

Wolf's Eye



Isle Royale & Keweenaw Parks Association

2010 Nos. 2-3

Isle Royale Plans Cultural Resources Management

Isle Royale National Park just launched the planning process for a Cultural Resources Management Plan (CRMP) with a series of public listening sessions in Minneapolis, Duluth, Houghton, and East Lansing. The sessions were informal gatherings for the public to interact with Park personnel on plan goals and processes, issues, ideas, and concerns. The CRMP will address the general management, preservation, public use, and interpretation of cultural resources island-wide. The process is expected to

take two years. The National Park Service is forming an interdisciplinary planning team to produce the plan in consultation with the public, tribal and state governments, and other interested parties.

Isle Royale's cultural resources reflect 4500 years of human endeavor and include: prehistoric mining and occupation sites, American Indian and Euro-American historic mining and fishery sites, lighthouses, shipwrecks, and historic resorts and summer homes. They demonstrate a complex interaction of people

and the role they played in shaping the human and physical landscapes on Isle Royale. Presently, the National Park Service manages its cultural resources according to directives defined in the Park's General Management Plan/Environmental Impact Statement (GMP/EIS 1998) without specific guidance for a number of cultural resource themes and topics. The proposed Cultural Resources Management Plan and accompanying Environmental Assessment (EA) seeks to define sustainable management practices

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Transition at Keweenaw National Historical Park



February 2, 2011, will be Mike Pflaum's first day on site as superintendent of Keweenaw National Historical Park. He replaces Jim Corless, who retired October 31 after nearly thirty years with the National Park Service (NPS). Pflaum, most recently the Regional Partnerships Coordinator for the NPS Midwest Regional Office in Omaha, is a 30-year NPS veteran. Starting with seasonal positions at Yellowstone and Devil's Tower, he achieved permanent status at Yellowstone in 1984 as a telecommunications technician before serving as chief ranger

at Mount Rushmore from 1989-2008. Mike was acting supervisor there and at two other parks for about a year. He has received numerous performance and achievement awards, including the U.S. Secretary of the Interior's Partners in Conservation Award for 2009 and the Midwest Region's Harry Yount Award for Ranger Excellence in 2007.

"I'm very excited about this opportunity," Pflaum said of this new assignment. "I am looking forward to working collaboratively with park partners and the outstanding park staff to accomplish the mission together and to get to know the people of the community. I am drawn by the fascinating history of Keweenaw National Historical Park and the natural beauty of the area."

A Minnesota native, Pflaum and his wife Barbara, a former NPS ranger, greatly enjoy hiking, cross country skiing, photography, and exploring the great parks, historic sites, and wildlands of the nation. They are looking forward to

further pursuing these interests in northern Michigan.

Jim Corless arrived at Keweenaw NHP in June of 2007, quickly noting that Keweenaw differs from most of the parks he served. "Rather than a park where the NPS owns most of the lands and historic resources within it, the vast majority of resources here are owned by individuals,

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ISLE ROYALE

Discovering Snug-Harbor

In the summer of the year 1901, in a desperate effort to overcome an exceedingly distressing case of hayfever, and the attending asthma, I set sail from Duluth on a Booth Line steamer for Isle Royale, where we arrived at noon the second day. This twenty-six hour water trip had improved my hayfever trouble very materially and it was in a high spirit of encouragement, that I left the steamer and took up quarters with a fisherman, by the name of Gus Matson, at Tobin Harbor, where I had a comfortable bed and good meals. The fresh, pure air of Isle Royale dispelled my hayfever trouble entirely in a couple of days and of course Isle Royale was heaven to me.

I inquired of Mr. Matson where I could find the Isle Royale Green Stones, and he directed me to Mott Island on Rock Harbor about six miles from Scoville's Point. I convinced Mr. Matson of my sailorship and he equipped me with a small sailboat. With a vigorous northeaster, I had a fine six mile sail to the inner beach of Mott Island, as per directions. I took the path leading across the island to the Green Stone beach. I had taken my noonday lunch at Matson's, expecting to be back for a six o'clock dinner.

