basin, Siskiwit Bay, Three Mile, Todd Harbor, and Toookers Island. Vessels at anchor within Quiet/No Wake Zones may operate on-board generators between 6:00 a.m. and 10:00 p.m. Eastern Daylight Time, except when anchored within 1/4 mile of a designated park campground.

Quiet/No Wake Zones

These zones promote a quality visitor experience by providing relatively tranquil, natural marine surroundings. Within the zone, vessels must not exceed 3 mph or create a wake. Calm, calm water, this means not making a wake or traveling no faster than 3 mph. In a one foot sea, a boat could travel up to a speed that would create a one foot wake. Quiet/No Wake Zones include specified areas near Todd Harbor, Johns Island, Barum/Washington Islands, Hay Bay, Wight Island, Malone Bay, Chippewa Harbor, Conglomerate Bay, Moskey Basin, Lorelei Lane, Tobin Harbor, Merritt Lane, Passage, Isle, Duncan Bay, Bee Finger Bay, Lane Cove, Robinson Bay, Packer Cove, Belle Harbor, Crystal Cove, and McGregor Cove. Consult boater’s maps and brochures available at Park Visitor Centers or go to www.cbp.gov .

Alcohol Ban

Open containers of alcohol are prohibited in campgrounds, on docks and in designated park waters, and on specified areas near Tod Harbor, Johns Island, Barum/Washington Islands, Hay Bay, Wight Island, Malone Bay, Chippewa Harbor, Conglomerate Bay, Moskey Basin, Lorelei Lane, Tobin Harbor, Merritt Lane, Passage Island, Duncan Bay, Bee Finger Bay, Lane Cove, Robinson Bay, Packer Cove, Belle Harbor, Crystal Cove, and McGregor Cove. Consult boater’s maps and brochures available at Park Visitor Centers or go to www.cbp.gov .

Pesticide Pollution

Head-pump out service is available at Windigo and Rock Harbor when the concession operation is open. Federal regulations prohibit the discharge of any waste, including gray water, into park waters. Vessels carrying spare fuel in portable containers must use legally approved containers. Fuel may not be stored on decks.

Castons

All vessels arriving from Canada (U.S. or Canadian) must clear U.S. customs at Windigo or Rock Harbor Visitor Center. As of 3/15/08, verbal declaration of citizenship for U.S. and Canadian travelers traveling across the border will no longer be sufficient, a government issued photo ID and birth certificate will be required. For additional information go to www.cbp.gov.

Divers

Please refer to your dive permit regulations concerning compressor use.

Fuels

Gasoline is sold from June 1 through September 8 at Windigo, gasoline and diesel fuel is available from September 8 to June at Rock Harbor. Diesel fuel is not available at Windigo. Early and late season service or fuel may be obtained at Windigo and Motz Island if personnel are available.

Greg Blust

Supervisory Park Ranger.
The Hunt for Moose Bones

In 2008, for the 21st year, Earthwatch volunteers will assist with wolf-moose research on Isle Royale. Earthwatch is an international non-profit organization that connects researchers with volunteers willing to donate their time, energy, and money. Isle Royale casts its spell over Earthwatch volunteers just as it does other visitors. Many come back multiple years. I have been fortunate to participate in fifteen trips.

The Isle Royale trips are among the most strenuous of the Earthwatch trips. Teams of three to five volunteers and their experienced leader spend a week hiking off-trail. We start with backpacks of forty pounds or more, carrying everything we will need. As our packs get lighter with the consumption of food, they are likely to get heavier with the addition of collected moose bones. If a skull has antlers attached, it adds significant weight. Frequently the week ends with heavier packs than at the start.

The primary role of the volunteers is looking for moose bones. We collect the skull, mandibles (lower jaw), and a metatarsal (lower rear leg bone), and any bones that show evidence of disease. We only collect jaw bones if there are teeth present. The incisors in the front of the lower jaw are prized for use in determining the moose’s age. We make notes about the location of the bones and the conditions in the area; and catalogue exactly what bones we find.

