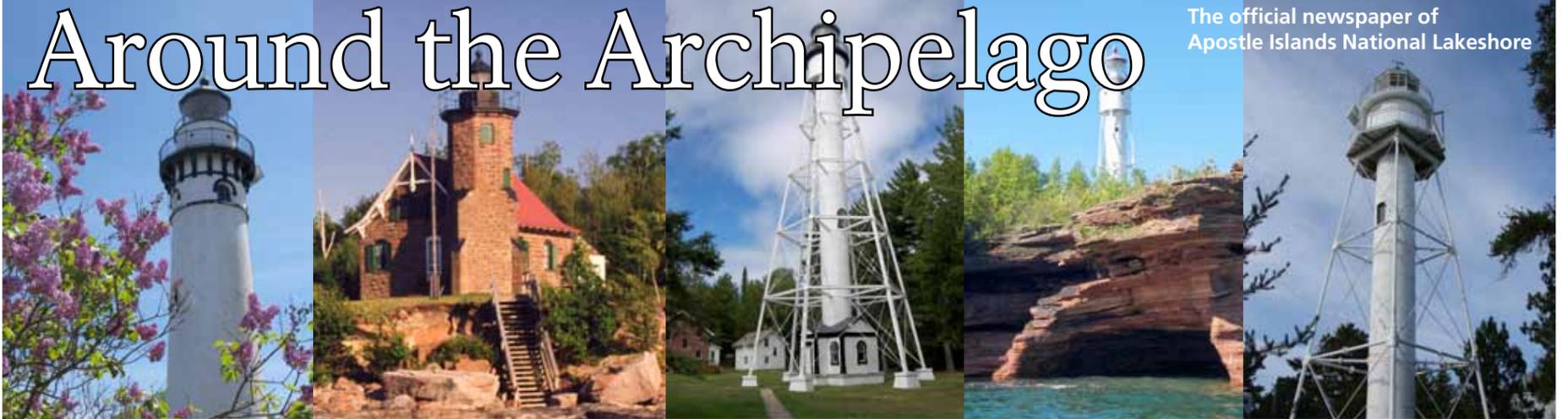




# Around the Archipelago

The official newspaper of  
Apostle Islands National Lakeshore



## American “Idols” Get Well-Deserved Attention

THEY HAVE FAN CLUBS AND WEB SITES. YOU CAN FIND their likenesses on posters, magnets, T-shirts, postcards, Christmas ornaments, books, yard art, and jigsaw puzzles. They are America’s lighthouses.

These elegant, silent sentinels, topped with glowing lanterns, poised above rugged and scenic coastlines are poignant images of America’s maritime frontiers. They tell us inspiring stories about the lonely, difficult, but seemingly romantic lives of the men and women who tended these lights and raised families in some of the most remote places imaginable. Amazingly, many are still working aids to navigation, with automated solar-powered lamps still flashing where older oil lamps flared a century ago.

Some fans of lighthouse history make it a lifetime quest to visit as many of these locations as possible, slowly climbing the spiral stairs to the startling blue vista of the lantern room, pacing old parlors and lawns, re-living in their mind’s eye the ordered but isolated world of the lighthouse keeper. For many of these fans, the Apostle Islands are a must-do destination for their lighthouse “life list.”

Yet while lighthouses grow in popularity and interest, they’re also, shall we say, maturing. At Apostle Islands, we’ll be celebrating birthdays of 155 years for our oldest light (Michigan Island, 1856) and a youthful 113 years for our youngest (Devils, 1898). That is, as an average, 134 years of Lake Superior winds, rain, snow, ice, and whatever else Gitche Gumee could throw at these buildings. For the “Keepers of the Lights,” this has meant a lifetime of careful maintenance: painting, structural repairs, re-roofing, re-glazing, utility replacement; the list is endless, and the work is complicated by limitations of staff, funds, and of course, the remote island locations. In spite of years of care by the Lighthouse Board, the Coast Guard, the National Park Service, and lighthouse friends and volunteers, the lights of the Apostles are losing ground against Mother Nature. But it’s good to have friends. With the help of lighthouse preservationists and former US Congressman Dave Obey, the National Park Service received an appropriation to undertake major preservation efforts at the light stations of Michigan, Sand, Outer, Long, and Devils islands.

This effort goes way beyond paint and shingles. Teams of architects and historians have combed each light station, documenting the history and condition of every feature from the top of the tower to the seats of the privies. Planners have developed stacks of detailed maps and alternatives, trying to address the immediate problems at each station, while suggesting those areas where a higher level of rehabilitation might be obtained. But this is just the warm-up act. In 2011, the environmental assessment on the project plans and studies has been completed and now the real work begins. Through 2012-2013, the Park Service plans to begin major repair efforts at the five light stations. Some of the work will be “behind the scenes” fixing problems (like leaky basements and roofs) which most of the public



**Top: The original Michigan Island lighthouse will be rehabilitated inside and out beginning in 2012.**  
**Bottom: Landscape clearing at several light stations (such as Long Island) will improve visibility to and from the buildings.**

doesn’t see but which will cause permanent damage to the buildings if not checked. But the vast majority of the work will result in changes the public can readily appreciate: rehabilitated interiors and exteriors, removal of encroaching vegetation, repairs to rotten woodwork and corroded metalwork. Michigan Island in particular is slated for a more extensive “makeover.” The grounds will be opened up to more closely approximate their 1920s appearance. The original 1856 lighthouse will see extensive repair work, as will the second (1929) tower, and 1928 keeper’s quarters. As interior work is completed on the 1856 lighthouse, new exhibits and other visitor enhancements will be added. The goal is for visitors to find improvements at each station, with a substantially expanded visitor experience at Michigan Island.

It’s America’s biggest re-investment ever in the lights of the Apostles. We hope you’ll come back to see them restored, at least in part, to some of their former glory.

And of course, we’ll keep the light on for you.

### Lighthouse Update

Preservation teams are rolling up their sleeves at Devils, Long, and Michigan islands in preparation for bigger work ahead in 2012. In the fall of 2010, a team of lighthouse preservation specialists completed work on the Fresnel lens and lantern room of the Devils Island light tower. They carefully cleaned and stabilized the lens prisms, as well as replacing all the lantern room glass and repairing the metal door to the gallery. Tower ventilation openings were cleared of dirt and abandoned birds nests. The results will help preserve the 100+ year old lens and the tall tower holding it high above the lake. In 2011, another work crew will head to the south end of Devils Island to repair the foundation of the boathouse that has served the light station for more than a century.



At Long Island, park staff will begin cutting some of the vegetation that is encroaching on the La Pointe light tower and keeper’s quarters. This will help the structures to “breathe” better, preventing moisture build-up and damage from encroaching root systems and heavy branches. As a bonus, visitors will be able to better view these historic features from the lake. Staff will also begin work on improving ventilation in the keeper’s quarters basement, in order to fight mold and other moisture-related problems in the building.

Lastly, Michigan Island Light Station (slated for more intensive preservation work in 2012) will see some preliminary vegetation clearing as well as engineering analysis of its dock. The vegetation clearing will help reduce moisture around the light station structures, and will begin a long-term effort to restore some of the original light station grounds and views to/from the lake. Engineering analysis at the dock aims to improve the dock’s flow-through design to prevent trapping excessive sediment loads alongside the dock, while still maintaining shoreline protection for the light station and preserving natural sandscapes.

