



Around the Archipelago

The official newspaper of
Apostle Islands National Lakeshore

Spring, Summer, Fall 2003

One Bear's Legacy

HUNGER DROVE THE LARGE BOAR WITH THE SCAR ON his rear end back to Stockton Island's Presque Isle campground. His keen sense of smell had previously led him to grease or partly burned garbage in the fire pits and to food scraps scattered in bushes near the campsites. On this midsummer day, "Skär" was roaming through the campground when he was surprised by the sudden appearance of a camper returning from the beach. The bear charged, sliding to a halt in a cloud of dust just a few feet from the camper while snapping his jaws. Skär knew how to defend his home.

Black bears have long been a part of the community of animals living in the Apostle Islands. Outstanding swimming ability allows bears to visit and utilize habitats on even the outermost islands. Larger islands like Oak, Sand, and Stockton are home to bears throughout the year. An extensive study of bears on Stockton Island saw the population grow from two animals in 1984 to a high of 31 non-cub bears in 1994.

The black bears of Stockton quickly adapted to life on the island. Initially, they grew fat on blueberries in summer and acorns in the fall. They tore open decaying logs in search of insects. They decimated the island's beaver population until virtually none were left. As the bear population grew, they began to self regulate their numbers. Females had fewer litters, the bears endured compressed and overlapping home ranges, and several smaller bears were killed by a few larger bears.

Skär was born during the population explosion on Stockton. He stayed with his mother for a year and a half, learning where to find food and shelter. As a yearling he was kicked out of his mother's home range and forced to establish one of his own. He was captured, weighed, measured, and fitted with ear tags and a radio collar to track his movements. He received a gash on his hindquarters (perhaps in a dispute with another male) that became his distinguishing characteristic. Skär grew to become one of the larger bears on the island. His home range grew accordingly. He continued to learn new ways of finding food. Eventually he learned that food could be obtained where people gathered on the island.

Last summer, Skär roamed between the camping areas at Presque Isle and Quarry Bay. One night he helped himself to steaks being grilled on a barbecue near the Quarry Bay dock. By August, Skär's visits to the campgrounds became increasingly frequent and menacing. Park rangers used every available nonlethal tool to discourage Skär's aggressive behavior, but finally had to kill him because he was a threat to island visitors.



Top: Skär in his element. Note the scar on the left hindquarter. Middle: Skär sniffs around the boats at Stockton Island's Presque Isle dock. Bottom: Skär locates a meat wrapper left near a portable grill. Food and garbage must be stored in bearproof food lockers, bearproof garbage cans, or in galley areas of boats where available.

The sight of Skär's carcass stretched out on the dock was no source of joy. Island visitors have forever lost the thrill of seeing this powerful, awe-inspiring animal in the wild. We all share responsibility to care for the bears and their habitat. Is our carelessness and ignorance responsible for this loss? Simple and effective methods are available to keep food away from bears. If we don't respect black bears' intelligence and adaptability, we may either lose our privilege to share this habitat or face losing even more of these remarkable animals from the islands. Will you be a steward or a threat to these animals?

Coexisting With Bears

Apostle Islands National Lakeshore experienced an unusual number of bear/human interactions last year. Two bears became such a threat to visitors that they had to be killed. Three others were relocated to mainland areas. Seeing bears in the wild can be a treat, but finding one in your campsite can be dangerous. Visitors must take precautions to minimize bear-human conflicts.

To reduce your risk of encounter:

- Watch for signs of bears such as tracks, droppings, claw marks on trees, and torn up logs.
- Never approach or feed a bear. Keep a distance of at least 100 yards.
- Report all bear sightings to park staff as soon as possible.

Store food properly.

- Bearproof food lockers are provided at campsites on Sand, Oak, and Stockton islands. Lock up food and toiletries between meals.
- Where food lockers are not available, campers should hang their food cache in a tree away from their tent at least 10-12 feet from the ground and five feet away from the trunk.
- Do not bury, scatter, or try to burn food scraps. Bag garbage and pack it out.
- Never leave food or water unattended.

Reduce food odors.

- Prepare food well away from your tent.
- Do not keep food, garbage, dish towels, or toiletries in your tent.
- Wash dishes, your hands, and clean the kitchen site after cooking.
- Wastewater from cleaning dishes attracts bears. Use as little as possible.
- Filter wastewater through a screen or strainer to remove food particles. Pack out food scraps with the garbage.
- Dispose of wastewater at least 150 feet from camp by broadcasting it on the ground.

2-4 Summer Info

Most visitors come to the Apostle Islands in the months from June to September. Recreationists looking to boat, hike, camp, paddle, or fish in the islands should familiarize themselves with park facilities, rules, and regulations. The information on these pages facilitates trip planning and provides schedules for guided activities and excursion cruises.

5 What's New?

Did you know that potable water will only be available on Sand and Stockton Islands this year? That the Devils Island light tower will be closed for painting in June? That new restrooms will be built at Little Sand Bay this summer? Find out more about the projects or schedule changes that might affect your visit.

6 Wilderness Study

The National Park Service expects to release a draft recommendation this summer for the Apostle Islands Wilderness Study. Information about the wilderness study in general or the draft recommendation in particular is on the web at www.nps.gov/apis/wstudy.htm

7 Lighthouse Update

Shoreline erosion has threatened to undermine light station buildings at Raspberry and Outer islands. Find out how the National Park Service is working to stabilize these shorelines and protect structures that are listed on the National Register of Historic Places.



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. Long a vacation mecca, the area realized new conservation and recreational value 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.

This fascinating unit of the National Park System features a combination of spectacular natural beauty and rich cultural history. The wooded islands are studded with bogs and beaver ponds, and 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 historic light stations were built in the Apostles to aid Great Lakes navigation.

Mailing Address

Park Superintendent
Apostle Islands National Lakeshore
Route 1, Box 4
Bayfield, WI 54814

Phone

(715)779-3397

Website

www.nps.gov/apis/home.htm

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

From the Superintendent

by Bob Krumenaker

Welcome to Apostle Islands National Lakeshore, one of 388 units of this nation's National Park System. For many of you this is a return visit to a familiar haunt; for the rest, I sincerely hope this is the first of many visits.

I have been at Apostle Islands National Lakeshore for about a year, and I already know that I have the best job in the world... but I need your help to be successful. I'd like to tell you about some of the more interesting challenges the park faces, as well as some exciting opportunities.

For example, did you realize that while there are about 69,000 acres within the park boundary, those lands and waters are spread out over an area four times that size? Much of the time you are traveling between islands you are not actually in the park. National Park Service staff must traverse and patrol this larger area, which is about the size of Rocky Mountain National Park.

Apostle Islands National Lakeshore is part of the public trust, and receives appropriated funds from the federal treasury. We must balance and be accountable for our budget each year, just like any private sector business. In 2003, the park will employ 70 people and have an operating budget of \$2.4 million, making us one of the larger economic engines in the Chequamegon Bay region. Because we must be exemplary stewards of your money as well as your park, last year we developed, with the generous assistance of the National Parks Conservation Association and two business student

consultants, a private-sector style business plan for the park. The business plan describes what we do; why we do it; what standard we are trying to achieve; what staffing and financial resources we have; what we believe is necessary to achieve our mission; and the gap between what we have and what is needed.

