

NLL 2018 NORTH STAR PORT



THE HARBOR LINE

Marking milestones

he past three months have been a whirlwind of activity here at the Port Authority.

Some days, it is difficult to clear enough time for strategic thinking. When it came time to tackle my first director's column for this magazine, I was challenged: how to carve out the time to think? So, I did what I always do when I need space to ponder. I got outside and climbed up the Duluth escarpment to look out across our harbor and magnificent lake.

I thought about Davis Helberg's passing. I thought about my start in this new job. I thought about next year being the 60th anniversary of the St. Lawrence Seaway. I thought about milestones.

We all mark milestones in our personal lives and at various points along our careers. Graduation. Marriage. Births. Deaths. New Jobs. Promotions. Retirement. Organizations mark milestones, too, providing an opportunity both to look back and to look ahead. Being appointed executive director of this Port Authority marks a milestone not only in my professional life but also in the lifespan of this organization. I am humbled and honored to serve as only the eighth director in the Port Authority's 60-plus years and to be the first woman at its helm. Yet, I keep circling back to the legacy left by my predecessors and am grateful for my team and the solid foundation upon which to further our mission.

Davis Helberg's passing was a milestone event in the course of Great Lakes maritime history. Davis was a man of vigor and vision who led the Port Authority for close to a quarter-century. He was a champion for the Port of Duluth-Superior and for the Great Lakes-St. Lawrence Seaway System. He staked our claim as the largest port by tonnage on the Great Lakes, at the headwaters of this entire inland waterway. Throughout his career, he increased our visibility nationwide and set this port on a course to succeed. We've included a tribute to his legacy on pg. 8 of this issue.

In the decade Adolph Ojard served as executive director, he notched his own set of milestones. Adolph realized that a staff who worked in silos could not accomplish as much as a staff that worked as a team. His development of a strategic plan and creation of that team atmosphere made our small staff much more effective. He also recognized the city's need to maximize developable industrial land and started a process to expedite cleanup of nearly 130 acres of the U.S. Steel Superfund site. He replaced a dirt path with a beautiful paved public road—Helberg Drive—providing improved access for docks between the Clure Terminal and Garfield Avenue. He also formulated a plan to reclaim former Garfield Dock C&D. Knowing we could not refurbish the dock without grant funds, he applied for a U.S. DOT TIGER Grant—five times! We finally were awarded that \$10M grant just as Adolph retired.

Vanta Coda served as executive director for just five years, yet his accomplish-



Deb DeLuca, Port Director

ments are out of scale with his term of service. Under his watch, we marked multiple milestones. We refurbished Dock C&D, the \$18M project known now as the Clure Terminal Expansion; framed a new, improved contract with our agent, Lake Superior Warehousing, through which we launched our Duluth Cargo Connect brand to grow global logistics opportunities; and fostered a partnership with rail that created our CN Duluth Intermodal Terminal, which provides unparalleled service and significant freight savings to our customers and represents a huge economic development advantage to our region. It also provides our organization with another steady revenue source, balancing our portfolio.

Talk about milestones! Visioning. Strategic Planning. Infrastructure Renewal. Branding. Service Expansion. Advocacy. All combined to enhance the Port's success and our role as a multimodal logistics hub.

Now it is my turn. I could be intimated by the big shoes left by those before me, but I choose, instead, to be inspired by their example. My team and I will build upon the foundation created by my predecessors and be guided by our mission: "Bring business to the port and economic development to the region, plus advocate for maritime, transportation and industrial interests." We are hiring staff to fill holes created by retirements and promotions. We are building and renewing partnerships, recognizing the broad stakeholder interest in the port community. We are resurrecting and executing capital projects started by my predecessors, and we are launching our own initiatives, some of which are reflected in these pages. Please check back here in upcoming months to see what milestones we carve out!



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Enjoying a last blast of summer.

Inside your NORTH STAR PORT

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On the covers

Schauer

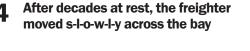
Gus



Joseph L. Block left the CN Duluth Dock with ore chips/fines for Indiana Harbor, while the Great Republic was departing MERC with coal for Manistee.

On the back:

Loading by the light of the moon, the Walter J. McCarthy Jr. is silhouetted again the Midwest Energy coal dock.



Irvin makes historic move

Industry=economic engine

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William A. Irvin makes historic trip to the shipyard

Great Lakes freighter moved from Minnesota Slip for first time in nearly 40 years

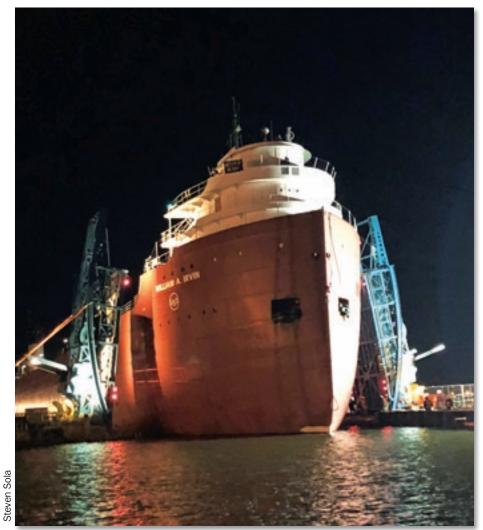
BY KELSEY ROSETH

Seven inches - that's all the space crews had to spare on each side of the SS *William A. Irvin* when guiding it through the Minnesota Slip.

The night of its move to Fraser Shipyards in Superior, Wisconsin, the *Irvin's* veteran tour guide Cedric Woodward smiled as he told Minnesota Public Radio, "Doesn't look like it's going to go through, does it? I'm glad I'm not steering it though."