### 3 Summer Info



### 5 Safety



### 7 Shipwrecks



### Archipelago:

- 1) a large group of islands,
- 2) a sea containing a large group of islands.



National Park Service  
U.S. Department of the Interior



### Apostle Islands National Lakeshore

Wisconsin's northernmost landscape juts into Lake Superior as the scenic archipelago of 22 Apostle Islands. The area's scenic, historical, biological, and recreational values were recognized in 1970 when Congress named 20 of the islands and 2,500 acres of the peninsula as a national lakeshore. In 1986, Long Island was also included. The Gaylord Nelson Wilderness, including 33,500 acres of the lakeshore, was established in 2004.

This fascinating unit of the National Park System features a combination of spectacular natural beauty and rich cultural history. The wooded islands are trimmed with sea caves, sandstone cliffs, and miles of pristine sand beaches. Native Americans, voyageurs, loggers, stone cutters, farmers, and commercial fishermen all left their marks on the islands. Six light stations were built in the Apostles to aid Great Lakes navigation.

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APIS\_Webmaster@nps.gov

#### Facebook

http://www.facebook.com/  
apostleislandsnationallakeshore



Apostle Islands National Lakeshore has a Fan Page on Facebook. Here, you will be able to share with others your experiences at the Apostles. Occasionally, we'll ask a thought provoking question, tell you "what is happening now," engage in conversations, and bring clarity to any rumors floating around out there.

The National Park Service cares for the special places saved by the American people so that all may experience our heritage.

# In the Public Interest

By Bob Krumenaker  
Park Superintendent

In 2011, we are but five years from the 100th anniversary of the creation of the National Park Service (NPS), but it's been 139 years since Yellowstone, the world's first national park, was established by a foresighted act of Congress. The Apostle Islands National Lakeshore is much younger, only 41 years old this year. Yellowstone and Apostle Islands and 392 other authentic places comprise the National Park System.

What unites these places? It's interesting, instructive, and I suggest, essential, to go back to the original laws, which in these cases are quite eloquent:

1872 Yellowstone National Park Act:  
*"for the benefit and enjoyment of the people"*

1916 National Park Service Organic Act:  
*"to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."*

1970 Apostle Islands National Lakeshore Act:  
*"to conserve and develop for the benefit, inspiration, education, recreational use, and enjoyment of the public"*

1978 Redwood Amendment to the Organic Act:

*"Congress further reaffirms, declares, and directs the promotion and regulation of the various areas of the National Park System . . . shall be . . . to the common benefit of all the people of the United States. The . . . protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System"*

Common benefit. High public value and integrity. Strong words that we take very seriously.

Clearly, Congress intended that the NPS and the parks be managed first and foremost in the public interest. It seems particularly appropriate today, considering the current debate about the proper role of government, to reflect on this. From the first days of Yellowstone to the present, there have been and will always be differences of opinion as to how the parks ought to be managed. How much development is appropriate? What kinds of uses are allowed? Is there too much, or too little, regulation? What rights do indigenous peoples retain? Are private residents allowed to live in the park? Ultimately, the answers to these questions swirl around the definition of just *what is the public interest?* Do the park's actions maintain or enhance the high public value and integrity of the System? Are they for the common benefit of the people?

This year, the staff at Apostle Islands is wrapping up a six year effort to produce the park's long-term General Management Plan (see page 6). We've released a draft plan for rehabilitation of Light Stations consistent with that plan and the funding direction we received from Congress in 2009-2010. Drafts have been shared with the public and



Roosevelt Arch at Yellowstone National Park's north entrance is engraved with the words from the 1872 Yellowstone National Park Act that identify the reason for the park's creation.

other agencies and the affiliated tribes, and we've considered thousands of comments before producing final plans. Since 2002 we've held over 40 public meetings where the park's direction and plans were up for discussion. Have we satisfied everyone? No. But I hope we've always been mindful of the high public value and integrity of the park and the National Park System.

There's a lot that happens behind the scenes in this and every national park, and I want to recognize the exemplary work done by park staff that is usually hidden from view. Maintenance workers clear trails of winter windfalls before most visitors arrive. Education specialists lead the "island school" each May, providing hundreds of

Balance the budget. Yes, we do that; in fact, this park is accountable to spend only what we are authorized by Congress each year. You may have heard that cost-of-living increases for federal employees have been frozen for at least two years; what you might not know is that the average NPS employee in a typical year contributes a minimum of 7% of their salary towards their retirement program, matching the government's share. Most full-time federal employees, in fact, contribute to Social Security and Medicare and have an optional 401k retirement plan which is only partially matched by the federal government. Apostle Islands employees entitled to health benefits pay, on average, over 30% of the cost of their health insurance. Staff who live in park housing pay



Public comments are crucial for assuring that future plans for Apostle Islands National Lakeshore are "in the public interest". More than 40 public meetings have been held since 2002 to discuss park plans.

area students an opportunity to camp (many for the first time) on an island. Preservation specialists and laborers preserve and restore the park's 158 historic buildings. Biologists, facility managers, and cultural resource specialists write proposals to fund research and restoration work that the normal park budget could never afford. Park rangers recruit and supervise an average of 140 volunteers every year, leveraging the work that can be done by paid staff while creating a growing cadre of park stewards. Interpretive specialists produce this newspaper, the web page, and interpretive displays, to share what we know about this place with visitors who come in person and those who visit electronically. Probably least visible of all are the IT specialists, budget staff, and other administrators who keep the books, maintain the computers, and make sure we balance the budget each year.

fair market rent. We all pay federal and state income taxes.

We're proud of the work we do and appreciative of the salary and benefits we earn, well aware that we do so in the public interest and subject to the public's scrutiny. The future of this and every other national park, as well as our jobs, depends on the public believing we are working in their interest. We therefore welcome your feedback on how we are doing. Every one of us chose to work here, most because it is a calling as much as a job. It's been said that NPS employees get paid in sunsets. We're grateful that our compensation isn't limited to sunsets . . . but we sure are glad we get those, too. Thank you for your support, and I hope you have a wonderful, and safe, visit to the Apostle Islands this year.

# Planning a Visit

## Information/Orientation



### Headquarters Visitor Center

Open Mon- Fri 8 am to 4:30 pm, May 1-May 27  
Open Daily 8 am to 4:30 pm, May 28-June 17  
Open Daily 8 am to 5 pm, June 18-Sept 3  
Open Daily 8 am to 4:30 pm, Sept 4-Oct 9  
Open M- F 8 am to 4:30 pm, Oct 11-May, 2012

### Little Sand Bay Visitor Center

Open 9 am to 5 pm May 28 - 30  
Open Daily 9 am to 5 pm, June 18-Sept. 5

## Camping



Camping is available on 19 of the lakeshore's 21 islands and at one campsite on the mainland. Permits are required for all camping in the national lakeshore. Individual campsites (for one to seven campers) can be reserved beginning one month before the start of a trip. Group campsites (for eight to 20 campers) can be reserved beginning the second week in January. Camping zones have also been established on 15 islands in the national lakeshore for visitors seeking a remote backcountry experience. A nightly fee is charged for camping (see chart on page 4). See the brochure "Camping in the Apostle Islands" for more information. Pictures and descriptions of Apostle Islands campsites are available on-line at [www.nps.gov/apis/planyourvisit/camping.htm](http://www.nps.gov/apis/planyourvisit/camping.htm)

## Sailing and Boating



The Apostle Islands offer outstanding boating opportunities. Public docks are found on 13 of the islands in the national lakeshore. Space is reserved at some docks for National Park Service (NPS) vessels and excursion boats. The remaining space is available to the public on a first come, first served basis. A fee is charged for docking any time between 6 pm and 6 am. The fee is \$10 for vessels up to 40 feet long or \$20 for vessels over 40 feet long. Public boat launches (non-NPS) are located in Ashland, Bayfield, Cornucopia, Little Sand Bay, Red Cliff, and Washburn. The cost is \$5/launch in Bayfield, \$6/launch at Little Sand Bay. All watercraft must be decontaminated before launching in the lake. Marinas are in Ashland, Bayfield, Cornucopia, LaPointe, Pike's Bay, Port Superior, Red Cliff, Roys Point, Schooner Bay, and Washburn.