The fresh lake breeze was a fine brand of good medicine for me and I was in no hurry to leave the Green Stone beach. I gathered a fine lot of Green Stone specimens, beach-polished by the waves and contact with the coarse sand and gravel. I had given too little heed to the wind increase, but when late in the afternoon, I walked back over the island to my sailboat, I found both wind and wave quite aggressive, and setting in strong from the northeast. It would be impossible for me to row the boat against the wind and my only alternative was to tack zigzag, to and fro across Rock Harbor, gaining what points I could at every tack. Then I discovered that my boat was lacking in keel surface and I drifted and lost ground that I otherwise would have gained with proper keel equipment or centerboard. By dusk, I had worked my way down the harbor about 4 miles, when I tacked from the mainland over to the east end of the Smithwick Island (now known as Green Stone Island). The wind was increasing and the heavy wash coming through the Smithwick channel, came near being my undoing, filling my little boat with a quantity of water that made

it too logy for sailing, nor had I any opportunity for bailing. I saw that I could not sail past the Smithwick gap under the present wind condition and I headed for the mainland intending to strike some favorable spot and jump for it, expecting to lose the boat.

Looking at the mainland from Smithwick gap, the shore appeared to be one straight line, but fortunately the boat passed just a short distance outside the point where the Lodge steamer dock now stands and to my great surprise and relief I found myself in the quiet water of the little bay, which I named Snug-Harbor and where I later built "Rock Harbor Lodge". In the quiet water I could row the boat to shore, then I worked my way in the darkness through bramble and over rocky places to the Tobin Harbor fishing station, where I arrived at about 11 o'clock, much to the relief of the whole camp. I found that some of the fishermen had the conviction that I could not sail that boat past Smithwick gap and around Scoville's point and that I might possibly be lost.

Gus Matson asked me whether I lost the boat and I described my tangle with the waves at the Smithwick gap, my boat being dangerously filled. I told him how I headed for the mainland intending, when I struck shore, to jump for it and that most fortunately I sailed into a little quiet harbor where I tied the boat, then made my overland trek. He smiled and said, "That is one of the prettiest spots on Isle Royale." In due time, I purchased a mile of Rock Harbor front embracing Snug-Harbor.



Author "Commodore" Kneut Neutson with his "one-time wee little pal," Ruth Ann Baggley Bennett

From *Memoirs of a Pioneer*, written by "Commodore" K. Neutson (his spelling) in 1938. Neutson founded Park Place, which became Rock Harbor Lodge in the 1920s when his daughter, Bertha Farmer, took over as manager. Neutson placed the photo above inside the cover of a copy of his memoir that he gave to Ruth Ann Baggley Bennett, daughter of Isle Royale National Park's first superintendent, calling her his "one-time wee little pal." Future issues of the *Wolf's Eye* will feature other glimpses of the past, which IRKPA members are encouraged to contribute.

Keweenaw Transition, from p. 1

local governments, and organizations, and the NPS role is one of advocacy and coordination, providing technical assistance and funding to owners of historic properties, sites, and museums that provide visitor services to the public.” He notes that the park—what he calls a “partnership”—resulted from local efforts to draw national attention to the history preserved here, and that many of those individuals and organizations continue to contribute to the national park experience. “Here we have partners with the NPS all contributing to the visitor experience and to a common historic preservation ideal.”

His work has included development of the Union Building in Calumet as the park’s first visitor center, a system of Keweenaw Heritage Site road signs that will be installed this spring, and working with numerous community partners in developing a strategy for the preservation of the 30-acre Quincy Smelter complex owned by Franklin Township. He praises both the KNHP staff and the park’s citizen-based volunteer Advisory Commission and its executive director for the role they play in supporting park partners and in preservation advocacy.

“While I’ve worked a lot with partners throughout my career, the energy and enthusiasm of the Copper Country community in preserving its own nationally significant history is amazing to me. What a great place to culminate my formal work with the national parks!”