On Saturday, September 22, following months of behind-the-scenes coordination and three hours of delicate movements on the water, the former flagship of U.S. Steel's Great Lakes Fleet traveled to its new home for the winter. From about 1:00 a.m. until 4:00 a.m., a couple hundred people gathered, some armed with blankets and popcorn, to watch as crews carefully moved the 610-foot-long freighter stern-first.

"You've got an extremely long vessel with very little space between the opening you've got to pull it through," said Chad Scott, president of AMI Consulting Engineers, the firm chosen to oversee the complicated move by its main contractor, Wisconsinbased Wren Works. Since it was built, the *Irvin* has bulged a bit, making it wider than its original drawings. That made pulling it from the slip, which was built after the *Irvin* was put in



The William A. Irvin is moved in the dark of night for work to begin on the Minnesota Slip.

place, extremely challenging. "If the vessel got turned at all, then basically it could have gotten pinched in the bridge and caused damage to the bridge," said Scott.

During its slow move through the raised pedestrian bridge, crews from Wren Works utilized winches and heavy equipment to move the vessel along the new seawalls until it was clear and moored against two temporary mooring barges in the harbor. The former "Pride of the Silver Stackers," traveled at a rate of about one foot every four seconds. As the *Irvin's* engines haven't operated in years, the ship was then moved by two tugs from Heritage Marine along its three-mile voyage to Fraser Shipyards.

"There's no ballast water in the vessel. Because there's no ballast water, the ship sits high in the water. Really high, which means it's susceptible to high winds," said Scott. Crews had to wait for a night with lower windspeeds to move the freighter, as its height acts like a giant sail.

What's next for the Irvin

Over the winter, the 1930s-era ship will be dry-docked and maintained, in addition to getting a fresh coat of paint on its corroding hull for the first time in more than 30 years. The *Irvin* reached its destination just days before a deadline set by the City of Duluth, now allowing a cleanup project to take place over the next several months.

The laker was moved 10 feet this past summer so crews could fix the failing, 1880s-era seawalls of the Minnesota Slip. And now, while the floating museum is at Fraser, the Minnesota Pollution Control Agency is stabilizing contaminated sediments, capping them in place with a clean layer of sand. The contaminants remain from former industrial activity in the slip which took place more than



Glenn Blaszkiewicz

150 years ago. All work being done is part of a \$10 million project to revitalize the slip, with the State of Minnesota and the United States Environmental Protection Agency providing the bulk of the funding.

The bright red vessel is scheduled to return to the Minnesota Slip by next May, with another carefullycoordinated move ahead of it.

"We know it comes out now," Scott laughed. "It's just a matter of getting it back in safely."



Stern first, the Irvin was moved slowly through the blue pedestrian bridge.



The William A. Irvin exited the Minnesota Slip in the wee hours of September 22.



As soon as the Irvin moved out, crews from J. F. Brennan moved in and began the process of capping legacy contaminants.

Dennis O'Hara

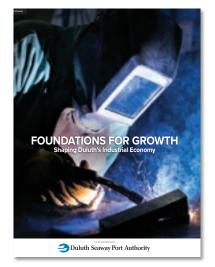
ICIC Report: Duluth's industrial economy sets strong foundation for future growth

ate last fall, the Duluth Seaway Port Authority contracted with the Initiative for a Competitive Inner City (ICIC) to analyze and benchmark Duluth's industrial economy—focusing on the contribution, assets and industry sectors necessary to drive diversified growth across the community.

Results of that study are in, and compelling data indicates that not only is the city's industrial sector an important component of Duluth's current economy, it also will be the catalyst that spurs equitable future growth across all other sectors to give Duluth a truly competitive

advantage in attracting new companies and residents. The ICIC report cites these key findings:

- The city's aggregate industrial sector continues to drive significant economic growth in both Duluth and the surrounding region.
- Duluth's industrial jobs pay higher wages and provide competitive benefits and opportunities for career advancement—with an average annual income of \$61,000 compared to \$47,000 in the city overall.
- On a per job basis, while the rest of Duluth's economy may be five-times larger, the industrial sector generates three-times more local tax revenue per job.
- Every 10 industrial jobs create eight additional jobs elsewhere in Duluth's economy.
- Jobs created in the industrial sector are accessible to residents with a wide range of educational



backgrounds—from high school graduates to folks in the trades and those with specialized technical training, as well as college graduates.

As noted in the report, supporting and growing the industrial sector in Duluth will require leadership from both the public and private sectors, and coordinated economic development strategies should recognize the importance of industry alongside other sectors of Duluth's economy.

"Industrial jobs have evolved with advances in technology and commitments to process improvement," said Dave Faynik, general manager of

Altec Industries, Inc., and part of an 11-member advisory committee that helped frame the research and provide feedback. "Industry in this century looks and behaves in a much more socially responsible manner. Companies understand, respect and lead innovation to create safe workplaces and minimize their environmental footprints."

The study concludes by recommending a number of priorities including: strengthening the visibility of industry's impact in Duluth; investing in "high-return" industrial assets; targeting economic development to address gaps in industrial clusters; and developing policies that create a more supportive business environment for industry.

For a copy of the final report, the executive summary and a brochure that highlights key findings, click on the ICIC folder on the Publications page at duluthport.com.