The gap between needs and available funding at Apostle Islands National Lakeshore is a staggering 58%, almost double the average gap of the 50 parks that have completed business plans. Lake Superior, cold winters, and the high cost of maintaining the nation's most magnificent – and accessible – collection of historic lighthouses clearly define our challenge and contribute to our high operating costs. As humbling as the numbers are, the business plan provides compelling documentation that the gap is real, and that we need to do something about it if we are to maintain this national treasure.

To help shrink this gap, I am pleased to announce the organization of a new membership group, the *Friends of Apostle Islands National Lakeshore*. The purpose of this organization is to unite people who love the Apostle Islands, thereby increasing community involvement, raising funds, and providing a voice in support of the park's unmet needs. The park and the *Friends* are also working with the Congressionally-sponsored, private

nonprofit National Park Foundation and our national park colleagues at Isle Royale, Pictured Rocks, and Grand Portage to establish the *Lake Superior National Parks Fund*. This will be a new, citizen-led organization to encourage philanthropic stewardship of these four national treasures of Lake Superior. I invite you to get in on the excitement of these new efforts and welcome your participation and support. If you would like to be involved, look for a membership flier in one of the park's visitor centers, send an email to apis_friends@nps.gov, look at our web site, or call me at 715-779-3397. We can do great things together!

Once you have visited Apostle Islands National Lakeshore, experienced the immensity of Lake Superior, slept on an island, stood in the doorway of a lighthouse in exactly the same spot the keepers did, or seen the dramatic sunsets at Little Sand Bay you too may walk away with a piece of the islands ingrained in you. I hope you have a positive experience while visiting and that it will stay with you for the rest of your life.

Julian Bay Beach, Stockton Island.



Summer Visitor Information

Visitor Center Hours

Headquarters Visitor Center

Open Daily 8 am to 5 pm, May 24 - June 14
Open Daily 8 am to 6 pm, June 15 - Aug. 31
Open Daily 8 am to 5 pm, Sep. 1 - Oct. 25

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. Marine weather forecasts are broadcast on marine channels 1 - 10 and are available at ranger stations and visitor centers. Statistics for average weather conditions are below.

| Month | Precipitation | Rain | Highs & Lows | Extremes |
|-----------|---------------|---------|--------------|------------|
| May | 3.31" | 11 days | 63 to 39 | 95 and 20 |
| June | 3.49" | 12 days | 72 to 48 | 98 and 22 |
| July | 3.48" | 11 days | 78 to 55 | 104 and 36 |
| August | 4.20" | 11 days | 76 to 54 | 99 and 34 |
| September | 4.08" | 12 days | 66 to 46 | 99 and 27 |
| October | 2.88" | 10 days | 55 to 36 | 88 and 15 |

Pets

Pets must be kept on a leash that is six feet or shorter and never left unattended. Persons having pets within the park must dispose of all pet excrement. Excrement must be deposited in wooded areas at least 100 feet from any trail, campsite, dock, building, picnic area, or water source. Pets are not allowed in public buildings or on scheduled Apostle Islands Cruise Service trips (except guide dogs accompanying visually or hearing impaired people.)

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 from the accessible parking spaces to the west entrance of the building. The Apostle Islands Cruise Service can also 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.

Summer Activities

Sailing and Boating

The Apostle Islands' protected bays, public docks, pristine beaches, and natural beauty 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 vessels and excursion boats. The remaining space is available free to the public on a first come, first served basis. Public boat launches are located in Ashland, Bayfield, Cornucopia, Little Sand Bay, Red Cliff, and Washburn. The cost is \$5/launch in Bayfield, \$3/launch at Little Sand Bay. Marinas are in Ashland, Bayfield, Cornucopia, LaPointe, Port Superior, Red Cliff, Roys Point, Schooner Bay, and Washburn.

The use of personal watercraft is not allowed within the boundaries of Apostle Islands National Lakeshore.

Paddling

During the past 15 years, sea kayaks have become very popular for travel among the Apostle Islands. Information about kayak outfitters can be obtained by calling Apostle Islands National Lakeshore at 715-779-3397. Two kayak launch points are located within the national lakeshore's mainland unit. Meyers Beach is a popular spot to begin a tour of the mainland sea caves. There is no launch fee. A free kayak launch is located to the west of the National Park Service dock at Little Sand Bay. Temporary parking for loading/unloading equipment is located to the west of the NPS visitor center. Long term parking is located in the parking lot adjacent to the Town of Russell campground. Because of the lake's power and unpredictability, the National Park Service does NOT recommend the use of canoes for travel between islands. Calm days can provide opportunities for canoeists to safely paddle along the mainland or island shorelines. The Apostle Islands Cruise Service will transport a canoe or kayak to the islands for a \$20 fee. For more information ask for the brochure "Paddling in the Apostles" or check our website at www.nps.gov/apis/paddling.htm

Swimming

Yes, it's true, Lake Superior can be really cold. The average annual water temperature of the lake is about 40 degrees Fahrenheit. On warm, calm, sunny summer days, however, water temperatures in the Apostle Islands' protected shallow bays can climb into the 70s. There are no lifeguards in the national lakeshore. Swimming is not allowed within 100 feet of all harbors, public docks, and vessels secured to public docks. Diving or jumping into the lake from the sandstone cliffs at Devils Island or the mainland sea caves is prohibited.

Scuba Diving

A free dive permit is required to scuba dive within national lakeshore boundaries. Permits are available from Park Headquarters or Little Sand Bay visitor centers.

Sand Island in a Day

The Apostle Islands have a complex human history that is an integral part of the natural landscape. Sand Island is an outstanding place to view the return of wild nature to lands that have experienced many complex and changing human uses. A brownstone lighthouse, a fence post in a field, fire-charred tree stumps, a rusted Ford model-A, a massive 250-year old white pine, a cement foundation...all these objects have stories to tell about the people who lived on, and those that continue to use, Sand Island. Day visitors to the national lakeshore will have a better opportunity to experience the stories of Sand Island this year.

The Apostle Islands Cruise Service plans to expand their Inner Island Shuttle service to include a stop at Sand Island this year. From June 21 to September 1, hikers and lighthouse buffs will have the option to

spend four hours hiking, picnicking, and visiting the lighthouse on Sand Island. *(Note: Low lake levels may prevent cruise boats from using the Sand Island dock at times. Call in advance to find out about current conditions.)*

The cruise boat lands at Sand Island's East Bay dock. Adjacent to the dock is a small camping area with picnic tables, a well, and a vault toilet. A two-mile trail links East Bay with the Sand Island Lighthouse. Most of the trail is covered with a wooden boardwalk. A half mile north of East Bay the trail passes through an overgrown field where hay, apples, and other crops were grown. Justice Bay and a view of the Swallow Point sea caves are found at the trail's midpoint. A mile and a half north of the campground, the trail passes through an area of virgin white pines. These 250 year old trees were protected within a

lighthouse reservation of land set aside for the sole use of the lighthouse keepers. An overlook with a panoramic view of Lighthouse Bay is a quarter mile south of the lighthouse.