Cultural Resources, from p. 1

for all significant cultural resources found on Isle Royale, including archeological sites, cultural landscapes, historic structures, ethnographic resources, and museum objects.

The public is encouraged to follow the planning process and submit comments on the project website, <http://parkplanning.nps.gov/ISROcrmp>. This website will provide plan information, documents for review, and details on public listening sessions and meetings. Contacts for more information or comments are Liz Valencia, Chief of Interpretation/Cultural Resources (906.487.7153, liz_valencia@nps.gov) or Seth DePasqual, Cultural Resources Manager (906.487.7146, seth_c_depasqual@nps.gov). The mailing address for both is Isle Royale National Park, 800 E Lakeshore Dr, Houghton MI 49931-1869.

IRKPA 2010 Annual Meeting Report

The Isle Royale and Keweenaw Parks Association convened its annual membership meeting at 3:00 PM, Sunday, July 25, 2010, in the newly renovated Rock Harbor auditorium. Board members present were Ron Eckoff, Bob Guiliani, Anita Campbell, Arne Alanen, and Sandy Wilhoit, along with Executive Director Kristine Bradof and Susan Hooker, summer mail order and visitor center assistant.

Isle Royale National Park Superintendent Phyllis Green updated members on alternative energy options for the island, dock upgrades, and evaluation of options for a possible relocation of the mainland headquarters. One option would share a visitor center with Keweenaw National Historical Park at the Quincy Smelter site across from the current Ranger dock. Superintendent Green then presented a review of the scientific work and proposed regulations regarding invasive species and ship ballast.

The meeting recessed for an hour so everyone could tour the tall ship *Niagara* that docked briefly at Rock Harbor on its way to Duluth. During the War of 1812, the original *Niagara* helped defeat the British in the Battle of Lake

Erie. Commodore Oliver Hazard Perry made his famous remark, “We have met the enemy and they are ours,” from the deck of this ship. The original *Niagara* was built in Erie, Pennsylvania. This replica is part of a living museum collection and is the flagship of the State of Pennsylvania. About half of the 40 crew members are professional sailors and the other half are volunteers.

President Ron Eckoff announced board election results: Mike George of Fenton, MI, and Ed Sheridan of Winter, WI, and Keweenaw County, MI, were re-elected. Houghton County, MI, resident Bob Marr, who recently retired as manager of information services for the Office of Development at Michigan Tech, was newly elected to the board. Ron recognized Bob Guiliani for his years of service on the board, including three years as president, and announced the recent resignation of Jean Bjorseth due to the press of her consulting business. Brief committee reports were then presented.

After the meeting adjourned at 5:00 PM, about twenty members enjoyed a picnic on the deck of the guest house. They were also able to

see the tall ship depart Rock Harbor.

At 7:30 PM Tim Cochrane presented the annual meeting program in the auditorium to IRKPA members and the general public. Tim is superintendent of Grand Portage National Monument and formerly served as a ranger and historian for Isle Royale National Park. The title of his presentation and his latest book was *Minong—The Good Place: Ojibwe and Isle Royale*. The book is recommended reading for anyone interested in Isle Royale.

Isle Royale Service Trip Opportunities

Want to do more to help Isle Royale National Park? A service trip to stabilize historic buildings and support the Artist in Residence Program just might be your ticket! Join a work crew in Tobin Harbor from June 14-22 or 21-29. Volunteer skills needed are carpentry, roofing, painting, cooking, and general labor. To learn more, see www.irkpa.org (“upcoming” tab) or contact crew leader John Dunn (jdadunn@gmail.com).

Moose Bones Suggest Early Nutrition Link to Human Osteoarthritis

Medical researchers and orthopedic specialists from around the world had a chance to get up close and personal with bones of moose from Isle Royale in Atlanta, GA, in November 2010. What drew their attention was the arthritis in hip joints and vertebrae from moose, which had been the subject of a feature article in the *New York Times* on 17 August.

Moose from Isle Royale often exhibit osteoarthritis, the same condition that afflicts most people as they age or experience injury to joints. In moose it is related to age (usually more than ten years old), sex (more in males), and nutrition before and just after birth.