INDUSTRY SUPPORTS A STRONG DULUTH

Duluth's industrial sector is often viewed as part of the past rather than the future – yet industry drives significant economic growth in the region. On a per job basis, the aggregate industrial sector generates a higher share of jobs and tax revenue than the rest of the economy. Further, industry supports accessible and quality jobs, offering high wages and benefits, which can create greater economic equality in the city. While the rest of Duluth's economy

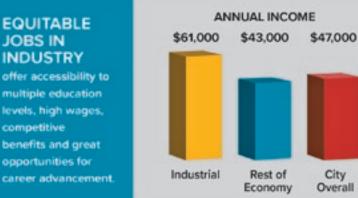
may be five-times larger, the industrial sector generates three-times more local tax revenue per job.

EVERY 10 INDUSTRIAL JOBS

CREATES 8 ADDITIONAL JOBS

EVERY 10 JOBS IN THE REST OF THE ECONOMY

CREATES 5 ADDITIONAL JOBS ****** *****



2016 DULUTH'S INDUSTRIAL SECTOR provided, supported and contributed: 9,449 ndustrial jobs in Duluff 8,419 additional jobs in the county \$3,888 to Duluff's economy \$236.4M in state and local taxes Di the \$236.4M in taxes \$107.3M supported the Duluff economy

IN



A treasure lost, a legacy left behind Saying goodbye to Davis Helberg

Some people are simply larger than life. When the Port Authority's longest-serving director, Davis Helberg, died in October, the headline in the *Duluth News Tribune* read, "A giant says goodbye."

They got it right. No hyperbole there. Davis was a giant in the maritime industry for all of the 24 years he served as this organization's director—and for six years prior when he was its public relations guru.

Davis was a tireless champion for the Port of Duluth-Superior and for the Great Lakes-Seaway System. His reputation preceded him wherever he went. He had a huge personality. Bold. Passionate. Powerful. Enthusiastic. Mindful. He set the bar high when it came to performance and expected near perfection from himself and from those with whom he worked. As port director, Davis founded, chaired and directed dozens of maritime commissions and trade associations, authored hundreds of articles about the shipping industry and edited a history book about his beloved port.

That work ethic was ingrained in him at an early age. Davis first traveled this inland sea aboard a freighter as a 17-year-old deckhand, and the Lake never lost its hold. He spent four decades immersed in maritime—as a vessel agent, public relations director, pilotage system manager, stevedoring contractor, terminal operator and, finally, port director. We joked at his 75th birthday that he just couldn't seem to hold a job!

Davis was the quintessential communicator. He had a wicked wit and was a master storyteller—in print and in person. He possessed the gifts of humor and eloquence, though brevity was in short supply. His hands-on experience in the shipping world enabled him to recount stories in the "first-person," leaving audiences enrapt and, typically, laughing themselves into stitches.

A journalist at heart, Davis loved to write and read. He devoured books and newspapers. He loved sports, especially baseball, as much as he loved the port. He could not start the day without knowing the box scores. He loved language and could wax poetic on most any subject. In his lifetime, he wore out more pens, pencils, typewriter ribbons and keyboards than most offices ever inventory.

Davis worked hard and played hard. Laughter filled his soul, and the retelling of "Helberg-isms" will certainly fill ours for years to come.

Though he traveled the world building a bank of business for our inland seaport, Davis never forgot where he came from. His rural roots, his Finnish ancestry, his loving family and lifelong friends kept this Eskomo booster well grounded. As was recalled at a recent Propeller Club meeting,



"Davis was an ordinary man who did extraordinary things."

So it seemed almost scripted that on October 10, with gale-force winds blowing fiercely across Lake Superior, this great force of nature died peacefully at home in Esko.

We all lost a treasure when Davis Helberg died—an irreplaceable piece of Great Lakes legend and lore.

Thank you, Davis. You met your final deadline. Rest in peace. - Adele Yorde



Davis and his wife, Karen, were all smiles when he was gifted with a Lake County Captains jersey. He had the chance to throw out a first pitch at Wade Stadium before he retired, and when Dennis Aho presented him with an original drawing of the *LaBelle* on his 75th birthday, dear friends Jim Banks and Dick Bibby were part of the celebration.

Mike Liikala



The Esko Sports Alliance held "Davis Helberg night" at the Eskomos football game Sept. 7. A handful of friends from the local Harbor Club joined in the celebration including (from left): Bob Stokes, Dennis Cochrane, Liz Mackay, Dennis and Linda Aho, Stacey Helberg, Jim and Susan Banks, and Tom Mackay. Seated in the front seat of the golf cart with Davis is Ed Ruisi. (At right) Davis and his wife, Stacey.

avis Helberg, 77, passed away on October 10, 2018, at his home in Esko, Minn. Diagnosed with cancer in January 2018, he faced that battle with high spirits, optimism and SISU—that uniquely Finnish resolve to overcome adversity with stoic determination, tenacity, courage and grit.

Davis had retired as executive director of the Duluth Seaway Port Authority in 2003 after 24 years at the helm and four decades of being immersed in the Great Lakes maritime industry. He graduated from Esko High School in 1958 and, at the age of 17, sailed as a deckhand on a Great Lakes Freighter, the *LaBelle*. He married his high school sweetheart, Karen, in 1961 and worked for the Alistair Guthrie vessel agency during the Seaway's early years.

Though Davis spent the bulk of his career in the shipping industry, he was a reporter for the *Duluth News-Tribune* and *Duluth Herald* for six years covering sports and county government. He left the newspaper in 1968 to become the Port Authority's public relations director. In 1972, he joined Upper Great Lakes Pilots, Inc. and, in 1977, became president of North Central Terminal Operators before being named Port Authority executive director in 1979.

