

Wolf's Eye



Isle Royale & Keweenaw Parks Association

2014 No. 1

Quincy Smelter Site Removed From Superfund List

The Environmental Protection Agency has removed the nationally significant Quincy Smelting Works site from the Superfund National Priorities List now that cleanup goals have been met, and the site is ready for redevelopment and reuse.

A key contributing feature to the Quincy Mining Company National Historic Landmark District within Keweenaw National Historical Park boundaries, it is the

only remaining late-nineteenth century smelter of native, elemental copper in the world. The park's professional cultural resources staff has provided tech-

nical assistance for the preservation and interpretation of the historic smelter site.

On November 6, EPA Region 5 Administrator Susan Hedman joined Superintendent Mike Pflaum, Keweenaw NHP Advisory Commission Executive Director Scott See, and U.S. Sen. Carl Levin (via Skype) in celebrating the delisting action with site owner Franklin Township, the area's legislative delegation,

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Garter Snakes: Isle Royale's Colorful Characters by Paul Brown and Wendel Johnson

Isle Royale is home to two harmless snake species, the red-bellied snake (*Storeia o. occipitomaculata*) and the eastern garter snake (*Thamnophis s. sirtalis*). Eastern garter snakes are one of the most abundant and often-encountered reptiles in North America. They are typically found near water but not always. They prefer wet meadows, streams, shorelines, and ponds to more upland sites like dry forests. Anecdotal evidence from Isle Royale suggests areas with ninebarks, red-twig dog-

woods, and other medium-sized shrubs are preferred microhabitats, especially for pregnant females. Their preference for wetlands areas is in large part due to their diets. They feed mostly on earthworms, but will also eat toads, frogs, fish, and rarely, snails and crayfish.

Garter snakes are somewhat unusual among reptiles in that they do not lay eggs. Instead, after emerging from hibernation and breeding in the spring, the females carry the offspring through the

peratures that speed the development of the young. Females at Isle Royale typically carry 10-15 young and breed every 2-3 years. Multiple matings with different males may partially explain numerous color morphs in a single litter. About 9-12 inches long at birth, they will continue to grow throughout their lives like most reptiles. On Isle Royale the average size for adults is 26 inches, with the largest individual snake caught just over 36 inches.



Black morph Isle Royale garter snake

summer until they give birth to live young in late August and early September. Females tend to remain near their hibernacula sites and so are often found in congregations during the summer. Females also tend to be out in the open more than the males to maintain higher body tem-



Isle Royale garter snake with normal coloration

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Garter Snakes, from p. 1



Red-checked copper morph juvenile garter snake

The coloration of eastern garter snakes is typically olive green or a dark-brownish color with three yellowish stripes, one that runs down the back and the other two along the sides. Herpetologists (scientists that study reptiles and amphibians) recognize genetic variations in color patterns in most amphibian and reptilian populations. Here on Isle Royale, Alexander Ruthven first observed such genetic variations in garter snakes in 1905. We now know that these variations are expressed on the island as eight different color morphs, which are described as normal, yellow-flecked, red-flecked, red-checked, red-checked copper, red, black, and blue.

The Isle Royale snakes' diversification is likely due to random genetic drift and a founder effect, with 65% of Isle Royale snakes expressing aberrant (non-normal) coloration (55% have extra red coloration and 10% are black). When a small part of a population moves to a new locale, the genes of the "founders" of the new group are disproportionately frequent in the resulting population if it remains isolated, and recessive genes are more likely to be expressed. The isolated gene pool thus drifts away from that of the original population.

Genetic testing of all snakes collected reveals that garter snakes on Isle Royale, regardless of color morph, are the same subspecies, the eastern garter snake, *Thamnophis sirtalis sirtalis*. (Black garter snakes on Isle Royale were once thought to be black rat snakes, *Elaphe obsoleta obsoleta*, also known as the eastern rat snake, *Pantherophis obsoletus*.) Surpris-

ingly, each of these color morphs exhibits slightly different behaviors, especially when it comes to aggressive anti-predator responses to being captured. Red-checked copper, black, and blue snakes tend to be the most aggressive. However, this is not the first correlation between coloration and aggression in garter snakes. Temperature affects the speed of their responses, but not the levels of aggression.