Many consider Sand Island's Lighthouse to be the most beautiful of the Apostle Islands' six light stations. The building was constructed on the north tip of the island in 1881 of locally quarried brownstone. Picnic tables are available on the lighthouse grounds and free guided tours of the lighthouse are offered daily.

The Inner Island Shuttle departs Bayfield daily at 9 am. It makes brief stops at Oak Island and Raspberry Island arriving at Sand Island about 10:30 am. Sand Island visitors will have about four hours to hike, picnic, and tour the lighthouse (or they may choose to stay on the island and

camp). The shuttle will return to pick up day visitors between 2:30 and 3 pm and take them back to Bayfield by 4:30 pm.

Visitors must provide all the food and equipment they will need while on the island. Insects and mud can detract from the pleasure of exploring Sand Island. Long-sleeved shirts, long pants, hiking boots, and insect repellent may allow for a more enjoyable visit. Hikers and campers must pack out whatever they pack in. The cost of the trip is \$29.95 for adults and \$16.95 for children ages 6-12. Reservations can be made by calling the cruise service at 800-323-7619 or 715-779-3925.

left: Abandoned vehicles near the East Bay trailhead for the Lighthouse Trail.

center: Boardwalk covers much of the two mile trail to the Sand Island Lighthouse.

right: Sand Island's lighthouse, built of local brownstone, dates from 1881.



Summer Visitor Information continued...

Hiking

Hikers can enjoy more than 50 miles of maintained trails at Apostle Islands National Lakeshore. Here are some of the highlights:
Lakeshore Trail - A 4.5 mile trail beginning at the end of Meyers Road in the park's mainland unit.
Julian Bay Trail - 0.4 mile from Stockton Island's Presque Isle dock to the Julian Bay beach.
Tombolo Loop - 3.8 mile loop through forests and along the Julian Bay beach at Stockton Island.
Sand Island Lighthouse Trail - 2 mile walk from East Bay dock to the lighthouse featuring views of beaches, sea caves, and old pines.
Basswood Island Loop Trail - A 5.5 mile hike past a historic farm and the old brownstone quarry.
Oak Island Overlook - A 3.4 mile hike from the dock area to an overlook with views of 11 islands.
Raspberry Island Sandspit Trail - A 0.8 mile walk from the beach to the lighthouse.

Camping

Camping is available on 18 of the lakeshore's 21 islands. Permits are required for all camping in the national lakeshore. The permit system allows campers to reserve campsites in advance. Individual campsites (for one to seven campers) can be reserved beginning one month before the start of a trip. A \$15 nonrefundable administrative fee will be charged for processing the permit. Group campsites (for eight to 20 campers) can be reserved beginning the second week in January. The fee for processing group camping permits is \$30. Designated camping zones have also been established on 15 islands in the national lakeshore. See the brochure "Camping 2003" for more information. Pictures and descriptions of Apostle Islands campsites are available on-line at www.nps.gov/apis/campsite/campsite.htm

Fishing

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. Summer fishing takes place in deep water with lake trout being the most commonly targeted fish. Trolling is the most successful method of catching trout and salmon in the Apostles in summer. Productive fishing spots include the area between Long and Madeline Islands, the area around Sand island, and near Cat Island. More information is available on our website at www.nps.gov/apis/fishing.htm

Fires

Campfires must be built in metal fire receptacles where provided. Burn only dead, fallen wood. 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 allowed on Raspberry Island beaches, at Julian Bay and Presque Isle Bay on Stockton Island, or on beaches within 150 feet of campsites where fire receptacles are provided. Fires are not permitted in portable grills or stoves on docks or on boats tied to public docks. Open fires will be prohibited during times of high fire danger.

Collecting

Reasonable quantities of fruit, berries, and nuts can be gathered for personal use only. Collecting other natural objects such as rocks, wildflowers, and driftwood is not allowed.

Cruising

The Apostle Islands Cruise Service offers a variety of non-stop sightseeing excursions and island shuttles featuring stops at several islands (see schedule below). 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



| 2003 Apostle Islands Cruise Service Schedule Summary | | |
|--|--|---|
| Cruise Name | Description | Dates and Times |
| Grand Tour | 3 hour nonstop cruise around Devils Island | 10 am, daily, May 10 to Oct. 12 |
| Inner Island Shuttle Oak, Sand, Raspberry Islands (\$29.95/Adult, \$16.95/Child) | 3.5 hour cruise to 3 islands, Oak I. - dayhike or camp Sand I. - 4 hr. hike/light tour Rasp. I. - 90 min. light tour | 9 am and 1 pm, daily, June 21 to Sept. 1 |
| Stockton/Manitou Shuttle (\$29.95/Adult, \$16.95/Child) | 5 hour shuttle to Stockton & Manitou Islands Man. I. - fish camp tour Stockton I. - dayhike or camp | Noon, daily, June 21 to Sept. 1 |
| Islander (\$17.95/Adult, \$9.95/Child) | 1.5 hour cruise around Basswood & Hermit Islands | 1:30 pm, daily, June 21 to Sept. 1 |
| Shoreline Lighthouse Cruise (\$17.95/Adult, \$9.95/Child) | 1.5 hour nonstop cruise to Raspberry Island and back | 3:30 pm, daily, June 21 to Sept. 1 |
| Twilight Grand Tour | 3 hour nonstop cruise around Devils Island | 5:30 pm, Tues.-Thur.-Sat., June 24 to Aug. 30 |
| Lighthouse/Sea Caves Evening Cruise | 3.75 hour cruise past 2 lighthouses and mainland sea caves | 5:30 pm, Friday, June 27 to Aug. 15 |
| Sunset 3 Lighthouse Cruise | 3.25 hour cruise past 3 lighthouses | 5:30 pm, Wednesday, June 25 to Aug. 13 |
| Prices: \$25.95/Adult, \$14.95/Child (unless otherwise indicated) | | |

What's New?

New Apostle Islands Film Ready For Release

The National Park Service is pleased to announce a new film about the Apostle Islands. "On the Edge of Gitchee Gumee - Voices of the Apostle Islands" is a 20 minute film that illustrates some of the islands' most significant features. As the film explains, "The Apostle Islands have stories to tell. On the edges where water meets land...field meets forest...past meets future... stories are revealed." The film's producer, Anne Tubiolo from the National Park Service's Harpers Ferry Center, recorded hours of interviews with people who live, work, and play in the Apostle Islands. Excerpts from these interviews are used to tell the islands' stories. A film crew made numerous trips to the islands between February 2000 and June 2002 to capture scenes of the islands in every season of the year.

"On the Edge of Gitchee Gumee - Voices of the Apostle Islands" is scheduled for its debut screening early this summer. It will be the introductory film shown on request at the national lakeshore's visitor centers in Bayfield and Little Sand Bay. The film will also be available for sale at these visitor centers in VHS and DVD formats. For information on viewing or purchasing the film, call (715)779-3397.