Davis was past-president of the Duluth Superior Propeller Club and current president of the Duluth Superior Harbor Club. During his career, he served as chair of the American Association of Port Authorities (1994-95), was named Great Lakes Person of the Year in 1992, was presented the U.S. Coast Guard's highest civilian award for Meritorious Public Service in 1999 and, in 2007, was inducted into the Great Lakes Marine Hall of Fame.

Davis was a gifted writer and storyteller. During his years as port director, he was a columnist for *Lake Superior Magazine* and the *Journal of Commerce* and wrote articles for *Great Lakes/Seaway Review*. He was editor of *Pride of the Inland Seas: The Illustrated History of the Port of Duluth-Superior* (2004), *Esko's Corner: An Illustrated History of Thomson Township* (2013) and *Thomson Township's Night of* *Terror* (2018). During these final months, Davis was writing his own book, a collection of life experiences and stories about places he visited and people he met along the way. The working title of the book was *Did I Ever Tell You*...?

Davis's death would have given him a chance to provide a definitive response to a frequently asked question: "Have you lived in Esko all your life?" To which he would respond enthusiastically, "Not yet!" While Davis did live in Duluth for about 10 years, he returned to his original home after his father died, and, despite opportunities elsewhere, chose to stay there because of his love for the woods, the wildlife and the Esko community.

Davis was proud of and loved his family and friends. A self-proclaimed sports nut, he fell in love with sports, but especially baseball, at an early age and would often say, "I need a box score fix." He had the radio on throughout the day, read multiple daily newspapers, worked on the *New York Times* crossword puzzle and had a library full of books. He enjoyed the outdoors and preserved the beauty of nature around his home and property. Davis was a friend of Bill and was grateful every day for his 34 years of sobriety. He was generous and kind, a historian and a lifelong learner, and he had an insatiable curiosity for life. During this past year, Davis ordered three different DNA kits, each one becoming more acceptable, with the third result showing his ancestry as 98.1% Finnish. He did not need to order a fourth.

Davis was preceded in death by his parents, his wife, Karen, and several family members. He is survived by his wife, Stacey, two sons, a daughter and their families including six grandchildren and two great-grandchildren, plus extended family and close friends.

Family and friends gathered to celebrate Davis's life at a "Sail Away" at Pier B Resort in Duluth Nov. 12. To honor his commitment to the Esko community, family asks that donations be made to the Esko Educational Foundation and the Davis Helberg Scholarship. Donations can be sent to: Esko Educational Foundation, PO Box 27, Esko, MN 55733.

Season Update: Fall leaves its calling card

Intering what is typically peak season for moving bulk commodities across the Great Lakes, year-to-date tonnage through the Port of Duluth-Superior was actually off just two percent through October, compared to throughput in 2017.

Wind and weather certainly slowed product flow early this spring and again this fall, as did a weakened demand for coal. However, momentum carried over from summer with shipments of agricultural products running almost 10 percent ahead of last season, and iron ore loadings through October already at 16.5 million short tons-a full 27 percent ahead of the five-year average.

There were a handful of notable moves during the past few months, not the least of which was a delicate, middle-of-the-night maneuver of the

William A. Irvin from permanent layup in the Minnesota Slip to Fraser Shipyards for maintenance work. In the meantime, crews are moving dredged material into the slip to cap legacy contaminants and finishing work on the adjacent dock wall project before her return in spring (story on pg. 4).

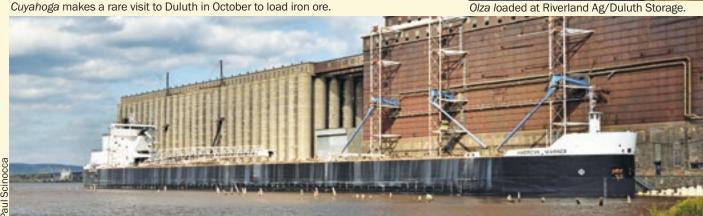
The waterfront hummed with activity as summer begrudgingly gave way to fall. Cement, salt, clay and stone made their way into the Twin Ports on a variety of vessels, while iron ore, coal, bentonite and grain filled most of the outbound cargo holds. As farmers rolled into high gear with harvests, the Port also witnessed a surge in international traffic as a host of salties arrived to load wheat, plus beet pulp pellets bound for customers along the Mediterranean.



Alpena arrived with cement for Lafarge.



Cuyahoga makes a rare visit to Duluth in October to load iron ore.



American Mariner at General Mills in Superior was loading wheat for making commercial baking flour in Buffalo, N.Y.



ane

Fivelborg was in Superior to load beet pulp pellets (right) at Gavilon.



Federal Asahi was one of dozens of salties in this fall to load grain.



CSL Tadoussac loaded iron ore at BNSF Railway Dock 5 in Superior.



Lee A. Tregurtha makes another grand entrance in September.

Cargo Spotlight: Beet Pulp Pellets

Cugar beets are not a new commodity for Jeff Blaskowski. In fact, you could say the manager of Gavilon Grain, Connors Point, is an old hand, having come from a region where the bulk of beet products that pass through the Port Duluth-Superior of are grown.

"I lived in the Red River Valley for years, and a farmer



Beet pulp pellets

near me needed help lifting sugar beets out of the groundthey are quite large," Blaskowski recalled, describing how they are shaken to remove dirt and loaded onto trucks. "The sugar beets are transported to a factory to be processed and squeezed into beet pulp pellets."

Processing removes sugar and liquid, leaving the pulp or fibrous portion of the beets in pelletized form. Gavilon Grain, Connors Point, will handle approximately 130,000 metric tons of beet pulp pellets in 2018, loading them onto 13 foreign vessels bound for European markets. The one-inch pellets, dark in color and roughly the diameter of a pinky finger, arrive by rail and are transferred into Gavilon's bins, then loaded by conveyors directly into the holds of ships.