Garter snakes are known to be cold tolerant, and Isle Royale snakes are *very* cold tolerant. On the island they are active for approximately 140 days each year. One snake was caught while actively hunting 18 inches underwater in Lake Superior at a water temperature of 54 degrees F. Another snake was seen almost a mile offshore swimming away from Menagerie Island.

The forests on Isle Royale are divided into ecologically distinct east and west halves, as are the garter snakes. Recent genetic results from Isle Royale, Minnesota, and Canada reveal that the island has two distinct garter snake subpopulations on the east and west sides. The Passage Island population is part of the eastern cohort.

Garter snakes reached the Windigo area of the island from Minnesota about 9,000 years ago, just after the retreat of the last ice age, most likely by drifting across on floating vegetation, actively swimming, or both. The snakes then dispersed southeast before heading to the eastern side of the island. At some time in the past, the west central part of the island with a lot of upland habitat types became poor habitat and prevented dispersals back toward the west. This led to a rift between the eastern and western populations that still exists today.

The black snakes, common in the Rock Harbor area, occur only in the eastern subpopulation; black is a recessive genetic trait. The blue snakes, which are thought to be a mutation of the black coloration, are only known

to occur on Isle Royale and in an unrelated population in southern Florida. The presence of the melanistic (black) snakes provides further evidence for the founder effect and genetic drifting in the population.

The stable color variations in the population are thought to reflect evolutionary advantages: the prevalence of red coloration (55% of individuals) seems to be correlated to increased camouflage, while the persistence of black coloration (10% of the snakes) correlates to better temperature regulation and increased survivorship from predation by the added aggressiveness. Around 35% of captured snakes showed evidence of recent escape from predation, even though the number of garter snake predators is substantially reduced from the mainland. Scarring and missing tails were the most common occurrence, though open wounds, broken ribs and missing/damaged scales were all observed. The main predators of garter snakes on the island are northern pike, red fox, ravens, and hawks.

Isle Royale may feature only two species of snakes, but as with so many other aspects of this isolated archipelago, there is so much more to the story. If you thought of garter snakes as ho-hum, garden-variety serpents, now you know them as some of Isle Royale's most colorful characters.

Paul Brown is chief of natural resources for Isle Royale National Park. Wendel Johnson is professor emeritus of biology at University of Wisconsin Marinette.



Swimming garter snake. NPS photos: Paul Brown

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In Memoriam

Elsie Cevilla (Feigley) Hinzmänn, 95, formerly of Hancock, MI, passed away August 21 in Grand Rapids, MI. She and her husband Paul, who died in 2012 at nearly 100 and after 71 years of marriage, were longtime IRKPA life members. The Hinzmänn spent summers at their Torch Lake cottage between trips to Isle Royale. Daughter Georgia and Hugh Makens are IRKPA sustaining members. Elsie also leaves behind son Vincent (Nancy), three grandchildren, five great-grandchildren, a brother, a sister-in-law, nieces, and nephews.

Les Mattson, 86, died September 23, 2013, in Hancock, MI. Born to a commercial fishing family in Chatham, MI, Les worked 30 years in construction and came to Isle Royale in 1980 to help restore the 1855 Rock Harbor lighthouse. From 1985-2009 he greeted many

visitors to the Edisen Fishery as a fisherman and cultural demonstrator along with his late wife, Donna. Surviving Les are four children: Richard of California, Larry, Debby (Chuck), and Sheila (Dennis) of the Keweenaw, and three grandchildren.

Edith (Kaarlela) Raski, 91, died on December 12, 2013. After attending school at Keweenaw Bay and Baraga High School, she worked for an elected state official before moving to Detroit, where she was secretary for a group of manufacturing agents. She and husband Reino Raski had been married 40 years when he died in 2000. Active in her church, Edith also was a hardworking volunteer at the Finnish Cultural Center in Farmington Hills. She joined IRKPA in 2009, along with her sister, Ruth Kaarlela, who survives her.