The early nutritional effects in moose were reported this year in a scientific paper by Rolf Peterson and colleagues, based on bones collected from Isle Royale moose over the past fifty years. Aside from injury, there is poor understanding of what, exactly, causes osteoarthritis, so the notion that early nutrition might have long-lasting

effects on joint health proved to be big news among arthritis specialists and the general public.

The convincing story from Isle Royale moose relied not only on the arthritis that is evident in skeletal joints, but also the length of the metatarsus, the long leg bone just above the hoof in the moose's rear leg. This bone has a high growth priority before birth; indeed, it is half-grown when a moose is born—probably part of the survival strategy for moose living among wolves and other carnivores. For moose born at the small extreme in size, the prevalence of arthritis when old is increased three-fold.

Researchers at Isle Royale began collecting metatarsal bones from moose in 1969, during a severe winter when it seemed obvious that moose calves were smaller in stature. At that time arthritis was also becoming more evident among moose killed by wolves. It would be several more decades before the link between small stature and increased arthritis was firmly established.

There are obvious parallels in arthritis between moose and humans that are explained in the article by Peterson et al. When corn, known to be deficient in several amino acids,

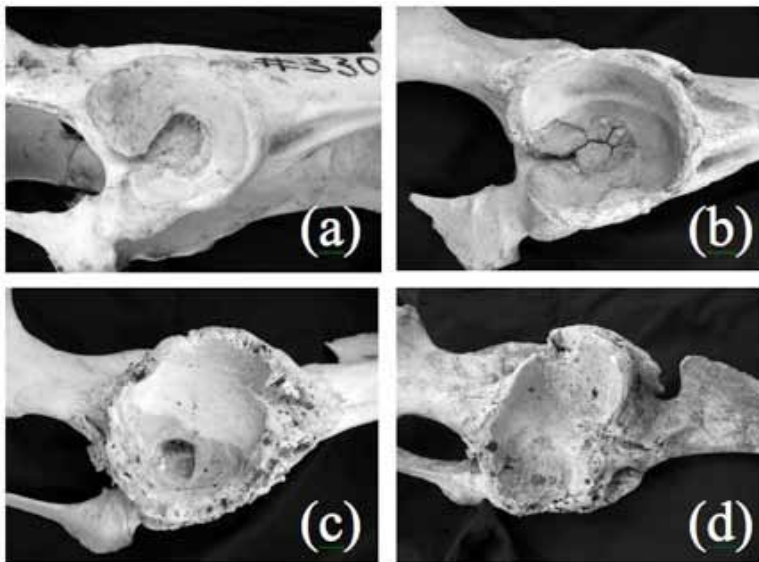
became a staple in the diet of some groups of native Americans beginning about 1,000 years ago, there was evidence of increased arthritis, but anthropologists have considered this a result of increased wear-and-tear on joints from working the crops. But the moose study suggests that arthritis late in life may have important origins very early in life.

The remarkable collection of moose bones from Isle Royale becomes increasingly valuable over time, especially as new technologies are applied to analysis of bone shape, composition, structure, and genetic information. Visitors to Isle Royale have a chance to discover and learn from these artifacts each summer.

Volunteers may assist researchers on week-long backcountry trips in search of bones (more information at www.isleroyale-wolf.org). Much less strenuous would be a visit to the summer field headquarters at the historic Bangsund fishery on Rock Harbor, across from Daisy Farm campground and a short hike from the Edisen Fishery and the Rock Harbor lighthouse. There, interpretive displays include an impressive collection of moose bones and skulls with antlers. Plan to stop by for a visit during your next trip to the island.

—Rolf Peterson

R. O. Peterson, J. A. Vucetich, G. Fenton, T. D. Drummer and C. S. Larsen. 2010. Ecology of arthritis. *Ecology Letters* 13:1124-1128.



The progression from a normal hip joint (a) to a joint severely affected by arthritis (d) probably takes place in less than a year in moose. Usually, a moose with arthritis quickly falls prey to hunting wolves.