"The pellets are dry, for the most part, not sticky," Blaskowski said. "Their flowability is not the same as grain, but we do not have problems handling them. They load just fine."

Most of the beet pulp pellets loaded by Gavilon, Connors Point, leave the Twin Ports aboard Wagenborg ships that are a bit smaller than most grain vessels served by the facility. Those carrying beet pulp pellets have two holds and are loaded with a total of 10,000 metric tons. By contrast, some of the grain vessels carry 20,000 metric tons of bulk cargo. The beet pulp pellets are shipped to multiple destinations, including Spain, Denmark, Morocco, the United Kingdom and Ireland, where they are used primarily as livestock feed for beef cattle and dairy cows.

Beet pulp pellets make up about 35 percent of the cargo handled by Gavilon, Connors Point.

"It is significant," Blaskowski said. "Grain markets fluctuate, but beet pulp pellets are pretty steady. They are a good source of income for us, especially in years when grain exports are slow."

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Research on the Great Lakes in great hands

BY JULIE ZENNER



Marine superintendent and senior research associate Doug Ricketts on board the research vessel Blue Heron.

t is a mid-September morning, and delicious smells are wafting from the galley of the R/V Blue Heron, moored at the U.S. Army Corps of Engineers Vessel Yard on Minnesota Point. Large Lakes Observatory (LLO) Outreach Coordinator Lisa Sundberg, the vessel's steward, is prepping food for a voyage that will take researchers out on Lake Superior for seismic reflection profiling of the lake's bottom and sediment layers. It is a typical excursion for the Blue Heron, one of several research vessels that frequent the Duluth harbor. Each fills a niche in the Great Lakes' scientific community.

Blue Heron

The Blue Heron is very familiar to Twin Ports boat watchers. Originally a fishing trawler on the Grand Banks, it was purchased by the University of Minnesota in 1997 and converted into a research vessel at Fraser Shipyards. Each summer, it ties up near the Great Lakes Aquarium for monthly "LLO Science on Deck" programs that allow school groups and the public to tour and meet working scientists.

Most Blue Heron researchers are University of Minnesota Duluth (UMD) faculty members who work with the LLO, but other universities and teams also use the vessel and its state-of-the-art equipment. The two primary pieces of onboard equipment are a CTD profiler and water sample bottles. CTD stands for conductivity, temperature and depth.

"We lower the CTD through the water column, and sensors measure water characteristics like dissolved oxygen, pH, and the amount of plankton," said Doug Ricketts, PhD, marine superintendent and senior research associate, LLO. "It provides real-time water characteristics that scientists can monitor by computer."

Water sample bottles are attached to the same metal frame. At any time, a technician can close the water bottles and capture samples for researchers to analyze in onboard laboratories.

In addition to lake bottom profiling, major 2018 projects



The Blue Heron was still working in November.

took the *Blue Heron* to Lakes Huron and Michigan for research on invasive mussels and along western Lake Superior for an ongoing study on currents. UMD faculty members also take students on short research ventures.

"It gives scientists doing research a safe platform to work out on the Great Lakes in conditions a smaller vessel would not be able to handle," Ricketts said. "The Great Lakes are not as well understood as you would think."

EPA Vessels: Lake Explorer II and Lake Guardian

EPA researchers also are working to better understand the Great Lakes. The Clean Water Act, the Great Lakes Restoration Initiative and the Great Lakes Water Quality Agreement, a binational agreement between the United States and Canada, define the EPA's responsibilities to assess them. Two EPA vessels participate in this work-the 180-foot R/V Lake Guardian, based in Milwaukee, and the 90-foot R/V Lake Explorer II, which calls Duluth its home port.

The Lake Guardian typically visits the Twin Ports two or three times a year in conjunction with spring and summer sampling surveys done on all five Great Lakes. On these voyages, scientists collect and report data from established offshore stations to monitor lake health and evaluate trends. Each year, EPA researchers also focus on one specific Great Lake, rotating on a five-year cycle. When Lake Superior is in the spotlight, the Lake Guardian makes more frequent calls to change crews. Scientists who work on the Lake Explorer II often help staff the Lake Guardian.

The two vessels have very distinct roles. Both work throughout the Great Lakes, but most of the Lake Guardian's monitoring stations are located in deep, offshore waters. The smaller Lake Explorer II can work closer to shore, exploring how data gathered in coastal waters informs the lakes' health. Its work is less about monitoring and more about developing new methods and technologies.

"We truly are a research vessel," said Joel Hoffman,

PhD, a branch chief with the EPA's Mid-Continent Ecology Division, which operates the *Lake Explorer II*. He explained some of the innovations being tested aboard the Lake Explorer *II*, comparing rapidly changing technology to an analog-todigital conversion. "Monitoring that used to require physical sampling can now be done with digital cameras."

One exciting new tool *Lake Explorer II* researchers are testing is a remote glider that can be released into one of the Great Lakes for weeks at a time. As it swims through the lake and dives through the water column, it gathers underwater temperature data-creating a much more detailed picture than spot checking at fixed locations.

"To actually map underwater variational temperature of the whole lake is phenomenal," Hoffman said. "Temperature affects lake biology and chemistry, so it is very important."

Lake Explorer II scientists also are testing new chemical tracers that can reveal an animal's yearlong diet just by analyzing a fin clip. An ongoing project is examining how invasive mussels have disrupted Lake Michigan's food web, using Lake Superior as a control.