## Personal Watercraft (Jet skis)

The use of personal watercraft is not allowed within the national lakeshore's boundaries.

## Paddling



Sea kayaks are very popular for travel among the Apostle Islands. To prevent the spread of the deadly VHS virus, all watercraft must be decontaminated before launching in the lake. Two kayak launch points are located within the national lakeshore's mainland unit. Meyers Beach is a popular spot to begin a tour to the mainland sea caves. There is a day use parking fee at Meyers Beach. A kayak launch is located west of the NPS dock at Little Sand Bay. Temporary parking for loading/unloading equipment is located to the west of the NPS visitor center. Apostle Islands Cruises will transport a canoe or kayak to the islands for a \$20 fee. For more information check our website at [www.nps.gov/apis/planyourvisit/kayaking.htm](http://www.nps.gov/apis/planyourvisit/kayaking.htm)

## Fishing and Hunting

A Wisconsin fishing license with a Great Lakes trout and salmon stamp is required for fishermen 16 or older. Sport fishermen are drawn to the Apostle Islands region by the opportunities to catch lake trout, rainbow trout, brown trout, and coho salmon. Emergency restrictions were implemented in 2008 to prevent the spread of the deadly VHS virus. More information is available on our website at [www.nps.gov/apis/planyourvisit/fishing.htm](http://www.nps.gov/apis/planyourvisit/fishing.htm)

Hunting activity may occur in the national lakeshore from September (after Labor Day) through May 15. A muzzle loader deer hunt (by permit only) is held on the islands during the month of October. Archery hunts for island deer run from mid-September to the end of September and from the beginning of November through December. For detailed information go to <http://www.nps.gov/apis/planyourvisit/hunting.htm> or email: [apis\\_resource\\_issues@nps.gov](mailto:apis_resource_issues@nps.gov). All hunting is conducted in compliance with federal and state law.

## Firearms

As of February 22, 2010, a federal law allows people who can legally possess firearms under federal, Wisconsin, and local laws to possess firearms in Apostle Islands National Lakeshore. It is the visitor's responsibility to understand and comply with all applicable state, local, and federal firearms laws. Federal law prohibits firearms in certain facilities in this park; those places are posted with signs at public entrances.

## Accessibility

Campsite #1 in the Presque Isle campground on Stockton Island offers accessibility with assistance to park visitors. A ramp leads from the main dock to the visitor center, wheelchair accessible toilets, and the campsite. The visitor center and restrooms at the Little Sand Bay visitor center are accessible. An accessible walkway also leads to the Hokenson Brothers Fishery at Little Sand Bay. The Headquarters visitor center in Bayfield features accessible parking and restroom facilities. A wooden ramp leads to the west entrance of the building. Apostle Islands Cruises can accommodate visitors with wheelchairs. Deckhands will carry wheelchair-bound visitors onto the main deck of the "Island Princess." The aisle on the main deck is extra wide and one of the restrooms is accessible.

## Apostle Islands Cruises Tour Summary - 2011

Cruise Name	Description	Dates/Times
Grand Tour \$39.95/adult, \$23.95/child	3.25 hour nonstop cruise around Devils Island	10 am daily May 14-Oct. 16
Stockton Shuttle Dayhiker:\$41.95/ adult, \$24.95/child Camper: \$54.95/ adult, \$32.95/child	4.5 hour shuttle to Stockton Island (day hike/camp)	8:30 am, Tue-Fri-Sat-Sun July 1-Sept. 4
Raspberry Island Lighthouse Shuttle \$41.95/adult, \$24.95/child	4 hour shuttle to Raspberry Island (additional fee for lighthouse tour)	1:30 pm, Tue-Fri-Sat-Sun July 1-Sept. 4
Islander Cruise \$30.95/adult, \$17.95/child	2 hour nonstop cruise past Basswood, Hermit, & Raspberry Islands and back	2 pm Tue-Sat, June 18 - 30 and Sept. 1-16 2 pm Mon-Sat, July 1-Aug. 31
Evening Grand Tour-\$39.95/adult, \$23.95/child	3.25 hour nonstop cruise around Devils Island	5:00 pm, Mon-Sat July 1 - Aug. 20

**Call 800-323-7619 for Reservations**

## Island Tours/Shuttles



Apostle Islands Cruises (an authorized National Park Service concessioner) offers a variety of nonstop sight seeing excursions and island shuttles featuring stops at several islands (see schedule). Their office is located in the Bayfield Pavilion near the city dock at the bottom of Rittenhouse Avenue in Bayfield, WI. All cruises depart from Bayfield. Reservations are recommended. For more information call 800-323-7619 or visit on-line at [www.apostleisland.com](http://www.apostleisland.com)

## Park Fees

### Camping (per site per night)

Individual site or camping zone: \$10  
Group site: \$20

### Docking (between 6 pm and 6 am)

Boats less than 40 feet: \$10  
Six-night docking ticket book: \$50  
Boats 40 feet or more: \$20  
Six-night docking ticket book: \$100

### Parking

Meyers Beach day use, vehicle  
less than 20' (including trailer): \$3  
Meyers Beach day use,  
vehicle 20' or more: \$5  
Meyers Beach annual parking pass  
(cost based on vehicle length): \$15-25  
Bayfield Headquarters overnight  
(cost based on vehicle length): \$5-8

### Guided tours/interpretive programs

Per person: \$3  
Per immediate family: \$8

All of the fee revenue collected at Apostle Islands National Lakeshore stays in the park and is used for critical and highly visible projects to benefit the public.

The Golden Age Passport or Interagency Senior Pass (for U.S. citizens 62 or older) and Golden Access Passport or Interagency Access Pass (for permanently disabled U.S. citizens) provide a

50% discount on camping, docking, parking and guided tours at Apostle Islands National Lakeshore.

## Guided Activities

Park staff offer a variety of guided activities from June to September. Check at park visitor centers or bulletin boards for specific times, topics, and locations.



## Guided Lighthouse Tours

Guided tours of the restored Raspberry Island lighthouse will be offered daily between 9 am and 4:30 pm from June 18 through late September. Tours include access to the lighthouse tower and the refurbished head lighthouse keeper's quarters. Guided tours at Raspberry Island cost \$3/person or \$8/ immediate family.