In some cases we are locating bones that researchers spotted the previous winter, or bones or carcasses that have been reported by park staff or visitors. However, the majority of the bones we find simply by hiking through brush and swamps. Climbing over frequent windfalls with a full pack can be challenging. Navigating through swamps is confusing and difficult. Finding a bone is always welcome, because you get to drop your pack to look for other bones. Usually the bones have been well-cleaned by the wolves, ravens and other scavengers, and time. There is always plenty to do. Live moose are observed to determine extent of hair loss. Fox and snowshoe hare are counted. Fresh wolf scat is collected for DNA analysis. In early years, we collected data from vegetation plots. In recent years, we have measured shed antlers.

Rolf Peterson states that Earthwatch teams make an important contribution to the wolf-moose study through their work in the field. In addition, they become ambassadors for the study. Many have given presentations or written articles regarding their experiences and the project. I have been on teams with members from Canada, Scotland, Northern Ireland, Germany, Italy, and coast to coast in the United States.

During my years of involvement, it has been interesting and rewarding to follow the research findings and to see what volunteers are contributing. I plan to be back for trip number sixteen in 2008.

Ron Eckoff
Earthwatch Volunteer
For more information about Earthwatch and volunteer trips to Isle Royale National Park go to www.isleroyalewolf.org or www.earthwatch.org.

Following in the Footsteps of Wolves

During warm seasons on Isle Royale, my attention is liable to dart away on the flight of a single insect. Vivid berries and brightly-hued flowers demand notice; to walk is to unravel a tangle of vegetation with my eyes. But during winter, distractions are eliminated. Winter emphasizes only the most recent occurrences. Ice crystals freeze movement. Snowstorms blot out excess. But tracks, recalling what motion winter does allow, can be protectively preserved by an unbroken bed of soft snow.

Unusually thin snow cover in January 2007 hindered aerial tracking of wolves, and researchers had yet to spot the Middle Pack. My destination was a nameless area on the north shore, halfway between Huginnin Cove and Finlander Reef, where I hoped to collect urine and pellet samples from each moose whose tracks I crossed.

A dusting of snow had fallen, but unfortunately not enough to aid spotting from the plane. On foot, fresh snow and bright sun made the winter woods a vacant expanse, brilliant and unmarked. Few red squirrels had even defiled the sparkling uniformity, and it seemed a pity to mar the surface with my footsteps. After walking a while, I spotted a line of marks ahead; marks that had not been stamped by moose hooves. There, in Middle Pack territory, glinted the fresh tracks of wolves.

A pack traveling in line — now with me following their tracks — swiftly traced stream beds, eluded ravines, and smoothly ascended banks. And a lot happened along the way! Here, an individual quit the queue. There, two tussled in a hollow. One old spruce received a spray of urine. Down an ice-crusted slope twenty-four paws had gripped securely, I slid. In a clearing, the nose-to-tail, single-file pattern fanned out and six wolves walked flank-to-flank, until they were realigned by perilous ground and leaning trunks.

Inside the cedar swamp, an impression of my own to the tracks of one wolf pack’s motion. But I needed to return to the warmth and good cheer back at camp. The pilot and researcher searching overhead for the Middle Pack would want to know about these fresh tracks, and soon! I made it back to Washington Harbor — though now, without the guidance of wolves, my route was awkwardly direct. The plane soon located six wolves near Lake Desor, several miles past where I had parted from their tracks.

It has been said those involved in the wolf-moose study for a long time share a particular wise glint in their eyes. After this brief acquiescence of my own to the tracks of one wolf pack, I better understand the success of the study. It has followed the paths of wolves and moose unresponsively, eagerly gliding behind each fresh lead to sometimes unknown destinations. That wise glint may simply be the reflection of so many fresh tracks in snow.