Isle Royale & Keweenaw Parks Association 2013 Annual Financial Report

Income and Expense for Years Ended September 30

Income	2011	2012	2013
Sales	\$79,424	\$90,448	\$96,749
Member Dues	\$22,058	\$22,727	\$21,990
Donations/Grants*	\$33,284	\$21,515	\$35,040
Programs	\$11,682	\$16,900	\$13,043
Interest/Discounts/Misc.	\$178	\$218	\$442
Auction & Special Events	\$1,088	\$3,687	\$5,551
Total Income	\$147,713	\$155,494	\$172,816
Cost of			
Goods/Programs	\$42,791	\$52,603	\$53,381
PROFIT	\$104,922	\$102,891	\$119,435
Expense			
Operating Expense	\$71,428	\$74,556	\$79,624
Net Annual Income	\$33,494	\$28,335	\$39,811
Aid to Parks	\$12,397	\$9,786	\$14,555
Net Increase/Decrease	\$21,097	\$18,549	\$25,256

*Donations do not include gifts to endowment fund at Keweenaw Community Foundation; 2011 includes 2010 grant-deferred revenue.

Balance Sheets for Years Ended September 30

Income	2011	2012	2013
Sales	\$79,424	\$90,448	\$96,749
Member Dues	\$22,058	\$22,727	\$21,990
Donations/Grants*	\$33,284	\$21,515	\$35,040
Programs	\$11,682	\$16,900	\$13,043
Interest/Discounts/Misc.	\$178	\$218	\$442
Auction & Special Events	\$1,088	\$3,687	\$5,551
Total Income	\$147,713	\$155,494	\$172,816
Cost of			
Goods/Programs	\$42,791	\$52,603	\$53,381
PROFIT	\$104,922	\$102,891	\$119,435
Expense			
Operating Expense	\$71,428	\$74,556	\$79,624
Net Annual Income	\$33,494	\$28,335	\$39,811
Aid to Parks	\$12,397	\$9,786	\$14,555
Net Increase/Decrease	\$21,097	\$18,549	\$25,256

Aid to Parks for Years Ended September 30

Cash Contribution	2011	2012	2013
Greenstone Newspaper	\$5,959	\$3,097	\$2,878
Keweenaw Guide Newspaper	\$2,415	\$2,495	\$2,415
Park Brochures	\$385	\$395	\$826
AIR/Historic Preservation	\$1,651	\$3,492	\$4,657
Interpretation/Events	\$20	\$115	\$1,415
Superintendents' Accounts	\$556	\$192	\$1,212
Natural Resources	\$1,411	\$0	\$0
Maintenance Projects	\$0	\$0	\$1,152
Total	\$12,397	\$9,786	\$14,555

Keweenaw Community Foundation Endowment

	2011	2012	2013
9/30 Balance	\$136,889	\$154,155	\$165,084
Basis	\$134,574	\$140,095	\$140,959
Grant to Operating Funds	\$4,829	\$5,902	\$6,840

IRKPA 2013 Annual Narrative Report

IRKPA ended FY13 with 978 members (708 memberships) and net income of \$25,256. Isle Royale National Park (IRNP) received \$10,147 in Aid-to-Park funding to print Greenstone newspapers and Rock Harbor maps, support the Artist-in-Residence Program, and maintain and repair historic structures for which 17 volunteers performed 1,040 hours of work and donated \$2,100. Another IRKPA volunteer donated \$1,152 and recruited three more volunteers to reshingle five leaking shelter roofs. Aid for Keweenaw National Historical Park (KNHP) of \$3,256 paid for 30,000 copies of The Keweenaw Guide newspaper and resources for interpretive staff, such as an iPad for use with visitors.

Mold concerns at IRNP's Houghton Visitor Center led to a brief move of NPS staff and part of IRKPA's sales area to a more visible—but too-small—space shared with the Chamber of Commerce. IRKPA staff and volunteers had booths at the Copper Country Poor Artists Sale, the Quiet Water Symposium in East Lansing, MI, and Canoecopia in Madison, WI. Sequester travel restrictions prevented planned NPS participation in the latter, even with IRKPA paying expenses, but volunteers staffed the booth. IRKPA collaborated with staff and volunteers from IRNP, KNHP, the KNHP Advisory Commission (AC), and the National Parks of Lake Superior Foundation to staff a Tori booth for five days during FinnFest USA 2013, held in the Keweenaw. Other outreach included a booth at Michigan Tech's "Afternoon on the Town" for new and returning students, and regular updates to IRKPA's Facebook page, with 2,259 likes as of September 30. The executive director also attended the Association of Partners for Public Lands Convention in Portland, OR, including a workshop "Bookstores Beyond Books."