Water Systems Closed on Several Islands

Potable water will no longer be available from well house faucets or drinking fountains at the following locations: Basswood Island, Cat Island, Otter Island, Oak Island, Rocky Island, Quarry Bay on Stockton Island, and South Twin Island. Visitors to these sites must carry their own water or use lake water. Water from the lake should be boiled at least two minutes or passed through an adequate filter (0.4 microns pore size) before use. Please plan on filtering, boiling or treating lake water before drinking. Drinking water will be available at Little Sand Bay on the mainland, Presque Isle on Stockton Island and in the campground near the dock on Sand Island. Occasionally heavy use or equipment failures may also make these wells unavailable. It is always a good idea to carry drinking water or be prepared to filter, boil or treat lake water for drinking.

New Restrooms Planned for Little Sand Bay

Construction of new visitor restrooms and water systems at Little Sand Bay is scheduled to begin this July. The restrooms will contain men and women's toilets and changing rooms. It will be located south of the National Park Service visitor center, between the large parking lot and the

Town of Russell campground. Burial of water and sewer lines will disrupt traffic flow through the area at times. A portion of the parking lot will be closed off as a staging area during construction. Work hours will be from 7 am to 6 pm on weekdays. Work will not occur near the campground on holidays or weekends. The entire project will require most of the summer to complete. Please excuse this temporary inconvenience. The improved services will enhance visitor experiences for many years. If you have questions about the project, call 715-779-3397.

Devils Island Light Tower Closes For Repainting

The light tower at the Devils Island light station will be closed to the public until July, 2003 to allow the National Park Service to remove cracked and peeling lead based paint and then repaint the tower's interior. A volunteer lighthouse keeper will be present to conduct tours of the rest of the light station beginning in late June. Boat access to the east landing at Devils Island may be interrupted at times during the project to allow the loading and unloading of equipment and materials. The tower will reopen once it receives its new coat of paint. For information on the status of this project call (715)779-3397.

Dock Space Reserved for Cruise Boats

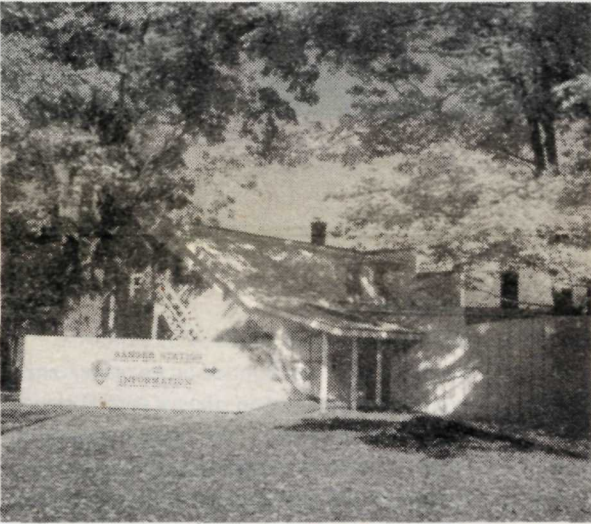
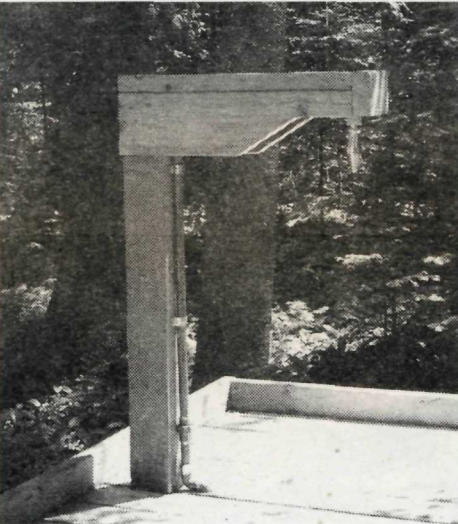
Portions of several docks will be reserved for use by the Apostle Islands Cruise Service from June 21 to September 1. Space will be reserved for the cruise boat at the Oak Island dock daily from 9 am to 10 am and from 3:00 pm to 4:30 pm. Space will be reserved at the East Bay dock on Sand Island daily from 9:30 am to 11:30 am and from 1:30 pm to 3:00 pm. Space will be reserved at the Raspberry Island dock every day from 9:30 am to 4 pm. The cruise boat will be moored at Stockton Island's Presque Isle dock daily from 1 pm to 5 pm. Space will be reserved at Stockton Island's Quarry Bay dock daily from 10 am to 11:30 am, 1 pm to 2 pm, and 4:30 pm to 5:30 pm. Space will be reserved for the cruise boat at the Manitou Island dock each day from 12:15 pm to 1:30 pm. Boaters should try to avoid using these docks during the posted times.

far left: Potable water will only be available from wells at Sand Island and the Presque Isle campground on Stockton Island this summer.

left: Mainland visitors will benefit from a new restroom facility that will be built near the visitor center at Little Sand Bay this summer.

right: The light tower at Devils Island will be closed for painting in early summer.

far right: Space is reserved at docks on Raspberry, Oak, Sand, Stockton, and Manitou islands for cruise boat access.



Summer Visitor Information continued...

| Guided Tours, Walks, and Evening Programs Apostle Islands National Lakeshore 2003 | | | | |
|--|--|-------------------|--------------------|------------------|
| Activity | Description | Dates | Days | Times |
| Raspberry Island Lighthouse Tour | Free park ranger guided tours of the historic lighthouse and grounds. 76 step stairs from dock to grounds. | 6/14 - 9/24 | Daily | 9 am to 4 pm |
| Sand Island Lighthouse Hike | Park staff may be available for free guided walk to the lighthouse. | 6/21 - 9/1 | Check availability | 10:30 am |
| Sand Island Lighthouse Tour | Park staff may be available for free tour of the lighthouse. | 6/21 - 9/24 | Daily | 12 to 4 pm |
| Devils, Michigan & Outer Islands' Lighthouse Tours | Volunteer lighthouse keepers may be available to provide free access to the lighthouses. | mid-June to Sept. | Check availability | 9-11 am & 1-4 pm |
| Manitou Island Fish Camp | Free guided tours of a historic commercial fishing camp | 6/21 - 9/1 | Check availability | 9-11 am & 1-4 pm |
| Hokenson Brothers Fishery | Free guided tours of a commercial fishing museum at Little Sand Bay (mainland). | 6/14 - 9/1 | Daily | 10 am & 2 pm |
| Stockton Island Nature Walk | Free guided walk to Stockton's forests, bogs, and beaches. | 6/21 - 8/31 | Daily | 1:30 pm |
| Stockton Island Evening Program | Hear the island's stories around the campfire at the Presque Isle amphitheater. | 6/21 - 8/31 | Daily | Twilight |
| "Around the Archipelago" Guest Lecture Series | Presentations at the Bayfield Visitor Center on a variety of island related topics. | 7/7 - 8/25 | Mon. | 7:30 pm |

Visitors must make arrangements for transportation to the islands. See the Apostle Islands Cruise Service Schedule for prices and times.



left: A volunteer lighthouse keeper guides a tour of the Michigan Island light station. Rangers and volunteers also staff the light stations on Raspberry, Sand, Devils, and Outer islands to care for those historic buildings in the summer. Lighthouse tours may be available at certain days and times. Ask in advance about availability.

below: Rangers present evening programs at Stockton Island's Presque Isle campground. The campfire presentations offer insights into the islands' animals, plants, and history several nights each week from late June through the end of August.