Beavers Hang on at Isle Royale

One of the goals of the Isle Royale and Keweenaw Parks Association is to fund research projects that will provide information helpful in the management of Isle Royale National Park. Since at least the 1970s, the association has funded a biennial survey of the beaver population. Researchers Philip C. Shelton and Douglas W. Smith conducted these surveys during 1964-2004. Beginning in 2006, for five years running, the association provided partial funding for

an intensified effort designed to improve the accuracy of these aerial surveys as well as continue the time series, which now ranks with Voyageurs National Park as the two longest-running estimates of any beaver population.

During 2006-2010 two light aircraft were used to conduct a double count of active beaver sites. Piloting the two aircraft were Jim Hummel from Voyageurs National Park and Donald Murray of Up North Aerials

in Grand Rapids, MN. Isle Royale National Park researcher Mark Romanski and Rolf Peterson of Michigan Technological University were the observers. Equipped with maps showing locations of all recently active beaver colonies, the two pilot-observer teams counted all the active sites they could find during low-elevation, intensive-search flights in October, after beaver have begun collecting food caches for winter consumption. Using the number of active sites seen

by both observers and by each observer alone, it is possible to estimate the number of sites probably missed by both observers, providing an estimate of the total number of active sites.

The results from the last five years suggest a slowly declining beaver population during 2006-2010:

Year	Total active sites (both observers)	Estimated total
2006	112	133
2007	99	124
2008	91	128
2009	87	92
2010	93	99

While estimating more active sites than the previous biennial counts by Shelton and Smith, the recent results are consistent with the declining beaver numbers they estimated during 1974-2004. The high count at Isle Royale in 1974 of almost 300 was probably the highest beaver density in the

previous two centuries. Recall that beaver were almost extinct in North America early in the 19th century because of the intensive fur trade. The deciduous forests that provide best forage for beaver have largely been replaced through natural forest succession by fir and spruce, and hunting wolves largely restrict beaver movement to less than 50 meters from water.

The annual counts allowed observers to estimate turnover in active sites. The annual rate of abandonment of active sites was 58% (range: 55-62%). In 2010, only about half the sites that had shown beaver activity since 2000 were currently active, while 11 sites were active each year during 2006-2010.

Wolf predation is probably a major limiting factor for beaver, although relatively poor habitat is the reason for high vulnerability to predation. The number of beavers present in active sites is believed to be small, probably just 1-2 individuals, in most cases, that have moved into abandoned sites. These beavers are vulnerable to wolf

predation as they are forced to forage far from their ponds. The 2010 survey found two formerly active sites where wolves had dug out lodges and apparently caught all beavers present. The small increase in active sites from 2009 to 2010 may be related to the decline in the wolf population during the same time from 24 to 19 wolves, with the loss of two of the four breeding packs. The most beavers in any site are to be found in Lake Ojibway (four active lodges in 2010), where abundant aquatic plants provide a rich source of food that permits beavers to remain secure in the water year-round.

The best locations to observe beavers are near Lake Superior campgrounds at Washington Creek, McCargo Cove, and Brady Cove, and interior lakes along the canoe system, especially Chickenbone Lake. There beavers can take advantage of opportunities to feed on aquatic plants in adjacent drainages and woody plants along long expanses of shore.

— *Rolf Peterson*

Wolf Numbers Continue to Slide; Moose Hold Steady

Winter study 2010 revealed that only two of Isle Royale’s four wolf packs seen in 2009 survived, and the number of wolves declined from 24 to 19. Rolf Peterson says, “East Pack’s extinction is the end of a dynasty. There has been a territorial wolf pack centered on the east end of the island since 1972.” Paduka Pack also disappeared, leaving the Chippewa Harbor and Middle Packs, plus three loners. Moose numbers declined slightly from 530 to 510, about half the long-term average.

The researchers observed five to nine members of the Chippewa Harbor Pack (CHP) at different times. A new alpha female displaced the older one. Subordinate wolves sometimes struck off on their own.