Beth Kolb
Biological Technician and Winter study volunteer, 2006 and 2007
Fishing at Isle Royale

A Michigan fishing license is required for fishing in Lake Superior, including narrow bays and harbors, and when transporting fish from the island to the mainland. If you are under 17 years of age, you may fish without a license. Licenses are not required to fish on the inland waters of Isle Royale; possession limits are the same as those set by the State of Michigan. Also see additional information on this page regarding special brook trout regulations. Anglers should refer to the Michigan fishing regulations for possession limits and detailed license requirements for Lake Superior (also see the chart on page 7 for a brief guide to regulations). Only 24-hour licenses are available on the island and only when concession services are open. You may purchase a Michigan fishing license online at www.michigan.gov/dnr.

Viral Hemorrhagic Septicemia

Viral Hemorrhagic Septicemia (VHS) is an exotic virus that could have severe impacts on fish in the Great Lakes. Below are some facts about the virus. The park is currently developing prevention and response efforts based on additional information about the disease and risks to the park’s fish community. Check the park website or with Visitor Center prior to your trip for additional information:

- VHS is a disease that may affect up to 37 fish species – Lake Trout and Coaster Brook Trout are at risk. The disease is often lethal, and can result in massive die-offs. Once VHS has invaded a body of water, there is no known way to eliminate it.
- VHS is in the lower Great Lakes, Lake St. Clair, and a few inland lakes of New York, Michigan, and Wisconsin. The virus has yet to be detected in Lake Superior.
- VHS does not affect humans, but humans are advised against consuming any fish suspected of carrying any disease. Fish that are affected by VHS may or may not show external signs such as red blotchy areas on the skin, redness near the base of fins, and bulging eyes with redness around the eye. Internal organs such as the liver or spleen often show signs of hemorrhaging. If you catch a fish with any of these signs at the park, please keep it, note the location and date that you caught it, and report it as soon as possible to a Visitor Center or park ranger.
- Live and dead fish bait, fish parts, and fish eggs from infected fish are some of the ways that the disease can be transmitted to wild fish populations. Freezing, salting, or borax treatment of eggs does not kill the virus. Check the park website or Visitor Center for bait use regulations during the 2008 season in park waters.
- Boat water in bilges and live wells from waters where VHS is present can spread the disease. Boaters should empty the bilges and live wells prior to leaving a mainland port, and again before entering park waters. Please ask for any specific updated guidelines and regulations before your trip.
- The park will be developing more informational material for visitors that will be available via its website and Visitor Centers.
- The following websites provide information on VHS and how you can help.
  - Isle Royale National Park website: http://www.nps.gov/isro/
  - Michigan Sea Grant: http://www.missagrant.umich.edu/ais/fish-diseases.html
  - Michigan DNR: http://www.michigan.gov/dnr
  - Wisconsin DNR: http://dnr.wi.gov/fish/vhs

Special Brook Trout Regulations

Recent surveys indicate populations are dangerously low and may be at risk of disappearing unless they have more protection. The National Park Service and Michigan DNR have implemented protective regulations at Isle Royale in order to help with the recovery of this once common fish.

Brook Trout can be identified by their nearly square tail and wormlike pattern on the back and dorsal fin. If you're uncertain about the species you catch, return it to the water.

Lake Superior Waters

(extend 4.5 miles out from the island)

Catch and release only for all brook trout, including all bays and harbors.

Inland Waters

Catch and release only in all streams and Hidden Lake. Only artificial lures and barbless hooks can be used in all streams and Hidden Lake.

Fishery Conservation

With its multitude of islands and bays on Lake Superior, as well as several lakes and streams on the interior of the island, Isle Royale provides many opportunities for outstanding recreational fishing for wild, native fish. How can you help to conserve and minimize damage to the Isle Royale fishery?