Self-Guided Tours and Walks

Brochures for self-guided tours and walks are available from brochure boxes at the Hokenson Brothers Fishery, the Manitou Fish Camp, and the Julian Bay Trail on Stockton Island. The brochures can be purchased, or used for free and returned to the box. To find out about guided tours of the Hokenson Brothers Fishery, contact park staff at the Little Sand Bay visitor center (715-779-7007) for scheduled times. Park rangers or volunteers may also be available to guide tours of the Manitou Fish Camp during some or all of the period from 9 am to 4 pm daily from 6/21 to 9/1.

Employee Privacy

Park rangers and volunteers occupy historic buildings at island lighthouses and at the Manitou Fish Camp. Please respect their privacy in these residences. Guided tours will not be available before 9 am or after 5 pm without prior arrangements. Park staff are available in case of emergency, but otherwise should not be disturbed after hours.

A Clean Camp Today Keeps the Bears Away

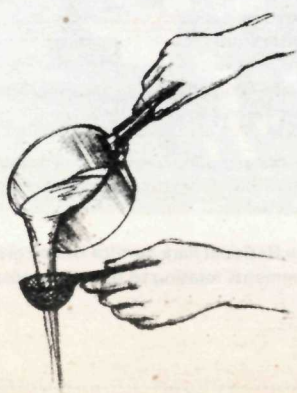
Last year was a trying one for black bears, visitors, and staff at Apostle Islands National Lakeshore. The article on page one details some of the problems that were faced in 2002 and some of the ways those problems can be avoided in the future. Visitors must take precautions to avoid the specter of damaged property, closed campsites, frightened campers, and dead bears. Rules have been established to help protect visitors and wildlife in the park. Please take a moment to review the rules and recommendations detailed below.

Reduce Food Odors

Grills, cook stoves and utensils may not be left unattended until they have been thoroughly cleaned of all food scraps or stored in facilities inaccessible to wildlife. Proper storage facilities include bear-proof lockers and galley areas of boats

It is important to wash the dishes and clean the kitchen site immediately after a meal. Don't forget that food scraps on grills and cook stoves can also attract wildlife. Give them a good cleaning as well.

Gray water must be strained and the food residues properly stored and packed out as garbage. Strained gray water must be broadcast on the ground at least 50 yards from camping and picnic areas or disposed of in a vault toilet.



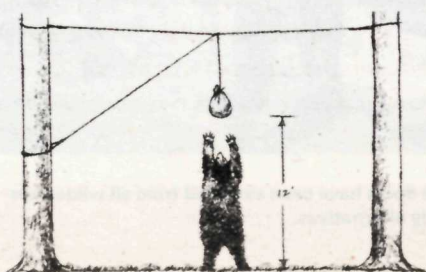
Gray water from cleaning dishes is a concern in bear country. The goal is to eliminate this water and its food odors as an attractant of bears and other animals. Using minimal amounts of cleaning water, and thoroughly straining it of all residual

food particles, are the first important steps to take. Then dispose of the water at least 50 yards from camp by broadcasting it on the ground to reduce odors and hasten decomposition. If a vault toilet is available, that is also a good place to put this water.

Store Food Properly

Food, leftover food scraps, food residue from cooking and cleaning, garbage and lawfully taken fish must be disposed of in proper garbage facilities (on Stockton Island), secured in bear-proof storage lockers (on Stockton, Oak, Basswood, and Sand islands) or galley areas of boats where available. Park users must pack out all food scraps and garbage (when garbage cans are not provided). Burning or burying food scraps or garbage is prohibited.

It is important to store food so it is unavailable to animals. Bear-proof storage lockers on Stockton, Oak, Basswood (group campsite), and Sand islands provide excellent food security when properly closed and locked. Other good options include bear resistant canisters and food bags, and carefully placed hangs from trees. Bear-resistant canisters are generally available at local outfitters.



Bear hangs must be done well to be effective. The food cache should be at least 10-12 feet from the ground and five feet away from the tree trunk. There are many methods to do this including suspending food between two trees and counterbalancing two bags over a branch. Practice hanging food at home to make sure you can do it and have the right equipment.

How to Poop in the Woods

Many visitors to the Apostle Islands do not use docks, established campsites or developed areas. Amenities such as picnic tables, fire rings and vault toilets are provided at some of the remote undeveloped areas of the park. However many of the areas used by visitors do not have these

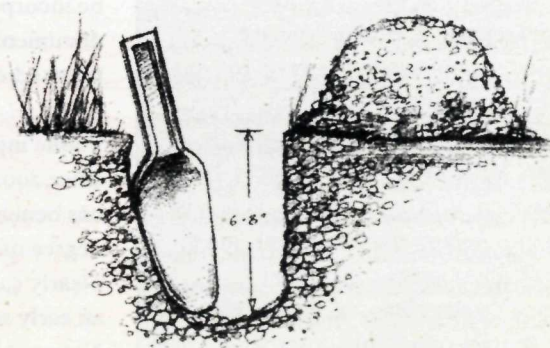
facilities. As visitor use at the Apostle Islands continues to increase you may find unwelcome evidence of previous users in the form of used toilet paper and visible remains of human waste. There are several options available for disposal of human waste in areas without toilet facilities. Visitors who have the capability can carry and use portable toilet units. Visitors can purchase individual disposable leak proof bags for carrying and disposing of human waste (these bags are similar to those used at dog parks for cleaning up dog waste). Visitors can also bury their waste in an appropriate manner that will allow natural process to eliminate the waste. The following is a brief lesson in "How To Poop In The Woods".



Step 1. Choose a place at least 200 feet from water, cooking areas, sleeping areas and beaches.

Step 2. Carry a hand trowel, toilet paper and extra zip lock bags. Using a water proof bag or container to carry these items is a good convenient idea.

Step 3. Find a place that you can dig a hole 6 inches wide and 6 to 8 inches deep. The hole should go down through any duff on the ground surface and at least 6 inches into soil. This is important as the majority of microorganisms that will decompose the waste live in the top 6 inches of soil. Please try not to dig up plants or roots during this process.



Step 4. All solid human waste should end up in the hole. Toilet paper should be placed in a sealed bag and carried out and disposed of at the end of your trip. Burying toilet paper is an option, but a less desirable one because it decomposes slowly and might be dug up by animals. Female sanitary products, especially those that contain plastic, will not biodegrade and should be packed out.

Step 5. Cover the waste and toilet paper with soil and then a layer of duff. Over the next few months microorganisms and insects will break down the waste. In the mean time, the next visitors to the site will have the same pleasant experience you enjoyed.