Park staff may be available to conduct free guided tours of the lighthouses at Devils, Michigan, and Sand islands from late June to September. Tours will generally be available daily on request from about 9 am to 4:30 p.m. Guided tours will NOT be available before 9 am or after 4:30 p.m. without prior arrangements.

## Campfire Programs

Join park staff at the Presque Isle campfire circle on Stockton Island nightly from late June through Labor Day. The free talks last about 45 minutes and cover such topics as bears, wilderness, bears, shipwrecks, and (did we mention) ...bears. Programs start at twilight.

## Self-Guided Tours and Walks

Brochures for self-guided tours and walks are available from brochure boxes at Little Sand Bay's Hokenson Brothers Fishery, the Manitou Island Fish Camp, and the Julian Bay Trail on Stockton Island. The brochures can be purchased, or used for free and returned.

# Changing Conditions Affecting Flora and Fauna?

Park employees regularly check the status and condition of plant and wildlife species. In recent years we have noticed three unexplained situations relating to flora and fauna in the islands that may be connected. In one case, beach grass is dying off on several sandscapes in the park creating bare patches of ground. In another instance, rare Arctic plant species like butterwort and bird's-eye primrose started disappearing from rock ledges on Devils Island. A third mystery involves declining numbers of bird species found nesting in the islands in the past few years. Besides the letter B, what do beach grass, butterworts, and birds have in common? Perhaps part of the answer lies in changes that have been occurring in the Great Lakes' climate.



Changes in climate may be responsible for several conditions recently identified in the Apostle Islands. Dying beach grass (above left) and the decline of bird's-eye primrose (above right) may be related to changes in temperature, precipitation, and lake levels noticed in the islands.

Between 2001 and 2004 several organizations and researchers made predictions on how climate change would impact the Great Lakes. These predictions included changes to temperatures, precipitation, lake conditions, and storms including:

- warmer temperatures in summer and winter months
- less precipitation in the summer, and more in the winter
- increasing lake temperatures coupled with later freeze-up and earlier ice-out; less lake ice; increasing evaporation; and lower lake levels
- more intense storms, as well as more spring flooding

We've seen evidence that these predictions were correct. The Apostle Islands region has had warmer summers with higher wind speeds in recent years. Water and air temperatures in the Lake Superior region have increased steadily since 1980, with water temperatures rising at twice the rate of air temperatures. The lake has also experienced record low lake levels in the last five years.

Beaches, dunes, and sandy shorelines are very exposed to the elements. High temperatures and wind dry out plants. Lower lake levels may reduce the amount of water available for plants due to lower water tables. Long-term monitoring of beach grass in the park shows that plants are dying off faster than they can reproduce in areas on several islands. Dying vegetation creates

bare patches that permit higher rates of erosion in popular sandscape areas.

Butterwort (a state endangered species) and bird's-eye primrose (a species of special concern) are found in moist areas on north facing cliffs and rock ledges. Monitoring at Devils Island shows that these plants are declining in numbers and have almost disappeared in one location where they once flourished. Low lake levels may reduce the likelihood of water reaching rock shelves to form splash pools...the moist habitat needed for these plants to survive.

Monitoring for breeding songbirds during 2008 and 2009 indicated the lowest numbers of species recorded since 1995. Research outside the park has shown that songbirds are migrating earlier, traveling farther

north, and laying eggs earlier. This can be problematic if food sources on nesting grounds are not at peak levels to correspond with the high energy requirements of nesting. It also means these birds are more vulnerable to late winter storms and cold weather. This is particularly true of long distance migrants...the neo-tropical species that typically make up the majority of the park's songbirds.

Are changes in climate responsible for these trends? The evidence is compelling, but the jury is still out. We have recognized the problems and will continue to investigate the declining beach grass, disappearing rare plants, and low numbers of songbird species to determine the causes of, and what might be done to address, these issues.

## Climate Change...Spreading the Word

Apostle Islands National Lakeshore is one of Lake Superior's five U. S. National Park units. Together with Grand Portage National Monument, Isle Royale National Park, Keweenaw National Historical Park, and Pictured Rocks National Lakeshore, they serve to protect over 1,120 square miles of unique habitat and national heritage. These places are at risk from the impacts of climate change. Some of the projected physical changes include warming air and water temperatures, falling lake levels, increased severe storm activity, increased vector borne diseases and increased invasions of exotic species. These changes have consequences for communities that rely on the resources of Lake Superior for their livelihood, cultural identity, traditions and recreation. Practices indicative of this region, such as wild ricing, maple sugaring and ice fishing are all at risk from the impacts of a changing climate.



Visitors learn about the impacts of climate change in the Apostle Islands from exhibits at the visitor center on Stockton Island.

Though uncertainty remains about the speed and extent of climate change, and how ecosystems will respond, it is clear that the Great Lakes Region is vulnerable. The risk to valuable natural and cultural resources offer good reason to promote practices that mitigate the causes of climate change and those that help humans and habitats better adapt to the impacts of climate change. An integral component of planning for climate change is an effective communication strategy.

### Approach

The goal of a climate change communication strategy is to reach a wide audience including policy-makers, scientists, students, and the general public to communicate the challenges of protecting the resources of Lake Superior parks under changing climatic conditions. The following inform the park's approach to a climate change communication strategy:

- **Uncertainty:** There is still much to learn. As climate change and the response of local ecosystems become better understood, this new information needs to be communicated accurately and efficiently.
- **Diversity:** It is not enough to simply provide information. Communication should occur in different styles and approaches to cater to our diverse audiences.
- **Interconnection:** By its very nature climate change is regional in scope; the consequences will not be limited by political boundaries. National Park Service sites on Lake Superior must be prepared to act in close concert with other federal, state and local partners in developing and communicating a coordinated climate change strategy.
- **Integration:** Planning for climate change

will take an integrated approach that includes mitigation, adaptation, scientific monitoring and assessment and communication.

### Tools and Techniques

#### Participation

- Continual support of environmental stewardship initiatives at local, regional and national levels.
- Include Climate Change discussions and actions through Lakeshore "Green Team" activities.
- Assist

implementation of Climate Friendly Parks throughout the region ([www.nps.gov/climatefriendlyparks/](http://www.nps.gov/climatefriendlyparks/)).

#### Education

- Incorporate Climate Change in education outreach programming.
- Incorporate Climate Change in off-site programming.
- Present Climate Change topics at on-site programming.
- Keep up to date and communicate impacts and adaptation strategies as data is collected in Great Lakes parks.

#### Public Media and Outreach

- Develop and post Climate Change information and articles on the park website. <http://www.nps.gov/apis/naturescience/climate-change-and-sustainability.htm>
- Provide up to date information and current

events on the Apostle Islands Facebook page.

- Distribute Great Lakes and National Park Service Climate Change brochures.
- Install and update Climate Change wayside exhibits and exhibits on Stockton Island.

### Engagement

- Acknowledge internally and publicly the park's mitigation gains from sustainable activities.
- Empower park staff to be innovative and make changes.
- Provide practical tools for visitors to make a difference!

We have already begun to see impacts of climate change on our natural and cultural resources. We need everyone's help to protect your national parks for future generations.