- Catch only what you plan to keep or eat. Catch and release, while encouraged, can be damaging and very stressful on fish.
- Know the minimum size of fish so that if they are too small they can be quickly released.
- Release larger fish and keep medium size fish to insure future productivity. Larger, more mature fish produce more offspring than smaller fish.
- Instead of killing trophy fish, consider a modern graphite mount produced from a picture of the fish.
- Return fish to the water as soon as possible. While unhooking them, keep fish in the water as much as possible.
- If fishing from shore, try to remove hooks while the fish are in the water, don't drag them up on the bank.
- Try not to handle fish, but if you need to, do so with a wet hand. Release handled fish gently by allowing them to swim from your hands rather than throw them back into the water.
- Do not squeeze the fish or place fingers in the gills, since a torn gill can cause the fish to bleed to death.
- Remove the hook gently. Pliers work best. Cut the line near the hook if a fish is deeply hooked. A steel hook will decompose in time.
- Use only artificial lures (required in inland waters) as exotic species can accidentally be introduced by using live bait and live bait are often swallowed deeper resulting in more damage to fish.
- Use single, barbless hooks or bend down the barbs on the hooks. Using larger hooks and live bait are often swallowed providing less damage.

Disposal of Fish Remains

At Rock Harbor, please use the fish cleaning station. At other locations, the preferred method to is dump remains chopped up into pieces 4" or less in deep (50' or deeper) water. This reduces the unsightly remains and odors around campgrounds and the unnaturally large gathering of gulls at these sites. At inland lakes the preferred method of disposal is to chop fish remains into pieces 4" or less and deposit into deep water via canoe. If you do not have a canoe, you could request the assistance of a canoeist. The alternate method is to chop up remains into pieces 4" or less and more at least 50 feet (15m) from campgrounds and throw remains as far as possible into deep water. These steps will eliminate the potential for attracting and feeding wildlife at campgrounds. Please clean fish away from docks and campgrounds. Do not throw remains in shallow water near shore or throw remains to gulls.

Transporting Fish to the Mainland

You are allowed only one day's catch in your possession. While the license holder remains on the Island, Michigan Department of Natural Resources (DNR) allows those with DNR permits to ship legally-taken fish on the Ranger III, Isle Royale Queen IV, Wenonah, Voyager II and the seaplane. This one-time per year permit covers up to a single day's catch. Fish must be claimed when the ferry service arrives at their destination. Permits may be obtained by writing: Department of Natural Resources, 447 U.S. 41 North, Baraga, Michigan 49908-9627 or calling (906) 353-6661. Fishermen returning on the Ranger III must check in their fish with the ship’s purser. Fish cannot be transported in coolers on private boats on board the Ranger III.

Fish Consumption Advisory

Contaminants discovered in the Park ecosystem remind us that although Isle Royale is remote, it is part of a global system. Ongoing research in six inland lakes (Sargent, Siskewit, Eva, Shesheebe, Wajigo, and Angleworm) shows fish with mercury levels exceeding the State of Michigan fish consumption advisories. For information on fish consumption advisories check with park staff or visit the Michigan Department of Community Health website at: http://www.michigan.gov/mdch

Jay Glase, Fishery Biologist, and Larry Kangas, Chief, Law Enforcement Division

Marine Warning: Boaters beware. Lake Superior levels are significantly down. Use caution in going around docks and reefs.
Transportation Services

**RANGER III**
National Park Service owned and operated.
5 hours one-way to Mott Island and Windigo, 6 hours one-way to Rock Harbor. 160 lbs., 128 passengers per vessel.

**SCHEDULE**
Eastern Daylight Time
June 1 thru September 13
Rock Harbor to Houghton
- 8:00 a.m.
- 9:00 a.m.
- 10:00 a.m.
- 11:00 a.m.
- 12:00 p.m.
- 1:00 p.m.
- 2:00 p.m.
- 3:00 p.m.
- 4:00 p.m.
- 5:00 p.m.
- 6:00 p.m.
- 7:00 p.m.
- 8:00 p.m.
- 9:00 p.m.
- 10:00 p.m.
- 11:00 p.m.
- 12:00 a.m.
Houghton to Windigo
- 7:00 a.m.
- 8:00 a.m.
- 9:00 a.m.
- 10:00 a.m.
- 11:00 a.m.
- 12:00 p.m.
- 1:00 p.m.
- 2:00 p.m.
- 3:00 p.m.
- 4:00 p.m.
- 5:00 p.m.
- 6:00 p.m.
- 7:00 p.m.
- 8:00 p.m.
- 9:00 p.m.
- 10:00 p.m.
- 11:00 p.m.
- 12:00 a.m.