Drawings courtesy of Leave No Trace Center For Outdoor Ethics.

For more Leave No Trace information call 1-800-332-4100 or visit www.LNT.org

For Your Safety

Boating Safety

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.
- 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 properly 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.

New Life Jacket Rule in Effect

The United States Coast Guard now requires all children under 13 years of age to wear Coast Guard approved life jackets while aboard recreational vessels underway, except when the children are below decks or in an enclosed cabin.

The rule was created to address the problem of childhood drownings associated with boating. Between 1995 and 2001, 121 children under the age of 13 drowned while boating. Most of these deaths could have been prevented if the child had been wearing a properly fitting life jacket.

"Statistics show that life jackets save lives - but only when they are worn," says Captain Scott Evans, Chief of the U.S. Coast Guard's Boating Safety Office in Washington, D.C. "Children customarily wear protective gear when rollerblading, skateboarding, and bicycling, and similar precautions are in order on the water."

Penalties for a boat operator who fails to have all children under the age of 13 wear a life jacket are similar to those for failing to have life jackets on board. Penalties may be assessed up to a maximum of \$1,100 for each violation.



In An Emergency

The National Park Service works closely with the U. S. Coast Guard, Wisconsin Department of Natural Resources, and the Bayfield County Sheriff to handle emergencies in the national lakeshore. For help in an emergency call...

- Marine Radio: Channel 16
- Daytime telephone: 715-779-3397
- Nighttime telephone: 715-779-3397 or 715-373-6120 (Bayfield County Sheriff)

Search and Rescue

Visitors should plan to be self-reliant and responsible for their own safety. The outdoors, and especially Lake Superior, can be unforgiving. Visitors must be aware of the risks and hazards associated with the lake and island environments. Response times to areas on Lake Superior can be far greater than for similar distances on the mainland. The National Park Service will make reasonable efforts to respond in emergency situations. A variety of factors including the danger to the visitor, risk to the rescuer, and the availability of staff and equipment to do the job will be considered. A moment's carelessness or a minor misjudgement can have serious consequences. Be careful out there, because maybe we can save you, and maybe we can't.

Hunting

Hunting is allowed in the national lakeshore. Hunting activity may occur from September (after Labor Day) through December.

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 mosquitos, 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.

Water

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

"Talk to Us"



We have found that people perceive wilderness in a wide variety of ways, which can make it a particularly difficult topic to talk about. If you would like to learn more about the legal definition of wilderness, and how the National Park Service manages designated wilderness areas, we encourage you to visit www.nps.gov/apis/wstudy.htm on the World Wide Web. Once there, you will also find copies of all public review documents, support documents, study schedules, and a Frequently Asked Questions document to aid in answering some of your questions. Times and locations for this summer's public meetings will be posted as soon as they are known. We hope you'll be able to attend one.

For those of you who are unable to attend a public meeting, we have devised several alternative ways for you to share your thoughts with us. You can mail your comments to us at Apostle Islands National Lakeshore, Route 1, Box 4, Bayfield, Wisconsin 54814. A link is also provided on the above web site for you to ask questions or submit comments electronically. Finally, you may also contact park's study coordinator, Jim Nepstad, at 715-779-3398, extension 102.

Whither Wilderness?

Draft Recommendation Expected This Summer For Apostle Islands Wilderness Study

The National Park Service expects to release a draft recommendation for the Apostle Islands Wilderness Study this summer. The study, required by the Wilderness Act and National Park Service policy, is intended to advise the United States Congress on how much, if any, of Apostle Islands National Lakeshore should be designated as wilderness.

Although the exact timing of the release was unknown at the time this article was written, it is hoped that the results will be made public early this summer. Once released, there will be a 60 day public comment period that will enable citizens to share their thoughts with the National Park Service concerning the study's draft recommendations. Comments received during this final phase of public input will be incorporated into the final release of the document, which is expected to be released early in 2004.

Public input has been sought each summer since 2001, and the National Park Service has benefited tremendously from the high degree of public interest in the study. Nearly 5,000 citizens commented during an early scoping phase in 2001, and the National Park Service received close to 1,800 comments on the draft set of alternatives that were released in the

summer of 2002. Park staff held six open houses and met with a large number of local, state, and tribal governments during the past two years. The input received has shaped the study to a very large degree.

For instance, during the summer of 2001, countless boaters expressed a concern that wilderness designation might lead to restrictions on boating within the park. In response to this widely-expressed concern, in 2002 the National Park Service ensured that the narrow strips of park waters surrounding each island were excluded from every conceivable alternative. Thus, boaters can now rest assured that whether or not wilderness is designated on the islands themselves, modes of transportation to and among the

islands will not change. Similarly, the park's public docks and visitor use areas have also been excluded from all alternatives.

A comment park staff has heard again and again at public meetings has run something like this: "I like the park the way it is now – don't change a thing." Regardless of the study's recommendations and regardless of how Congress decides to act on them, visitors to Apostle Islands National Lakeshore will continue to be able to enjoy the park as they do now. In large measure, this is due to the time our visitors have taken to share their concerns and inspirations with us during the study's public input phases. We sincerely hope to hear from you again this summer!



Park docks have been excluded from all wilderness study alternatives.



The National Park Service has received nearly 7,000 comments relating to the wilderness study.

Nice to See Yew

By Jim Nepstad, Chief of Planning and Resource Management

"Some vegetation of unbrowsed islands is probably similar to that of the original forest in northwest Wisconsin."

E. W. Beals, *Influence of Deer on Vegetation of the Apostle Islands, Wisconsin* (1960)

Imagine walking through a forest as old as an Ojibwe legend...

Perhaps one of the reasons Americans love their nation's parks so much is because the parks they visit often take them back in time. Many of us feel a powerful sense of awe when we gaze up the slope of Little Round Top at Gettysburg National Military Park, or when we stand in the ruts of the Oregon Trail at Scotts Bluff National Monument. Our preoccupation with the present and future can melt away when we gaze across a landscape that offers a window to the past.

The forests of Apostle Islands National Lakeshore can have that same impact. While many of the islands were logged during the nineteenth and twentieth centuries, some were not. Some of the largest remaining patches of old growth forest in the upper Midwest can be found within the park.

Even the islands that were logged have an ancient feel in some respects. Beneath the second growth trees of some islands, plants from the understory of the original forests still thrive. Some of these plants have been nearly eliminated from the forests of the mainland by an unexpectedly powerful force that followed the logger's ax – the white-tailed deer.

Early accounts indicate that the number of deer in northern Wisconsin increased dramatically following the clearing of the ancient forests. While deer have managed to colonize a small number of islands, Lake Superior has prevented them from developing reproducing populations on many of the others. Beloved in so many other respects, deer can be tough on certain plants. They have strong preferences when it comes to food, and during the region's long winters, one of their favorites is a native plant called Canada yew.

Canada yew is an evergreen shrub also known as ground hemlock. The plant has small green seeds surrounded by red juicy cups. Yew has a very low tolerance to deer browsing, so it has been virtually eliminated from vast portions of northern forests. Biologists have



Canada yew is an important shrub in the understory of Apostle Islands forests.