For the first time, the annual meeting moved to early October in 2013 to take advantage of the Keweenaw's fall colors, unfortunately coinciding with the government shutdown. About 25 members gathered for the pasty dinner, 40 for Bill Rose's talk on geoheritage tourism in the region, and more than 60 for a Saturday cruise on the *Isle Royale Queen IV*, with Michigan Tech Professors Emeriti Larry Lankton and Bill Rose as guides to the human and geologic history of the Keweenaw Waterway. The six participants in IRKPA's first three-day Keweenaw photography workshop were also on the cruise. Six-day Isle Royale botany and photography workshops in June had nine and seven participants, led by Janet Marr and Bob and Linda Guiliani, respectively.

IRKPA worked with IRNP interpretive staff and local aerial photographer Neil Harri to design "Advice from Isle Royale" bookmarks, postcards, magnets, and shirts. Other new sales items we developed included Isle Royale interpretive bandanas and local designer Mike Stockwell's 1913 copper miners strike centennial poster, the latter part of a KNHPAC grant that also produced DVDs of the "Risk and Resilience" short film featured at KNHP's Calumet Visitor Center.

In collaboration with the George Wright Society, IRKPA awarded two \$250 Bob Linn Scholarships this year to students starting college at Michigan Tech; the two groups, both co-founded by Bob Linn, will offer a \$500 scholarship in future years to local high school graduates or IRKPA members' children majoring in biological or earth sciences.

Italian Hall Tragedy Centennial

by Tom Baker

On Christmas Eve, which marked the centennial of the 1913 Italian Hall Tragedy, a ceremony was held at the site of the hall, which is situated in the heart of Keweenaw National Historical Park in Upper Michigan's Copper Country.

In the midst of the bitter Michigan Copper Miners Strike of 1913, the union women's auxiliary held a Christmas Eve party for the miners' children and families. It was to be a night of song, gaiety, and Santa Claus.

Instead, at the height of the festivities there was reportedly a cry of "Fire!" after which a stampede ensued down the stairs from the second floor hall. In an instant, 73 people—59 of them children—piled up in that fateful stairway, crushed and suffocated. And the village was left to mourn and bury its dead.

One hundred years later, the village continues to mourn. Around 200 hardy people showed up on the afternoon of December 24th to honor the victims of this tragedy and to pay homage to their memory. Following a brief invocation, the names of the 73 victims were read by the village president as the bells of the former St. Anne's Church (now the Keweenaw Heritage Center, a partner of Keweenaw NHP), tolled in the distance for each person. It was a moving ceremony, befitting the solemn remembrance.

Following the ceremony, the attendees proceeded to the village hall (much

as the villagers had done with the bodies of the deceased that heart-wrenching night) and viewed historic photos of the aftermath. A remembrance book was provided for those who wished to share their personal thoughts. It was a striking scene, with relatives, friends, and supporters sacrificing their Christmas Eve to pay their respects in this centennial ceremony.

The event was planned in partnership with the Village of Calumet, Calumet Township, Main Street Calumet, and the NPS at Keweenaw NHP. The CLK Rotary Club provided 73 luminaries at the Italian Hall Site, which remained lit through the eve. Recent video releases about this significant event in American labor history include the documentary film, *1913 Massacre*, and the PBS offering, *Red Metal*.

Tom Baker is management assistant at Keweenaw National Historical Park; his article appeared in InsideNPS. For more information, see keweenawnow.blogspot.com/2014/01/calumet-village-holds-italian-hall.html or the park's website at www.nps.gov/kewe. Several new books related to the 1913-14 strike, along with the *1913 Massacre* DVD and a commemorative strike poster, are available from IRKPA. Titles include *Community in Conflict: A Working-Class History of the 1913-14 Michigan Copper Strike and the Italian Hall Tragedy* and *Annie Clemens & the Great Keweenaw Copper Strike*.