## Mitigating Our Impacts

**Apostle Islands National Lakeshore has reduced the amount of waste going into local landfills by implementing a recycling program that includes not only paper, plastics and glass, but also metals, batteries and other miscellaneous materials, which has a significant impact on our total waste production.**

**From October 2009 through October 2010, the following materials were recycled at the park:**

<b>Ferrous metals</b>	<b>11,850 lbs</b>
<b>Aluminum</b>	<b>339 lbs</b>
<b>Copper/brass</b>	<b>161 lbs</b>
<b>Old batteries</b>	<b>485 lbs</b>

# Have Fun...Be Safe...

*Tips to help preserve the park, respect other visitors, and protect yourself.*

## ...On the Water



**To avoid dangerous mishaps, paddlers should monitor weather forecasts and conditions, stay together with their group, and know their limits.**

### Paddling

Canoes should not be used for travel between the islands. Calm days may make canoe use possible along the mainland or island shorelines, but weather conditions can change rapidly. Sea kayaks have become very popular for travel among the islands, but may be difficult for other boaters to see. Brightly colored kayaks clustered in a group offer greater visibility. Allow plenty of time to accomplish your intended route. Beginners should not try to cover more than ten miles in a day. Inform a friend or relative of your travel plans. Kayakers should wear a PFD and use wet suits or dry suits when paddling in the Apostles. Paddlers should also pack such items as: a marine radio or cell phone, a first aid kit, extra paddle, sunscreen, insect repellent, compass, nautical charts, 50 feet of line, waterproof matches, a headlamp, dry storage containers, and provisions for at least one extra day.



**Severe weather can occur with little or no warning. NPS and Coast Guard vessels provide towing only in emergency situations.**

### Boating

The following precautions and regulations will help make a safe trip:

- Do not overload your boat.
- Use life jackets, also known as personal flotation devices (PFDs). A U.S. Coast Guard approved, wearable PFD must be provided for each person aboard any boat.
- All children under age 13 must wear PFDs while aboard recreational vessels underway except when in an enclosed cabin or below deck.
- Boat sober.
- Exhibit anchor lights from sunset to sunrise.
- Stay at least 100 feet from commercial fishing nets.
- Be wary of shoal areas and when beaching a boat. NPS and U.S. Coast Guard vessels provide towing only in emergency situations.
- Make sure your boat is equipped with: PFDs, paddles or oars, fire extinguisher, spare propeller and shear pin, compass and nautical charts, running lights, flashlight, whistle or horn, first-aid kit, radio, and an anchor with sufficient line.

### Swimming

The average annual water temperature of Lake Superior is about 40 degrees Fahrenheit, but on calm sunny summer days, surface water temperatures in the Apostle Islands' protected shallow bays can climb into the 70s. There are no lifeguards in the national lakeshore. Swimming is done at your own risk. Swimming is not allowed within 100 feet of all harbors, public docks, and vessels secured to docks. Diving or jumping into the lake from the cliffs at Devils Island, Sand Island, or the mainland sea caves is not permitted.

### Drinking Water

Well water is only available at Little Sand Bay, on Sand Island, and at Presque Isle on Stockton Island. Water from the lake should be boiled for two minutes or filtered through an adequate filter (0.4 microns pore size) before use. This precaution eliminates many organisms including Giardia, a microorganism which causes an intestinal disorder.

## ...On the Land

### Black Bears

Stockton, Oak, Manitou, and Sand islands host resident bears, but bears can swim to any of the Apostle Islands. Never approach a bear, even to take pictures. Keep at least 50 yards away. Never feed a bear. There are several ways to avoid a close encounter with a bear where you camp or picnic. Reduce food odors by washing dishes and cleaning the kitchen site after cooking. Use minimal amounts of water to clean dishes and broadcast that wastewater on the ground at least 50 yards from camp. All food, beverage containers, garbage, cooking materials, condiments, utensils, and toiletries (such as toothpaste or soap) must be secured from wildlife contact. Bear-proof lockers are provided at all designated campsites in the park. Where food lockers or closed vessels are not available, hang all food and related items in a tree away from the tent and at least 12 feet from the ground and five feet from the trunk. Do not bury, scatter or try to burn food scraps. Bag garbage and pack it out. If you encounter a bear near a dock, campsite, or picnic area, use tone of voice and body posture to show you are in charge, yell and make noise until the bear leaves the area, then report the encounter to park staff.



**All food, beverage containers, cooking materials, garbage, etc. must be locked up INSIDE bear-proof food lockers except during meals. Violations are subject to fines.**

### Fires

Campfires must be built within fire receptacles where provided or on the sand beach near the water's edge, below the vegetation line. Fires are not allowed on beaches at Raspberry Island, at Julian Bay and Presque Isle Bay on Stockton Island, on beaches within 150 feet of campsites where fire receptacles are provided, or in Outer Island camping zone #3 (NW quarter of the island). Beach and camp fires may not be larger than 3 feet in height or diameter. Dead wood on the ground in forested areas or unvegetated beach areas may be collected for firewood. Firewood cannot be carried into, or between islands in, the national lakeshore. Chain saws cannot be operated in the national lakeshore. Before leaving a campfire, the fire must be extinguished and free of litter with no evidence of food remains that could attract wildlife. Fires are not permitted in portable grills or stoves on docks or topside areas of boats tied to public docks. Open fires will be prohibited when fire danger is high.

### Pets

Pets must be kept on a leash that is six feet or shorter, and never left unattended. Pet excrement must be immediately collected and disposed of in the nearest trash receptacle or buried in a forested area using a small hole dug in soil at least six inches deep at least 200 feet from any trail, campsite, beach, dock or water source. Pets are not allowed in public buildings or on scheduled Apostle Islands Cruises trips (except assistance dogs accompanying visually or hearing impaired people.)

### Insects and Ticks

Biting insects can be prevalent on the islands from June to September. Wearing long pants and long sleeved shirts will provide some protection from mosquitoes, biting flies, and ticks. Insect repellents are helpful. The ticks that transmit Lyme Disease and Ehrlichiosis are found in the park. If you notice a rash, flu-like symptoms, or pain in the joints following a tick bite, call your physician.

### Hazard Trees

High winds can cause even healthy trees to fall down. Beware of trees with recognizable flaws (leaning or partly uprooted, dead areas, hanging branches) near campsites, docks, outhouses, and picnic areas. Do not linger in areas adjacent to hazard trees, especially during high winds. Report any such trees near visitor use areas to park staff as soon as possible.

### Emergency Contacts

Call 715-779-3397 (day, NPS),  
or 715-373-6120 (night, Bayfield County Sheriff),  
or 715-779-3950 (night, U.S. Coast Guard),  
or 911 and specify your location (Bayfield County),  
or marine channel 16.

## Climate & Weather

Typical summer conditions feature winds of 5 - 20 knots and waves of 1 to 4 feet. Winds of 30 to 40 knots with 6 to 12 foot seas are possible. Severe weather (high winds, rough seas, fog) can set in with little or no warning. Pay close attention to the weather and monitor weather forecasts. In fall, warm lake waters intensify storms and strengthen winds, making small craft advisories (22-33 knots) and gale warnings (34-47 knots) more frequent. Many of the islands are more than five miles from shore, so boaters should check both the nearshore (within five miles of shore) marine forecast and the open waters forecast. Marine weather forecasts are broadcast on marine band radio on the following channels:

- Ashland, WI - marine channel 8 - 162.525 MHz
- Park Falls, WI - marine channel 7 - 162.500 MHz
- Duluth, MN - marine channel 9 - 162.550 MHz

Weather information is available at ranger stations and visitor centers. NOAA's National Weather Service forecast office in Duluth (<http://www.crh.noaa.gov/dlh/marine.php>) has both nearshore and open waters forecasts for Lake Superior as well as weather readings from the lighthouse at Devils Island.