Canada yew needles.

long recognized that the islands are different in this respect. The Apostle Islands are perhaps the last remaining refuge in the Midwest for healthy populations of yew. At many island locations, Canada yew is present in stands as dense as those of the original forests. In these places, the forest can feel different, older.

Forests are so much more than a collection of trees. Yew and other understory plants serve as important habitat for birds and other small animals. Research in other areas indicates that there are fewer birds in areas that are heavily browsed by deer. So the forests of the Apostle Islands might not only look and feel different, at times they might even sound different.

To protect this rare vegetation, park staff would like to keep deer isolated to the islands they have historically inhabited. Unlike many other National Park Service sites, the legislation that created Apostle Islands National Lakeshore requires the park to allow hunting. For decades, hunters participating in a special muzzle-loader hunt have been helping the National Park Service achieve its goal of reducing deer populations on the islands to pre-settlement levels.

Beginning in 2002, local Ojibwe hunters have returned to the islands to exercise their right to hunt on the lands they ceded to the United States – a right that was guaranteed to them by the Treaty of 1842. The return of ancient traditions seems especially appropriate here, and the National Park Service is pleased that the resulting harvest contributes to the preservation of some of the last remnants of Wisconsin's original forests.

Enjoy your walk through time in the forests of Apostle Islands National Lakeshore. We hope you'll agree – it's nice to see yew.

From the Apostle Islands to the Oval Office - The Story of Benjamin Armstrong

By Bob Mackreth, Park Historian

Benjamin Armstrong was desperate: out of money and out of his element, a frontiersman marooned in Washington, D.C.

Worst of all, he'd failed in his mission, it seemed. He'd have to tell his Indian companions that no one wanted to listen to them. They'd made the arduous, two-month journey from Lake Superior to the national capital, all for nothing. The result would be war.

Benjamin Armstrong is one of the most intriguing characters in the history of the Apostle Islands. Born in Alabama in 1820, he left home at the age of ten. As a young man, he traveled around the Midwestern frontier, working his way up the Mississippi. By the time he reached his early thirties, he had settled at the old fur trading village of LaPointe, on Madeline Island.

Along the way, Armstrong developed close friendships among the region's Ojibwe people. He learned their language, and eventually married a niece of the respected chief of the LaPointe band, Ke-che-waish-ke, or Buffalo. The chief became fond of Armstrong, and adopted him as a son. Armstrong, in turn, served the tribe as interpreter and adviser.

In the late 1840s, disturbing news began reaching the Lake Superior country. Powerful politicians were lobbying in Washington to force the Ojibwe out of their homelands, resettling the tribe to unfamiliar surroundings on the Minnesota prairie. In February, 1850, President Zachary Taylor issued a proclamation repudiating earlier treaties, and ordered the Indians to get ready to move.

Sitting in on tribal council meetings, Benjamin Armstrong could feel the sense of betrayal and anger in his Ojibwe friends. "I could tell great trouble was brewing," he later recalled. Rather than submit to exile, many of the men agreed: "Better to be slaughtered in our old home, where we can



Benjamin Armstrong

be buried by the side of our relatives and friends."

Conferring with his adoptive father, Armstrong arranged an audacious plan. He would escort the elderly chief all the way to Washington. President Taylor had passed away suddenly- perhaps the new President Fillmore would listen to reason. Maybe a personal appeal would bring justice for the Ojibwe, and preserve peace along the frontier. It was a desperate measure- Buffalo was more than 90 years old- but the stakes were high.

On April 5, 1852, Chief Buffalo, Benjamin Armstrong, and five Ojibwe companions launched a canoe from the Madeline Island shore. Three days of paddling brought them to the town of Ontonagon, where they circulated a petition protesting the removal order. To Armstrong's elation, he found unanimous support. The white residents of the region objected strongly to outsiders' plans to force their Ojibwe neighbors into exile.

The party paddled on, stopping at each settlement along the lake's wild coast, collecting ever more signatures for their petition. Day followed day as they battled

waves and storms; each night, they slept under blankets on the shore.

At Sault Ste. Marie, they met an obstacle more formidable than the waters of the big lake: bureaucracy. Officers at the fort there informed Armstrong that no Indians were allowed to pass that point without advance permission from Washington. Presenting his petitions and explaining the urgency of his mission, Armstrong finally convinced the officials to allow his party to continue. They warned him, though: "The Indian Agent at Detroit will be sure to stop you."

Leaving their canoe, the delegation boarded a steamer bound for Detroit. As predicted, the agent there held them up, then finally relented. Shaking his head, he warned, "You'll never get to Washington."

Armstrong proved him wrong. At Washington, though, it seemed their luck ran out. The Commissioner of Indian Affairs refused to meet with the delegation. "You have come here without permission," he told Armstrong. "I do not want to see you or hear of your Indians again." An appeal to the Secretary of the Interior brought a curt dismissal: "I can do nothing for you."

Dejected, Armstrong walked back to the hotel where Buffalo and his companions waited for word. How could he tell them that their hardships had been wasted? What would happen when they returned home? Their money was gone, how would they even get home?

Arriving at the hotel, he found the Indians surrounded by a curious crowd. Several well-dressed gentlemen seemed particularly interested to learn what had brought an Ojibwe chief all the way to Washington. Armstrong explained the nature of their mission. "We can help,"

Benjamin Armstrong on Oak Island

Benjamin Armstrong cleared a homestead near the Oak Island sand spit, and lived there from 1855 to 1862. Nothing remains of his cabin, but campers in site number one pitch their tents very close to the spot.

said one of the men. Among the onlookers, it turned out, were a United States Senator, and a member of the President's cabinet.

The next afternoon, at three o'clock, Armstrong, Buffalo, and their companions walked in the door of the White House. President Millard Fillmore welcomed them and solemnly accepted the pipe of tobacco that Buffalo offered as a mark of friendship. Each man in the room took a draught on the pipe, then Buffalo's deputy and spokesman, O-sha-ga, arose and explained the Ojibwe's plight. He spoke for an hour, with Armstrong translating. President Fillmore listened carefully, then promised the group a prompt reply. Two days later, he summoned the delegation back to the White House and announced his decision: he would rescind his predecessor's order. The Ojibwe would not be forced to leave their homeland.

Armstrong and Buffalo brought the welcome news back to LaPointe. Two years later, Armstrong again served his adoptive father as translator and adviser in the negotiations surrounding the Treaty of LaPointe, formalizing the agreement between the United States and the Ojibwe.

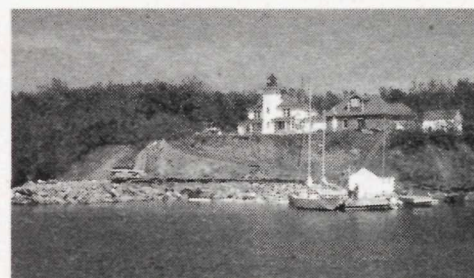
Chief Buffalo died in 1855, at the age of 96. Benjamin Armstrong built a cabin on Oak Island, where he farmed for several years. He made two more trips east as an advocate for the Ojibwe; on one, he met another President: Abraham Lincoln. After a long and eventful life, he died at Ashland in 1900. Several years before his death, he dictated the memoirs which told the tale of his trip to Washington with Chief Buffalo.