A radio-collared male dubbed “Romeo” explored beyond CHP territory, killing a moose calf with the help of another wolf. He may have mated with a Middle Pack female, also seen on her own.

Middle Pack consistently had seven members. Two or three were likely pups, which means that four or five adults died or dispersed since 2009. The pack struggled to kill two moose, waiting nine days for one to die. The posture of the alpha female, who was at least eleven years old,

suggested injury or some other problem, which probably affected the pack’s hunting success.

The East Pack had been in decline for several years. Its alpha female was found in May 2009 after she died giving birth to eight pups. One of the lone wolves may have been from the Paduka Pack.

The moose survey produced no big surprises, though the researchers saw two sets of twin calves in the former East Pack territory, the first time since 2005 that twins were seen. A greater percentage of wolf-killed moose were malnourished, based on the fat content of their bone marrow, than in recent years. At least 11 of 16 necropsied moose had jaws showing periodontitis. The odor produced by the infection probably alerted wolves to the presence of a weakened moose.

Moose teeth show air toxics decrease

Moose teeth collected over five decades on Isle Royale offer evidence that passage of the Clean Air Act in 1970 and elimination of lead in gasoline in 1975 have reduced lead and mercury in the environment. Mercury content in the teeth dropped 65% in the early 1980s and has remained

constant since. Lead has continued to decline since the 1980s, 80% by 2002.

Wolves are not wasteful gluttons
It’s time to kill the myth that wolves regularly kill more than they can eat. Years of wolf-moose study data on carcass utilization show that wolves usually eat 91% to 95% of the edible parts of a carcass. Ninety percent of the time, they eat at least 73%. They do leave more when food is plentiful, but such partial-prey consumption is common among many species, even humans. Those leftovers benefit Isle Royale scavengers like ravens and foxes, too.

To explore the research in greater detail or track the 2011 winter study as it unfolds, see the project website (www.isleroyale-wolf.org) or buy the following research reports from the Isle Royale & Keweenaw Parks Association at www.irkpa.org or our bookstore at the Isle Royale National Park Visitor Center or from the International Wolf Center (www.wolf.org).

Ecological Studies of Wolves on Isle Royale, Annual Report 2009-2010 by John A. Vucetich and Rolf O. Peterson (\$4.95)

Winter Study 2010: Notes from the Field by John A. Vucetich (\$5.95)

In Memorium



Donna Mattson Longtime Isle Royale volunteer Donna Mattson of Houghton passed away on July 5, 2010, after a short but tough battle with lung cancer. Donna worked as a volunteer for the National Park Service alongside her husband Les at the Edisen Fishery from 1992 through the summer of 2009. She also helped at the fishery in an unofficial capacity in the 1980s. During the winter months, Donna and Les traveled throughout the Southwest, enjoying life. In addition to her husband, Donna leaves behind four children, three grandchildren, one sister, one brother, and numerous nieces and nephews. Family and friends gathered in the Keweenaw in October to celebrate her life. (Photo courtesy Candy Peterson)



Bob Simonson Robert J. Simonson, 83, of Iron River, died May 19, 2010. He and his wife Jean, longtime members of IRKPA, were married nearly 64 years and retired to their beloved Upper Peninsula to spend summers at Agate Harbor in the Keweenaw. Bob had many interests: reading, hiking, photography, and his computer. His claim to fame was publishing his mother's journal of their year (1932-33) spent on Isle Royale, where she taught the five Johnson children and Bob. *Diary of an Isle Royale Schoolteacher*, which remains a popular IRKPA title, will be reprinted in 2011. Surviving Bob are his wife, two sons, two granddaughters, seven great-grandchildren, and a sister-in-law.



Bob Janke Robert A. Janke, 88, of Boston Location, passed away December 22, 2010. Bob taught physics and biology for over 40 years at Michigan Technological University and spent 50 summers on Isle Royale conducting research. He and his late wife, Nadine, both IRKPA life members and volunteers, authored *Wildflowers of Isle Royale*. He also coauthored *Flora of Isle Royale* with Allison Slavick. Bob enjoyed spending time outdoors, especially on the island, hiking, and cross-country skiing. Singing and folk dancing were other pleasures. Surviving are three sons, a daughter, seven grandchildren, six great-grandchildren, two step-grandsons, a sister, and several nieces, nephews, and cousins.