### What's the Weather?

	Avg. High/Low	Avg. Precip. "
January	21/3	1.64
February	27/6	1.14
March	35/16	2.05
April	48/28	2.40
May	61/38	3.29
June	71/47	4.16
July	77/55	3.98
August	75/54	3.98
September	68/46	3.58
October	55/36	2.74
November	38/25	2.66
December	26/12	1.56
Yearly Avg.	50/31	33.18

Average temperature (degrees F) and precipitation measured on Madeline Island

# Park News

## Apostle Islands National Lakeshore Completes General Management Plan

By the time you read this, the park's General Management Plan should be complete. The General Management Plan is a critical park planning document that defines the general approach that the National Park Service will follow in managing the Apostle Islands National Lakeshore for the next 15-20 years. Over the past six years, many of you have provided critical input through participating in public meetings or providing written comments. Approaches to several issues were modified in response to these comments.

In general, the park's current management direction will continue with some minor changes to increase the opportunity for more people to have an island experience. For example, opportunities would be sought to make it easier for visitors to access some of the islands, especially Basswood and Sand islands. Some additional visitor facilities are proposed for these islands, perhaps including day use areas, new trails, and campsites.

A number of projects are proposed within the General Management Plan. Projects that are planned in the near future include work on five of the light stations (see cover article) and improvements to docks at South Twin and Basswood Island. Other projects we hope to accomplish as funding allows include adding a ranger station and accessible beach ramp at Meyers Beach. In the public interest, if a life estate on Sand or Rocky Island expires within the life of this plan, historically significant structures would be preserved and interpreted. Some of the larger projects proposed in the plan, such as the future of the Bayfield visitor center and the campground on Stockton Island, will involve additional planning and public input. We appreciate your interest and continued involvement in helping us preserve and protect this amazing resource.

The final version of the General Management Plan and Wilderness Management Plan will be posted on the park's website (<http://www.nps.gov/apis>).



Kayakers paddle near float marking the sensor for a real-time wave observation system at Mawikwe Bay.

## Real-Time Wave Observation System Goes On-line in 2011

The sea caves at the Apostle Islands National Lakeshore are spectacular natural rock formations that are best viewed from the water. Thousands of paddlers come to Meyers Beach each year to visit the mainland sea caves near Mawikwe Bay. Wave conditions near the sea caves are dynamic and complex, making this a potentially dangerous trip. Kayakers are well warned to avoid the cave area during rough seas. What may appear to be comfortable paddling conditions at

Meyers Beach, however, may be significantly different near the sea caves. Due to the combination of wave focusing processes and shifting wind directions, freak waves can form suddenly and then disappear in several seconds. Unexpected freak waves can capsize boats or kayakers, leaving little opportunity for kayakers to respond to this type of emergency.

With support from the Wisconsin Coastal Management Program and the Friends of Apostle Islands National Lakeshore, scientists from Wisconsin Sea Grant and UW-Madison designed and tested a real-time wave observation system (RTWOS) in the summers of 2009 and 2010. The RTWOS measures real-time wave data and water temperature and then transmits the data using wireless cellular technology to a host computer at UW-Madison, 350 miles away from the remote sea cave site.

The web hosting software and website update the wave, wind and water temperature in real-time as well as post a visual photo display of the waves every thirty (30) minutes and posts the results to the internet. The Web site is then easily accessible and readable for persons using mobile internet devices like BlackBerry, iPhone, and PDA.

The project Web site <http://wavesatseacaves.cce.wisc.edu> is anticipated to be online in June 2011 through Labor Day and will provide real-time wave and water information in front of the mainland sea caves. This system is designed to better inform visiting sea cave visitors and kayakers of potentially dangerous wave conditions.



## Floating Boardwalks Installed at Julian Bay

Beach, dune, pine savannah and wetland all come together at Julian Bay on Stockton Island to form one of the most diverse and ecologically significant areas within the park. Many visitors are attracted by the singing sands on the beach, but also want to explore the dunes. While the beaches offer recreationists a durable surface to walk on, the sandy dunes are a fragile environment. Over the years, many informal trails have formed through the dunes and the pine savannah. To limit impacts on this sensitive area, approximately 600 feet of boardwalk was installed in the pine savannah in 2010 by park staff with the help of a Minnesota Conservation Corps crew. The floating boardwalk will allow visitors to experience this special area, while protecting fragile dune plants from trampling. This boardwalk is the first phase of restoring the vegetation at Julian Bay. This summer, thousands of native plants will be planted to replace trampled vegetation and stabilize the dunes. Funding provided by the U.S. Fish and Wildlife Service's Coastal Program made this project possible.



The dock at South Twin Island is one of the docks that will be rebuilt this summer.

## Dock Improvements Scheduled for 2011

Public docks at Basswood and South Twin islands will be replaced with new structures in 2011. The new docks at Basswood and South Twin islands will generally be similar in size to the existing docks. A bin wall (adjoining closed-faced bins composed of corrugated steel members) style cribbing will be installed and anchored to the bedrock replacing the old wood cribs. The new docks will incorporate a flow through design that includes a 40 foot walkway from the shore to the dock. This will allow coastal sediment (sand, dirt, gravel) to flow along the shore. The bin wall cribs will be filled and then have a concrete cap for a surface. Other than the walkway, this design is very similar to the docks at the Stockton Presque Isle Marina.

The docks at Basswood and South Twin islands may be closed for short periods of time while construction is in progress. Call 715-779-3397 for information about the docks' status.



Ice damage to the dock at Otter Island has forced sections of the dock to be closed pending repairs.

## Low Water, Ice Damage Affect Park Docks

Early season surveys of park docks have shown that low lake levels and winter ice damage may impact boaters planning to use some of the docks this year. As of the beginning of May, Lake Superior is 14 inches below its long-term average beginning-of-May level and is four inches lower than the level recorded at the beginning-of-May last year. This means that water levels may be shallow at park docks. Measurements made at the ends of several docks in early May showed the following depths:

Basswood Island - 3'  
Michigan Island - 5' 6"  
Otter Island - 2' 8"  
Outer Island - 5'  
Raspberry Island - 5' 6"  
Rocky Island - 6'  
Sand Island East Bay - 2' 2"  
Stockton Island Presque Isle - 5'

Winter ice damaged several cribs supporting the Otter Island dock. Portions of that dock will be closed until repairs can be completed. Call 715-779-3397 for up to date information about dock conditions.



A new privy was installed near the group campsite on Basswood Island in fall 2010.

## New "Sweet Smelling Toilets" Planned for Island Sites

Four islands are scheduled to receive new accessible vault toilets by the end of 2011. The new design features a wider door with a translucent panel for easier access and a brighter interior. The new "sweet smelling toilets" also promise enhanced ventilation for user comfort. New toilets were installed near the dock and adjacent to the campsites at the south end of Basswood Island in the fall of 2010. In 2011, new toilets will also be installed near the docks on Rocky and Sand islands and at the Raspberry Island light station.