"We think of Lake Superior as a sentinel lake, telling us how the Great Lakes used to function before the mussel invasion," Hoffman said. "Over the years, there has been very little change on Lake Superior, it is remarkable."

Kivi

One noted exception is a recent drop in Lake Superior's cisco, or lake herring, population, which has been declining for two decades. That phenomenon is being studied by United States Geological Survey (USGS) scientists aboard the Kiyi. The bright blue vessel conducts research to support healthy ecosystems and commercial and recreational species on Lake Superior.

"We have a mandated responsibility to provide estimates of the number and biomass of prey fish in Lake Superior," said Mark Vinson, chief for the USGS Lake Superior Biological Station in Ashland, where the Kiyi is based. "The information collected supports regulations put in place for commercial species."

The *Kivi* conducts two annual surveys to meet reporting requirements—a "Near Shore Cruise" that visits 80 sites around Lake Superior and an "Offshore Cruise" that samples 35 stations at depths greater than 300 feet. Researchers use high-tech tools to measure water quality and temperatures and to collect zooplankton. They bottom trawl using a net to catch fish of various species and sizes. Fish are counted, weighed, measured and tissue sampled to determine their ages, health and diets.

In addition to these annual excursions, the Kiyi conducts topical research, like that into the cisco populations.

"This year we started a new project with sophisticated hydroacoustic equipment to get better estimates of the population, both adults and juveniles," Vinson said. "It is too early to see trends from this summer's work because we haven't had a chance to look at that data, and the boat is going out again. It is ongoing."

Science and caretaking combined

Those who conduct research on the Great Lakes respect each other and value their combined efforts.

"Each boat specializes, and we all have different data requirements," Vinson said. "There's a shared feeling that we're doing something worthwhile and important."

"It takes knowledge to care for something," said Ricketts, back on the Blue Heron. "The work the Kivi is doing, the long-

> term maintenance monitoring being done by the EPA, and the short-term research we do all are important to understanding the Great Lakes."





Victory II is expected to make two stops in Duluth in August 2019.

Cruising ahead with plans for cruise ship terminal

uluth is hoping to once again become a port of call for international cruises. Plans for a new cruise ship terminal and customs clearance office on the Duluth waterfront are moving forward thanks to local funding commitments and growing demand for cruise destinations on the Great Lakes.

The City of Duluth, Duluth Economic Development Authority and the Port Authority have committed a combined \$85,000 to purchase equipment necessary to process international cruise ship passengers. This funding will enable Duluth to establish and equip a temporary facility for cruise vessels to dock and international visitors to clear U.S. Customs. The goal is to develop a permanent terminal.

"This is an exciting opportunity to put Duluth on the map for international cruising and establish our port as a place where cruise ship passengers from around the world can clear customs and enter the country," said Kate Ferguson, DSPA director of business development. "It is good news for tourism, for business and for the region's economy!"

At least two visits to Duluth are scheduled in 2019, both by the Victory II. Ferguson foresees steady growth in Great Lakes cruising over the next few years and anticipates at least eight cruise vessel visits to Duluth in 2020, half arriving from foreign ports. Detroit, Cleveland and Sault Ste. Marie also have been identified as strong candidates for international cruise ship terminals to meet the growing demand. Visit Duluth officials predict an economic impact of as much as \$100,000 per cruise ship, with the average passenger conservatively spending around \$200 per day while in Duluth.

Lake Superior cruising dates back to the mid-1800s, and modern cruise vessels have visited Duluth intermittently since 1997. The last cruise vessel to visit was nearly five years ago. In the past, international cruise ship visitors have been received on a temporary basis both at the Duluth Entertainment Convention Center and Great Lakes Aquarium.

A huge, new lock gets the green light ... finally



At the end of October, after decades of work by maritime industry leaders, Great Lakes legislators and the U.S. Army Corps of Engineers, President Trump signed into law America's Water Infrastructure Act of 2018. Among other upgrades, it authorizes \$922 million for building a new 1,200-foot-long lock to back up the Poe. The news was met with great excitement. Minnesota iron ore supplies about 85 percent of all ore mined in the nation for domestic steel making, and the only way it gets to the mills is via the Soo. That same gateway also allows for coal shipments and Midwestern grain exports plus shipments of project cargo and other commodities like limestone, cement and salt. This second, Poe-sized, lock will create a full measure of redundancy, allaying fears over what would happen to Great Lakes-Seaway commerce were the Poe Lock ever to be knocked out of service. The project is authorized to be fully funded by the federal government and will be considered for appropriations in the funding cycle. Building the new lock is expected to take seven years to complete.

Port of Duluth-Superior delivers jobs and economic growth

Cargo and vessel activity at the Port of Duluth-Superior generated \$1.4 billion in economic activity and supported nearly 8,000 jobs in 2017, pumping more than \$504 million in wages, salaries and purchases of goods and services into the region's economy, while generating nearly \$240 million in state and federal taxes.

Those insights are according to *Economic Impacts of the Port of Duluth-Superior*, a report released by the Duluth Seaway Port Authority in August. It was gleaned from a much broader study conducted by Martin Associates that examined 2017 economic impacts of the entire Great Lakes St. Lawrence Seaway System. The Port of Duluth-Superior is the largest tonnage port on the Great Lakes and anchors the westernmost point of the 2,340-mile system.