Efforts to Protect Historic Lighthouses Continue

The National Park Service is responsible for protecting the six historic light stations in Apostle Islands National Lakeshore. Two of these light stations were built in areas that have proved vulnerable to shoreline erosion. More than a century of erosion near the lights at Raspberry and Outer islands has moved the edge of these islands perilously close to historic buildings. The National Park Service has begun the process of stabilizing shorelines near the lighthouse structures at both these islands.

Following years of planning, work to stabilize the slope at Raspberry Island

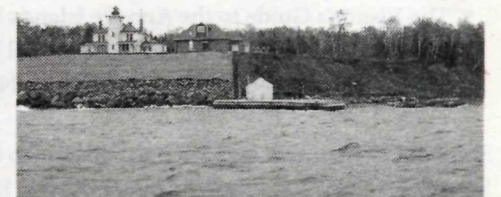
commenced in 2002. Two thirds of the work to construct a rock revetment (wall) along the shoreline in front of the light station was finished last summer. The slope immediately in front of the lighthouse was rebuilt with earth fill. The restructured slope was seeded and replanted with native plants to further stabilize the shoreline. This will provide stability to the light station structures and halt ongoing erosion from both the toe and the face of the slope. Work will continue to complete the revetment and slope stabilization to the east of the Raspberry Island dock in the summer



Raspberry Island shoreline stabilization work in progress last summer

of 2003. The work will not impact visitor access to the lighthouse or the dock.

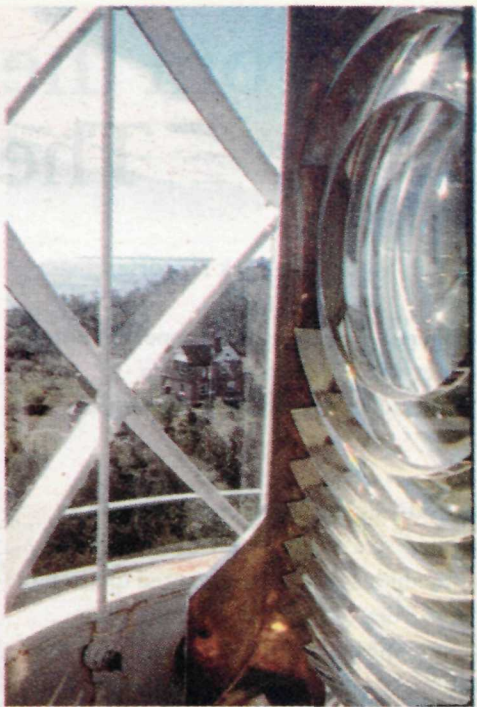
Erosion has advanced to within 50 feet of buildings at the Outer Island Light Station. Stabilizing the Outer Island site will involve installing a riprap footing and shoreline protection barrier to help prevent erosion from the base of the bluff. Additional work will include re-contouring and stabilizing



Shoreline stabilization progress as of October 2002. The area east of the dock will be completed in 2003.

the slope, revegetating the new slope with native vegetation, and installing an improved drainage system at the top of the bluff. Funding has been obtained to complete the final design and preparation for this project in 2003. Construction of shoreline stabilization structures on Outer Island is scheduled for 2004 and 2005. Details about these projects are available on the park's website or by calling 715-779-3397.

Apostle Islands National Lakeshore



Third order Fresnel lens at Devils Island.



Ranger guided walk on Stockton Island.



Mainland sea caves viewed from the Lakeshore Trail.

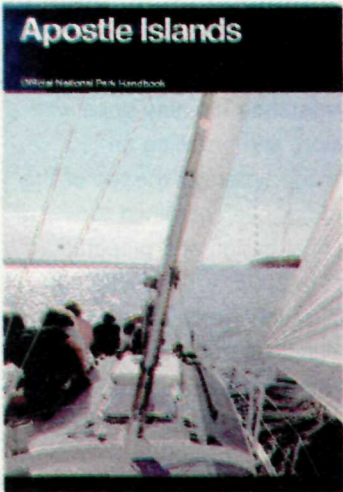
Park Partner

Eastern National (EN) provides quality educational products and services to America's national parks and other public trusts. EN is an educational institution that functions as a part of the interpretive arm of the National Park Service, a business that acquires or produces and sells materials to enhance the enjoyment of park visitors and a philanthropic organization that disperses its net income to the Service for its diverse programs. At Apostle Islands National Lakeshore, EN operates sales outlets at park visitor centers in Bayfield and Little Sand Bay, at Stockton Island, and at the Raspberry Island lighthouse. Sales are also conducted by phone, mail, and website. The "Around the Archipelago" newspaper is just one of many free publications and information handouts that are funded annually through the generosity of Eastern National.

Some Apostle Islands site specific sales items include:

- "Apostle Islands Official National Park Handbook" \$7.95
- "The Visitor's Guide to the Apostle Islands National Lakeshore" \$10.00
- "Hiker's Guide to Apostle Islands National Lakeshore" \$4.95
- "Trails Illustrated Map of Apostle Islands National Lakeshore" \$9.95

Shipping charges will be added to orders. To order, contact Eastern National, Apostle Islands National Lakeshore, Route 1, Box 4, Bayfield, WI, 54814 or call (715)779-3397.



Around the Archipelago 2003 Summer Guest Lecture Series

| Date | Title | Description |
|-----------|---|--|
| July 7 | Chippewa Treaty Rights | Ronald N. Satz, provost at UW -Eau Claire, author of "Chippewa Treaty Rights" discusses the issue. |
| July 14 | West Nile Virus and the Birds of Northern Wisconsin | Thomas H. Nicholls (retired USFS) & Dr. Kurt Reed (Marshfield Clinic) describe the impacts of this disease on bird populations. |
| July 21 | Saving a Storied Wilderness: The Riddle of Apostle Islands National Lakeshore | Dr. William Cronon, professor of history at UW-Madison, discusses wilderness preservation in the Apostles. |
| July 28 | Piping Plovers of the Lake Superior Region | Sumner Matteson, Wisconsin DNR Bureau of Endangered Resources, explains the story of this rare bird species. |
| August 4 | Oh Deer | Jim Meeker, associate professor of biology at Northland College, describes the effects of high deer numbers on native plant communities. |
| August 11 | Ghosts of the Apostle Islands | Park Historian Bob Mackreth reveals some memorable stories from the Apostles. |
| August 18 | Public Input in the Internet Age | Park Chief of Planning Jim Nepstad describes the public's response to the APIS Wilderness Study and the park's reaction to the volume of comments it received. |
| August 25 | Exploring Mars | Astronomer Greg Furtman explains how on Aug. 28, Mars will be at "opposition," the moment when the Sun, Earth and Mars will form a straight line. |

**Apostle Islands National Lakeshore's Bayfield Visitor Center
Monday Evenings at 7:30 pm**