## Become a Junior Ranger!

The Apostle Islands have stories to tell. Young visitors can now begin to read these stories and write their own tales of Apostle Islands adventure by using the park's Junior Ranger Activity Guide. The booklet is full of intriguing activities designed to promote a greater understanding of the unique cultural and natural resources of the Apostle Islands.

The booklet will be redesigned with new activities this year. It is still available free to Junior Rangers of all ages. Junior Rangers should also check out the National Park Service's online Junior Ranger program at [www.nps.gov/webrangers](http://www.nps.gov/webrangers).



A new wayside exhibit on Sand Island will tell the story of two vehicles that were used by island residents.

## Your Fee Dollars at Work!

You might be wondering what the park is doing with the money it has collected from camping, docking, guided tours, and parking. In 2010 those funds were used to dredge the harbor at Little Sand Bay and to begin rehabilitation of the historic fish tug "Twilite" at Little Sand Bay's Hokenson Fishery. Fee money also helped pay the salary for park staff providing guided tours of the Raspberry Island Lighthouse and working at the information desk at park headquarters in Bayfield. 2011 fee dollars will continue to fund these staff members and the "Twilite" rehabilitation. Fee money will also be used to plan and design a series of wayside exhibits to help interpret the stories of Sand Island, and to fund trail repairs on Michigan, Otter, Outer, Raspberry, Rocky, and South Twin islands.

# Partners Help Protect Apostle Islands' Shipwrecks



A diver inspects the windlass and capstan on the *Lucerne* shipwreck near Long Island. (Photo courtesy of Tamara Thomson)



The Wisconsin Maritime Trails marker at Little Sand Bay describes the *Sevona* shipwreck near Sand Island.

A chance find on the Internet: a mention of his great-great-grandfather, George Lloyd, led him to this lonely, windswept place. Accompanied by his son, the man carried a wreath to pay respects to someone he never met. Lloyd, a Civil War veteran, survived the Battle of Gettysburg only to disappear in a blinding northeast snowstorm on Lake Superior in 1886. He was captain of the schooner *Lucerne*, lost with all hands off Long Island, Wisconsin. His body was never recovered.

A dive to the wreck reveals that the bow contains the ship's windlass and capstan, scene of the crew's last battle to set anchors and prevent *Lucerne* being driven ashore. Below the windlass deck lies the cramped crew's quarters, where a jumble of coats, potbelly stove, tools, and ship stores marked the men's last refuge before the freezing green waters burst through the *Lucerne's* hatches and seams. Three men made it on deck only to die a slow death, encased in ice in the ship's rigging.

Apostle Islands National Lakeshore is a Lake Superior archipelago of great natural beauty: an almost Southwestern color palette of red sandstone cliffs and dunes set

against the dark greens and blues of forested islands and bays. But it is also a place of great maritime traditions, with lighthouses, commercial fishing stations, and the remains of historic shipwrecks scattered throughout the islands.

The shipwrecks of Apostle Islands National Lakeshore are

managed as a partnership between the State of Wisconsin and the National Park Service. Shipwrecks occur both within and just outside the park; park visitors and commercial dive charters enjoy visiting these sites, and the stories of the shipwrecks are often closely tied to the stories of the park's historic light stations. In strange twists of historical fate, nearly every Apostles light station has its own shipwreck story.

The park's first shipwreck preservation project began with the discovery of the shipwreck *Noquebay* off Stockton Island. In 1984 Toni Carrell of the NPS Submerged Cultural Resources Unit (now the NPS Submerged Resource Center) led a team

of volunteer divers in the excavation and documentation of the wreck. The *Noquebay* project raised awareness of shipwreck management issues at the Lakeshore and

throughout the Great Lakes region.

The State of Wisconsin followed NPS' pioneering work with the creation

of a state underwater archeology program in 1988, located at the Wisconsin Historical Society (WHS). Partnering with East Carolina University's Program in Maritime History and Underwater Research and the University of Wisconsin Sea Grant Institute, a shipwreck survey of the Apostle Islands was initiated in 1990. Mapping and photographic documentation of major wreck sites was accomplished, along with the development of technical reports, waterproof visitor guides, and an award-winning website, Wisconsin's Great Lakes Shipwrecks. It was through this website that the family of Capt. George Lloyd learned of the recent research

To learn more about Apostle Islands shipwrecks, visit:  
[http://www.wisconsinshipwrecks.org/explore\\_lakesuperior.cfm](http://www.wisconsinshipwrecks.org/explore_lakesuperior.cfm)  
<http://www.maritimetrails.org/discover.cfm>  
<http://www.nps.gov/apis/planyourvisit/diving.htm>  
<http://www.wisconsinhistory.org/shipwrecks/>

## Wildlife Cameras Reveal Hidden Secrets



Bobcat

It's 6:54 in the evening of November 20, 2009 and a solitary bobcat is padding through the woods at West Bay on Sand Island. A tiny noise occurs, one that the cat doesn't even register, and he continues on his way, unaware that a motion-triggered camera has recorded his presence. The camera also notes the date and time the photo is taken. These digital cameras are equipped with infrared flash, so no lights disturb the animal. Park employees are using this technology in association with several wildlife management projects at Apostle Islands National Lakeshore. The cameras are revealing secrets about the animals that live in the park, some of which are rarely seen by park staff or visitors.

One researcher is using these cameras to estimate deer populations on Sand and York islands. Overabundant deer are devastating the Canada yew on those islands. Canada yew



White-tailed deer

is a shrub species that is regionally rare, but one that is characteristically found on islands in the park. This slow growing species is a favorite food for deer. Photographs of deer taken by the cameras are used to distinguish between individual bucks. These so-called "mark-recapture" methods rely on repeated photographs of bucks that can be individually identified. The number of bucks is then used in mathematical formulas to estimate entire island populations, including numbers of does and fawns. This work is accomplished without any type of a bait or attractant.

Bears readily swim between the islands, making population estimates difficult. Wildlife cameras were used last summer to help accomplish this goal. Hair snares (strands of barbed wire) and cameras were set up on several islands at stations baited with anise and fish oils to attract bears. Bears visited these sites and left



Black bear

hairs snared on the barbed wire, which were retrieved and sent to a lab for DNA analysis. Bears often visited sites repeatedly, as was evident by the six hundred hair samples that were sent for evaluation. This non-invasive method not only allows the identification of individual bears, but in some cases can also determine which island their parents came from. The cameras show if individual bears or groups are coming to the baits. Bears, frequently with cubs, visited all sites equipped with cameras on Sand and at one site on York, mostly in the evening or at night. Hibernation often starts in November in Wisconsin, but some island bears were still active until November 23rd, when all cameras were removed.