**ISLE ROYALE QUEEN IV**
3 hours one-way, concession operated, 101 ft., 110 passenger vessel

**VOYAGEUR II**
Grand Portage to Windingo - 2 hours one-way, Windigo to Rock Harbor - 5 hours one-way, concession operated, 60 ft., diesel powered vessel.

**SCHEDULE**
Eastern Daylight Time
June 17 thru July 31
- 9:00 a.m.
- 10:00 a.m.
- 11:00 a.m.
- 12:00 p.m.
- 1:00 p.m.
- 2:00 p.m.
- 3:00 p.m.
- 4:00 p.m.
- 5:00 p.m.
- 6:00 p.m.
- 7:00 p.m.
- 8:00 p.m.
- 9:00 p.m.
- 10:00 p.m.
- 11:00 p.m.
- 12:00 a.m.

**SEALPANE**
Air service to Isle Royale operates from the Houghton County Airport May 15 through September 15.

**WENONAH**
3 hours one-way, concession operated, 63 ft. vessel.

The Wenonah schedule is dependant on adequate Lake Superior water levels.

**SCHEDULE**
Central Daylight Time
Grand Portage to Windigo:
- Departure 8:00 a.m.
- July 1 thru August 13
- September 14 thru October 31
- 9:00 a.m. Wed, Th, Fri, Sat, Sun,
- July 20 thru August 20
- Friday round trip to Windigo on the Voyageur II.
- July 1 thru Aug 15, if Wenonah is not running.

**FARES**
ONE WAY
Adults
- Windigo to Rock Harbor $50.00
- Windigo to Houghton $58.00

Children
- Windigo to Rock Harbor $30.00
- Windigo to Houghton $36.00

**GRAND PORTAGE, MINNESOTA**

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- July 20 thru August 20
- Friday round trip to Windigo on the Voyageur II.
- July 1 thru Aug 15, if Wenonah is not running.

**FARES**
ONE WAY
Adults
- $58.00
- Children (3 thru 11 years) $36.00

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ONE WAY
Adults
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- Children (3 thru 11 years) $36.00

**GRAND PORTAGE, MINNESOTA**

**SEALPANE**
Air service to Isle Royale operates from the Houghton County Airport May 15 through September 15.
Join the Isle Royale Natural History Association & Support Isle Royale National Park Programs

The Isle Royale Natural History Association, in partnership with the National Park Service, promotes the public's understanding and appreciation of Isle Royale National Park and Keweenaw National Historical Park through education and research.

By publishing and selling products about Isle Royale National Park and Keweenaw National Historical Park, we educate people about these special places and raise funds that are re-invested in the parks to support research and interpretive programs.

Every year the Isle Royale Natural History Association contributes approximately $25,000 in cash and in-kind aid to Isle Royale National Park.

YOU CAN HELP....
You can support the work of the Isle Royale Natural History Association and our partner parks by becoming a contributing member of our organization. Your tax-deductible contribution will help us share the stories of Isle Royale National Park and Keweenaw National Historical Park with people of all ages, around the world.

Membership levels are:
- Life $200 (Payable in 5 installments)
- Patron 100
- Sustaining 50
- Household 35
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IRNHA member benefits:
- a 10% discount on all purchases from IRNHA outlets and on other National Park Visitor Centers throughout the U.S.
- 3 issues of Wolf's Eye newsletter,
- park newspapers,
- invitations to park programs, trips, and events,
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Become a member today!
Call us at 800-678-6925, or join online at www.irnha.org

The Isle Royale Natural History Association:
Sells books and other educational products in visitor centers at Houghton, Rock Harbor & Windigo;

Windigo Visitor Center
Conducts Volunteer Service Projects on Isle Royale;
2007 IRNHA Service participants and NPS staff at the newly painted privy

Conducts educational programs and field trips.