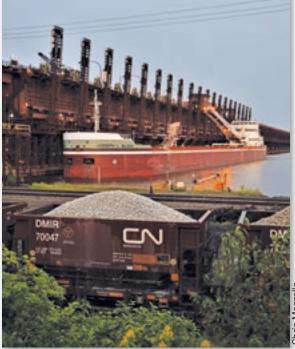
"We have long known the key role this port plays in the economic vitality of the entire region," said Duluth Seaway Port Authority Executive Director Deb DeLuca. "Not only does this study validate that message, it also provides relevant data to share with policymakers, investors, business leaders and residents, illustrating how indispensable our working waterfront is to job growth and economic sustainability in northeastern Minnesota and northwestern Wisconsin."

Around 35 million tons of iron ore, coal, limestone, salt, cement, grain, steel, wind turbines and heavy machinery move through the Port of Duluth-Superior each year, helping to keep businesses running in adjoining states and communities along the U.S.-Canadian border. Farmers, miners, steel producers, construction companies, food manufacturers, utility companies and street maintenance departments depend on this system to move raw materials and finished products to market.

Employment figures reported in the local study reflect direct, induced and indirect jobs. Direct jobs include longshoremen, terminal employees, crane operators, steamship agents, vessel operators and crews, freight forwarders and stevedores plus railroad workers and truckers. Induced jobs are created when individuals spend their wages locally in grocery stores, restaurants, shopping centers and on home purchases. Indirect jobs result when marine-related businesses purchase goods and services from office supply companies, maintenance and repair contractors, equipment suppliers and the like.

"The value of the Port of Duluth-Superior cannot be overstated," said Jason Serck, economic development, planning and port director for the City of Superior. "When you look at the number of jobs in this area related to maritime commerce, it is clear that the working waterfront drives the economies of this entire region."

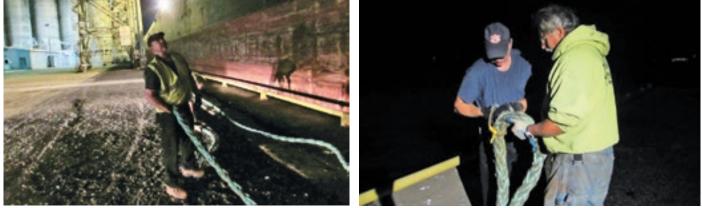
The full study prepared by Martin Associates documented that more than 158 million short tons of cargo valued at \$15.2 billion were moved on the Great Lakes-Seaway System in 2017. This movement supported 237,868 jobs, created \$35 billion (USD) in economic activity, generated \$14.2 billion (USD) in personal income, and paid \$6.6 billion in federal/state/local taxes. Find both the full and local port economic impact studies under Publications at www.duluthport.com



ECONOMIC IMPACT PORT OF DULUTH-SUPERIOR JOBS SUPPORTED CARGO MOVED 5 MILLION ECONOMIC ACTIVITY \$1.4 BILLION INCOME GENERATED 504 MILLION TAX REVENUE GENERATED MILLION

Linehandlers know the ropes

BY JULIE ZENNER



Captain Ed Montgomery and Greg Fisher handle lines for the Polsteam vessel Juno.

Captain Ed Montgomery knows how to say "tighten" and "loosen" in seven different languages. That ability comes in handy for the seasoned captain and owner of Sea Service, LLC, who also happens to moonlight as a linehandler.

Linehandlers are hearty longshoremen who are called in at all hours of the day or night to tie up and release the giant foreign-flagged vessels that visit the Port of Duluth-Superior. With so much at stake, there is no room for error or miscommunication.

One recent night, Montgomery was on the dock at Gavilon, Connors Point, awaiting the *Juno's* arrival shortly after 9 p.m. As the Polish Steamship Company (Polsteam) vessel moved into position, the crew of four linehandlers (two at the stern and two at the bow) stood ready. A few short exchanges in Polish with crew members on board, and they sprang into action, each person knowing their job.

"It is all on the job training," said Montgomery, who has been linehandling since the late 1980s and is the senior linehandler on the crew. "I was taught on the dock by the other guys—they showed me what to do and what not to do so I didn't kill myself or someone else."

One of the first lessons: Don't get hit on the head by the monkey's fist. Originally called a sailor's knot, the weighted projectile is attached to a heaving line thrown from the ship to assist linehandlers on the dock. The round knot landed with a thud on the Gavilon dock, and Montgomery grabbed it, heaving on the lightweight line to pull in the vessel's larger mooring line to which it was attached.

"(Mooring lines) are anywhere from six to eight-inch diameter lines," Montgomery said. "They weigh anywhere from 12 to 20 pounds per foot."

Montgomery and fellow crew member Greg Fisher dragged the heavy mooring lines at the bow end of the *Juno* and secured them to bollards on the dock. The same process was occurring at the stern. Once the vessel was secured, the gangway was lowered so the Great Lakes pilot on board could exit the ship. As lead person on the crew, Montgomery's job includes notifying the linehandling service company if the situation changes at the dock and reporting the work times. He also serves as a volunteer driver should the vessel pilot need a lift to their home, vehicle or hotel.

On a good night with an efficient crew up top and no weather challenges, tie-up takes about 45 minutes. In nasty weather or with language barriers, it can take hours.

Linehandlers in the Port of Duluth-Superior are a division of the International Longshoremen's Association, Local 1037, based in Superior, Wis. Montgomery is part of a regular crew of four, and there is a list of "extras" who are called in when needed. The extras are ILA members within the grain trimmers group, who work at various elevators loading grain into the ships. If they are unavailable, lower seniority union members are eligible for the work. Two Twin Ports companies provide ship mooring and release services, Northstar Marine Operators and Daniel's Shipping Services. ILA Local 1037 linehandlers work for both.