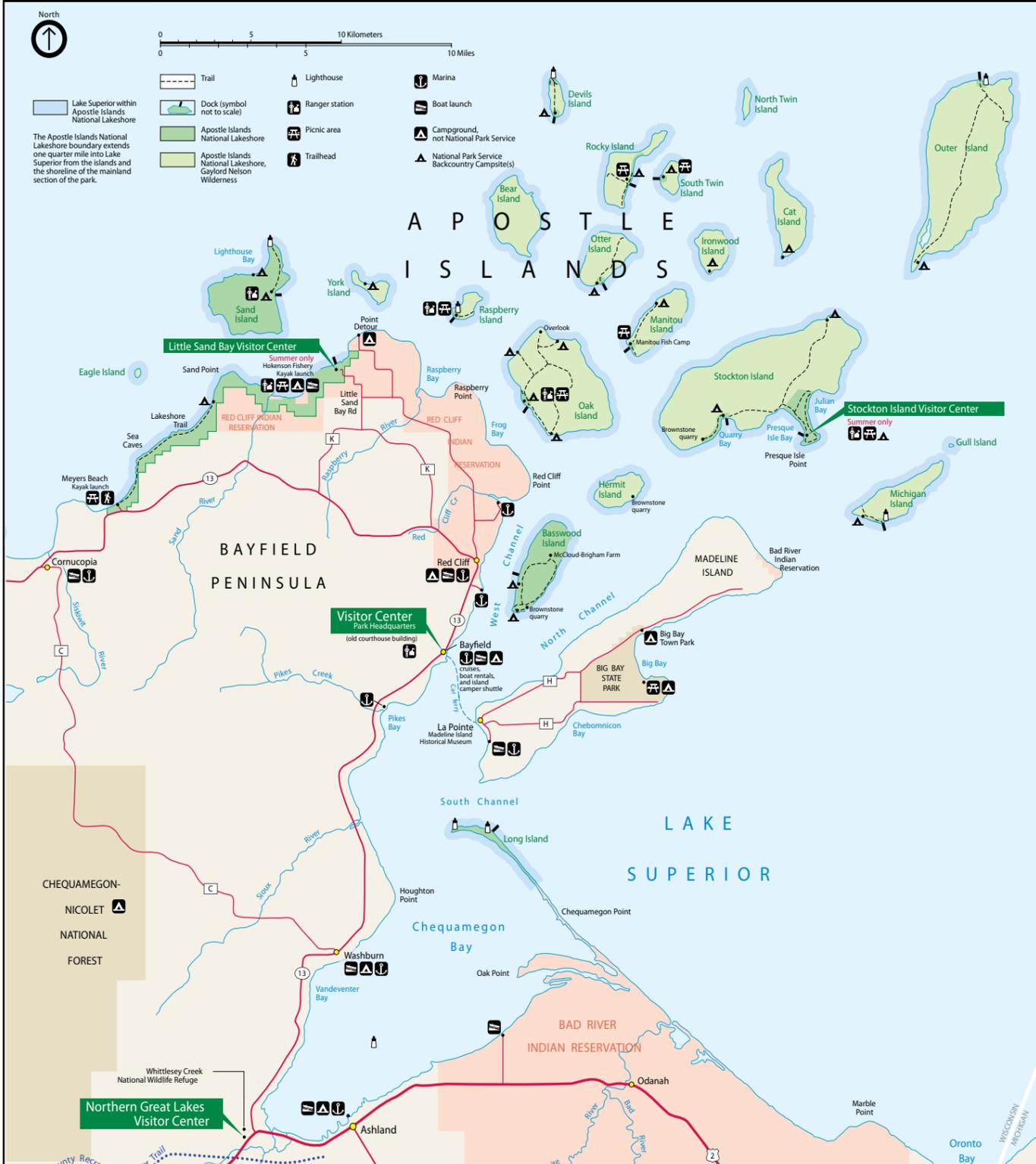
The cameras are also revealing some of the other species that make their homes on the islands. On Michigan Island, a rabbit showed up in several photos. On September 14, 2009,



Coyote

a lone wolf was photographed at the Hansen Farm on Sand Island, providing the first ever pictures of this species in the park. Birds trigger the cameras, too, and many photos revealed ravens, crows, and blue jays. All were taken without any disturbance whatsoever to the birds or the bobcat, deer, and bears living in the park.

# Apostle Islands National Lakeshore



## Park Volunteers...



...plant flowers and vegetables in the historic gardens at Raspberry Island Light Station.



...clear downed trees off park trails.



...guide tours at the Michigan Island Light Station.



...help band endangered piping plovers on Long Island.

## “Friends” Donate Money, Time, and Energy for Park Projects



by George Hansen, Board President

I am pleased to report the Friends of the Apostle Islands National Lakeshore had another good year in 2010. As part of our on-going support of the park, two years ago the Friends committed to raise \$52,000 for the restoration of the historic Raspberry Island Boathouse by 2013. As of the end of 2010 we had reached over 50% of our goal, with \$27,000 in the bank. With the promise of a good fund raising effort this year, the Friends should be able to realize our goal by 2013. Last year also saw several administrative changes with the Friends including the appointment of a new president, election of two new directors, and a renewed effort to improve our website and communication programs.

We are off to a good start in 2011 as well, with strong membership numbers, and merchandise sales which are off to a fast start. Current plans for 2011 include the completion of the Hadland cabin maintenance project on Rocky Island. Last year the Friends funded and volunteered to re-roof the cabin. This year volunteers will



The “Friends of the Apostle Islands National Lakeshore” helped re-roof the historic Hadland cabin on Rocky Island in 2010.

finish the project by painting the building. The Friends have also selected 10 additional projects for 2011 including funding for printing this newspaper and purchasing bear-proof food boxes. The development of the real-time wave monitoring equipment will be completed later this spring followed by installation of the equipment at the mainland sea caves near Meyers Beach.

As we look toward the future of the Apostle Islands National Lakeshore, the Friends will continue to play an important role in several areas. From on-going fund raising efforts to

key project initiatives, our efforts will continue to play a critical role in the maintenance and support of the park, especially in these tight budgetary conditions.

Please remember, there are several ways you can help the Friends:

- Become an annual member of the Friends
- Consider a donation to the Martin Hansen Endowment Fund
- Visit our web site to purchase merchandise and select artwork.

For more information on the Friends of the Apostle Islands National Lakeshore, or on ways you can support the Friends, pick up our brochure at park headquarters or visit us online at [www.friendsoftheapostleislands.org](http://www.friendsoftheapostleislands.org). Remember- every donation is tax deductible.

To all of my fellow Friends, I hope you enjoy your stay among the Apostle Islands and experience a true sense of relaxation as you explore the beauty of this wonderful place!

## National Parks of Lake Superior Foundation

The National Parks of Lake Superior Foundation (NPLSF) is a 501 (c) 3 organization with a mission to support the five U. S. national parks on Lake Superior through fund raising and advocacy. NPLSF supports the kinds of projects that are not federally funded. Since 2008, NPLSF has purchased five bear-proof storage boxes for Apostle Islands campsites, and solar-powered refrigerators for park volunteer quarters on Oak and Manitou Islands.

In 2011, NPLSF received a grant from Unilever, Inc. to help fund current climate change literacy and stewardship projects at the park. This includes upgrades to an interpretive display at Stockton Island and support for an intern that will focus on the impacts of climate change on cultures in the Great Lakes Region. In addition, NPLSF will provide funds for the NPS to purchase solar-powered ventilation fans and lights for the vault toilets at Meyers Beach, and fans for the primary toilet at Stockton Island.

We're grateful for the growing collaboration between The NPLSF and the Apostle Islands National Lakeshore. NPLSF is seeking board members with particular interest in the Apostle Islands. See <http://www.nplsf.org> or the park superintendent for more information.