Other longtime IRKPA members we lost in 2010 are Dr. Richard Imm of Chassell, MI, and Dorothea Schlechte of Evansville, IN.

Behind the Scenes @IRKPA.org

From the executive director:

Since taking over from Jill Burkland on April Fools' Day (probably tempting fate!), Kristine's focus has been learning myriad job responsibilities and reducing costs where possible. Jill's inner calendar is still attuned to IRKPA, so she has generously given her time and advice on everything from the big picture to "do we have a file on...?" questions. With this *Wolf's Eye* finally done, members will see a more regular schedule resume.

Membership committee:

Thanks largely to board member Ed Sheridan, IRKPA increased its visibility this past summer by having a tent and display of services we provide to the two national parks. Volunteers staffed booths at ten different shows from Copper Har-

bor to Old Victoria. We covered arts and crafts shows to a Civil War encampment to a strawberry festival, as well as Fourth Thursday in History programs.

Displays with images of Isle Royale and the Keweenaw accompanied books and other items. Visitors picked up free park newspapers, brochures, and IRKPA membership materials, and were encouraged to visit the parks themselves.

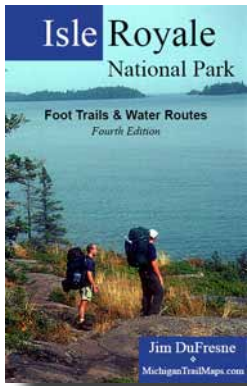
Publications committee:

In addition to new books nearing publication, a major project for the committee headed by Mike George is developing a "scope of sales" required by the cooperating agreement between IRKPA and the National Park Service. Items for sale must be relevant to park themes and the telling of each park's story. For example,

the six primary themes for Isle Royale are the island fisheries; gray wolf history, ecology, and research; cultural history; geology and related information; human impact on the island's ecosystems; and general information on national parks.

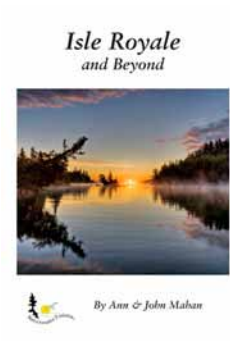
Other factors to consider are a publication's audience, a mix of media types (print, video, audio, games) and price points that will maintain demand. Does the item provide information on a specific topic? Is it geared to children? Does it present research or scientific findings. Any item offered for sale should make us think, make us feel, allow us to invest ourselves in the park's story. This effort helps IRKPA maintain a well-rounded offering of educational materials geared to the interests of those who visit and support these two wonderful parks.

New Items Available from IRKPA



**Isle Royale National Park:
Foot Trails & Water Routes**
4th Ed., Jim DuFresne \$16.95

Brand new edition of the essential guide to trails and waterways, including mileage, difficulty, and amenities at each destination. More than 60 photos and 35 detailed maps of the park's backcountry plus details on the park's flora, fauna, fishing opportunities, and history. 184 pp.



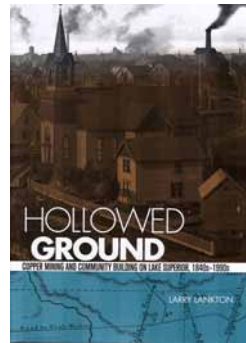
Isle Royale & Beyond DVD
Ann & John Mahan \$24.95

Through photography, sounds, music, and their narration, John & Ann Mahan capture the essence of the Isle Royale experience. They explore the uniqueness and beauty of the island wilderness—sharing their adventures, knowledge, and passion about the island. 49 min.