Friends of Fashion presented Women of Isle Royale show at the 2007 50th anniversary celebration.

Ruth Baker doing some plant identification on 2007 IRNHA Botany Trip.

Books, Maps & More

Your purchases help support Isle Royale National Park!

NEW!! Island Life: An Isle Royale Nature Guide $19.95
A complete guide to the common flora and fauna of Isle Royale in one easy-to-use and easy-to-carry guide. Over 150 species of mammals, birds, fish, reptiles, trees, and flowers, each illustrated with a color photograph or drawing. 168 pages.
Authors: Ted Gostomski & Janet Marr

NEW!! Wolf/Moose Study Poster $12.95
Lapel Pin
Limited edition poster and pin celebrating the 50th anniversary of the Isle Royale wolf/moose study. Poster is 11" x 14". Lapel Pin is ¼" x 1 1/16".

Trails Illustrated Map $9.95
Topographic map includes valuable wilderness tips and Leave No Trace guidelines, along with updated trails, trailheads, points of interest, campgrounds, and much more. Printed on waterproof, tear-resistant material with a plastic coating for extreme durability. Measures 4" x 9" folded and 38" x 25" fully opened. Scale = 1:50,000. Updated 2006.

NOAA Lake Charts $20.25
Official navigation charts for Isle Royale, Lake Superior, Grand Portage, the Great Lakes, Keweenaw Peninsula, and Portage Canal. Soundings in feet. Folded or rolled. Add $3.00 for mailing tube if rolled.

Isle Royale National Park:
- Foot Trails and Water Routes $15.95
The park's authoritative illustrated guidebook. All the information you need to plan everything from a series of day hikes to a two-week trek that circles the park. A must for planning your backpacking or canoeing trip to Isle Royale. 136 pages. Third edition. Author: Jim DuFresne

Isle Royale: A Photographic History $29.95
The history of Isle Royale from early exploration in the 1800s to the birth of the national park as told through historical photos and maps. Chapters: Exploration, Copper Mining, Navigation, Commercial Fishing, Recreation, and Creating a National Park. 160 pages. Authors: Tom & Kendra Gale

The Geologic Story of Isle Royale National Park $10.95
Classic study of Isle Royale's geologic history and landscape, the shifting of rocks and specific minerals which produced one of the most beautiful islands in North America. Maps, photos, and illustrations. 66 pages. Author: N. King Huber

Diaries of an Isle Royale Fisherman $12.95
Reproductions of the journals and correspondence of Elling Seglem who fished from Isle Royale's Fisherman's Home between 1920 and 1932. These newspaper-format letters give a personal view of the birth of the national park as told through historical photos and maps. Chapters: Exploration, Copper Mining, Navigation, Commercial Fishing, Recreation, and Creating a National Park. 160 pages. Authors: Rolf Peterson

Exploring Isle Royale DVD $21.95
This orientation video produced by the National Park Service shows how to best enjoy the island's many attributes, including its wildlife, landscapes, and man-made structures. 28 minutes.

Isle Royale Wolf T-Shirt $16.95
Heather gray heavy cotton short-sleeve T-shirt with red wolf design in tones of black, gray and brown. Adult sizes 5 to XXL.

Special Value Packages

Hiking & Canoeing Package $26.00
Includes the Trails Illustrated map, the book Isle Royale National Park: Foot Trails and Water Routes, and the park checklists of birds, mammals, and rocks.

Fishing Package $25.00
Includes the Isle Royale Navigation Chart, the book The Fishes of Isle Royale, and copies of Isle Royale fishing regulations and Aquatic Invaders brochure.

Visit our sales outlets at Isle Royale National Park Visitor Centers, on the waterfront in Houghton, Michigan, and on the island at Rock Harbor and Windigo.

You can support the work of the Isle Royale Natural History Association and our partner parks by becoming a contributing member of our organization. Your tax-deductible contribution will help us share the stories of Isle Royale National Park and Keweenaw National Historical Park with people of all ages, around the world.

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