Village of Calumet President and IRKPA member Dave Geisler (at right) reads the names of the 73 Italian Hall victims during the Christmas Eve 2013 centennial ceremony at the historic site. A descendent of one of the victims takes a rose from the memorial wreath. Photo: Allan Baker, *Keweenaw Now*

Mike Pflaum Heads East

On January 26, Mike Pflaum became superintendent of Pictured Rocks National Lakeshore. After three years at Keweenaw National Historical Park, he remains acting superintendent there until his replacement is selected. "Mike's extensive background and experience in park operations, law enforcement, and resources management—specifically wilderness and lake management during his time at Yellowstone National Park—will serve him well in this new leadership role," said Mike Reynolds, director of the National Park Service Midwest Region. IRKPA will miss Mike and Barb's contributions to the park and the community but appreciate their renewing as IRKPA members for 2014!

Quincy Smelter, from p. 1

the Michigan Department of Environmental Quality, the Torch Lake Public Advisory Council, and the community.

The advisory council has worked tirelessly for nearly two decades to clean up, delist, and redevelop numerous locations of the Torch Lake Superfund Site. The delisting of the Quincy Smelting Works is the most notable milestone in the journey, as the site is emblematic of the rich copper mining heritage associated with Upper Michigan's Copper Country and Keweenaw NHP.

"The NPS commends the EPA, Franklin Township, and the many partners involved in the effort leading to this

action," said Pflaum. "A tremendous amount of planning and groundwork over a long period of time has resulted in this major environmental improvement and decision. We look forward to continuing the positive work with all involved to ensure future progress in the protection of the smelter for the benefit of the community and the enjoyment and education of park visitors."

"The park's advisory commission is redoubling its efforts to raise non-federal partner funds for the purchase of the Quincy Smelting Works Site by September 2015," said Sec. "The importance of this site to the story of copper on the Ke-

weenaw is beyond measure; it was, after all, the single most significant feature cited in the legislative history of Keweenaw NHP."

The purchase may happen as early as this summer. See reported at the January quarterly meeting of the Advisory Commission that sale of easements, needed to realign M-26 along the smelter site during the upcoming construction season, to the Michigan Department of Transportation will count toward the purchase price of \$335,000. The KNHPAC has raised \$85,000 of the match required to secure a \$100,000 anonymous donation for the balance of the needed funds.



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Your Extra Support Helps!

Did you know that members like you have several ways to increase their support of IRKPA at no cost to them? Here are some examples and the difference they make:

Thanks to 13 IRKPA members who installed the iGive button in their browsers during the pre-holiday \$5 bonus promotion and 8 others who shopped via iGive.com with IRKPA as their cause, we will soon receive a check for \$109! The total already paid to IRKPA since joining iGive in February 2012 is \$160, with another \$39 pending.

Six members have set up employer matches for their donations, which brings in an extra several hundred dollars each year. If you work for a company that offers matches for employees' or retirees' charitable giving, your donations to IRKPA may be matched up to 100% simply by filling out a form.

Another member has set up monthly payroll deduction, providing \$120 of extra financial support each year. Although it is her money, not her employer's, they take care of the payment, which IRKPA now receives electronically. We send a year-end receipt for those tax-deductible donations. There are also options for including IRKPA in wills and trusts via the Keweenaw Community Foundation or directly to us. Just ask!

Annual Meeting July 25-27

Mark your calendars for IRKPA's annual meeting in Rock Harbor this July 25-27. A highlight event in the works is a special tour of Chippewa Harbor, led by IRKPA member Nancy Johnson Stegman, who is the last of Holger and Lucy Johnson's children (the fisherman's family in *The Diary of an Isle Royale School Teacher*, though Nancy was not yet born at that time). A group campsite is reserved for members. Another option is a room or housekeeping cottage at Rock Harbor Lodge. Watch for details in the next newsletter. Hope to see you there!

Sweepstakes Drawing 2/28

Thanks to those of you who donated \$2,013 for a chance to win a Keweenaw stay! Those donations are **not** tax deductible but are appreciated. Watch for the next sweepstakes for an Isle Royale trip.

Please Renew for 2014!

The message with this newsletter will indicate if you need to renew your IRKPA membership. We mailed renewal reminders in November. Thanks to the 354 of you with new or renewed memberships for 2014 so far (plus 234 life memberships)!

Isle Royale & Keweenaw Parks Assn.

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Facebook.com/IRKPA

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.

Membership Categories

Individual \$25	Household \$35
Supporting \$50	Sustaining \$100
Patron \$250	Life \$1,200*

*may be paid in four annual installments

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