Hollowed Ground

Larry Lankton \$34.95

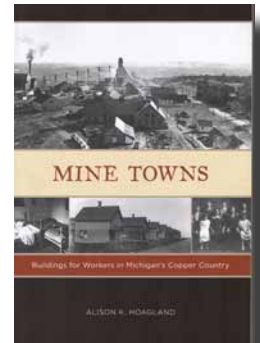
This book provides an informative and absorbing account of copper mining on Michigan's Keweenaw Peninsula. Focusing on the region's three largest copper producers, it documents the dynamic evolution of the Keweenaw's social and industrial landscapes, giving a context for understanding those landscapes today. Paper, 375 pp.



Mine Towns

Alison K. Hoagland \$25.00

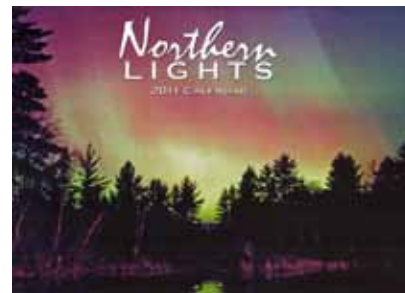
The first working-class history of domestic life in Copper Country company towns during the years 1890 to 1918, this book investigates how the architecture of a company town revealed the paternal relationship that existed between the company managers and workers. Paper, 307 pp.



Naked in the Stream

Vic Foerster \$19.95

Foerster narrates thirty years of wonderment as an Isle Royale visitor. Funny and poignant, riveting and heart-thumping, Foerster describes his first Isle Royale hike with humor and humility. Beautifully illustrated by former Artist-in-Residence Joyce Koskenmaki, this book takes an intimate look into what it means to find and revere wilderness. Paper, 288 pp.



Northern Lights 2011 Calendar \$15.95

Featuring the photography of Shawn and Brian Malone (www.LakeSuperiorPhoto.com), this calendar features twelve images and information about the phenomenon of the aurora borealis.

Isle Royale Benchmark Pin \$3.50 Medallion or Zipper Pull \$4.00

Based on a U.S. Coast and Geodetic Survey marker on Isle Royale, these benchmark items add an iconic wolf image to pins, hiking medallions, and zipper pulls.



Jr. RangerLand National Park Board Game \$19.95

In this board game of color matching and exploration, 2-4 players collect Explorer Cards as they journey to national parks throughout the United States, including Isle Royale. Ages 4 and up.





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Register now for Isle Royale workshops in June!

The fifth edition of the popular **Isle Royale Botany Workshop** takes place **June 13-18**. Taught by botanist Janet Marr, the workshop will introduce those with beginning/intermediate plant ID skills to the island's spring flora.

Want to improve your photographic skills? Make Isle Royale your subject matter at the popular **Isle Royale Photography Workshop, June 17-22**, taught by professional photographer Bob Guiliani.

For either workshop, register by March 5 to get the early \$650 rate (including \$25 IRKPA member discount; \$200 deposit required), which covers instruction, transport to and from the island, meals, and camping. Email kbradof@irkpa.org for a flier with more details.

Linn Scholarship Available

Graduating high school students in the Copper Country Intermediate School District or children of IRKPA members are invited to apply for a \$250 college scholarship in memory of Bob Linn. Seniors who plan to major in biology, forestry, or earth sciences are eligible. Last year's award went to Kristin Brusso from Calumet High School who is now studying wildlife ecology at Michigan Tech. To apply, contact Kristine Bradof at irkpa@irkpa.org or 906-482-7860.

Feeling renewed?

If not, your IRKPA membership may have expired! The remedy is simple: just respond to the renewal email or letter you should have received. This year's premiums are a stainless steel 17 oz. IRKPA logo thermos (\$100+ dues or donation) or a 100-page, recycled-content notebook and pen set with blue IRKPA logo and cloth accent (\$50+ dues or donation). See www.irkpa.org for more details or to renew online.

Isle Royale & Keweenaw Parks Assn.

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IRKPA is a nonprofit membership organization that assists Isle Royale National Park and Keweenaw National Historical Park by publishing and selling educational materials for park visitors. Gifts, bequests, memorials, and memberships are U.S. tax deductible.

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