Linehandlers typically get about 12 to 25 hours per week during the shipping season, based upon foreign vessel traffic, so most have other fulltime jobs. In addition to linehandling and operating the pilot boat company with his wife Jeanne, Montgomery is a certified marine surveyor and works as a boat, ship and cargo inspector.

"In a seasonal port like this, you kind of have to wear a bunch of hats to make make a living," he said, noting that linehandlers can make \$100 to \$150 per call out. "The downside is that you are on call 24/7. If a ship arrives at 2 a.m. in a blizzard, linehandlers have to be there."

Despite the odd hours and sometimes harsh conditions, linehandling is good work, and longshoremen always are needed on the waterfront as people retire.

"It is a good job in the summer, but it gets tough in the winter fighting the ice chunks," said Greg Fisher, a longshoreman and construction worker who has been part of the linehandling crew for several years. "Like shipping, it gets in your blood. It is hard to walk away."

For information about linehandling opportunities in the Twin Ports, contact Lamont Rupert at (218) 391-1714.

Celebrating Duluth's extraordinary achievements Duluth Seaway Port Authority's dock expansion featured in new book

BY KELSEY ROSETH

The Will and the Way, Volume II

Determination and drive can move mountains. Look around Duluth, and you'll see examples of how community leaders turned innovative concepts into concrete change and growth for the city. These impressive achievements are chronicled in the book *The Will and the Way, Volume II.*

Donn Larson is the book's publisher. The 89-year-old Duluthian retired in the mid-1990s and has since been observing Duluth's progress and the positive developments that have taken place.

"It's extremely interesting to me how the city found the time, talent, energy and resources to accomplish so much," said Larson, referencing how local leaders collaborated on substantial projects, such as the building of AMSOIL Arena, the restoration of NorShor Theatre and the development of Maurices' headquarters.

The Will and the Way, Volume I was published in 2004 by Larson and Duluthian Monnie Goldfine.

"[Monnie] was motivated by what he felt was an unusual quantity of achievements in a community of our size, in the wake of a wartime economy and decline of heavy industry. I think that's still true," said Larson.

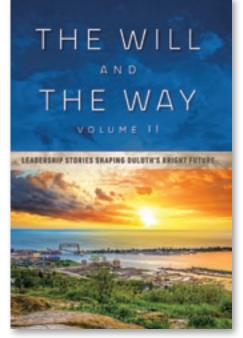
For the second volume, Larson and his team encouraged 42 volunteers to author chapters on more than 30 subjects of local importance. The writers shared stories of Bentleyville, Sacred Heart Music Center, Homegrown Music Festival, the controversial business Last Place on Earth, the rise of Duluth's craft brewing community, the development of brownfield sites into the IKONICS Corporation headquarters and Pier B Resort Hotel, among other subjects.

The former mayor of Duluth, Don Ness, who wrote an eloquent foreword, was Larson's principal co-worker on the project. "We hope to encourage and inspire the next generation to lead the city to ever-greater achievement in problem-solving, strengthening our local economy, and contributing to this unique and special place," said Ness.

DSPA project featured

While The Will and the Way, Volume I featured an article on the development of the Port Terminal, the latest volume highlights the terminal expansion on an adjacent pier. The article, titled "Persistence pays off for Port Authority," reports on the \$18 million dock redevelopment project. In 2016, a 28acre parcel of land on Rice's Point was rehabilitated and put back into maritime service, breathing new life into a vital waterfront property. The project, now called the Clure Terminal Expansion, took 40 years to complete.

Today, the Clure Terminal remains the only general cargo dock in the harbor. It plays an integral role in handling breakbulk and project cargo for industries such as mining, oil and gas production, pulp and paper, and wind energy. The previously vacant, underutilized dock is now being used as a storage/staging and distribution hub for a wide variety of raw materials and



finished goods, including wind turbine components.

Jim Sharrow, former director of port planning and resiliency for the Duluth Seaway Port Authority, wrote the following in his article, "Converting an unused, unloved 28-acre parcel into a productive, intermodal transport terminal spanned the careers of three port directors, nearly four decades of planning, five federal grant proposals and an infusion of \$20 million. And it's been worth every penny."

First printing: 2,000 copies

Book outlets familiar to Duluthians will sell the book, including Zenith Bookstore, The Bookstore at Fitger's, Lake Superior Magazine Outlet Store, the Electric Fetus and the Duluth Grill. For more information visit duluthleaders.com.





Port names new facilities manager

The Duluth Seaway Port Authority welcomed Dean Lembke Oct. 1 as its new facilities manager. He now serves as the agency's liaison with tenants, service and government agencies, private contractors and other property users to derive safe, efficient and environmentally sound use of all Port Authority-owned land, structures, equipment and other assets. He also will work closely with the executive director and chief financial officer on long-range planning with regard to capital improvement programs and new construction projects.

Lembke previously was a site supervisor with North Shore Track, overseeing rail construction and maintenance projects. For 13 years prior, he was a senior project coordinator at Krech Ojard and Associates, during which time he provided 20 months of onsite construction oversight for the Port Authority's \$18 million redevelopment project on the Clure Terminal Expansion (formerly known as Dock C&D).

This working knowledge of the terminal and years of construction management experience have enabled Lembke to hit the ground running.

"I am very excited to be joining the Port Authority team," said Lembke. "During the Clure Terminal Expansion project, I quickly recognized and appreciated



Dean Lembke

the knowledge and professionalism shown by all Port staff. I am honored to contribute my skill set and experience to the goal of promoting, maintaining and growing the organization."

Lembke, a graduate of Wrenshall High School, earned his degree in civil engineering technology from Duluth Technical College. He and his family live in Wrenshall.

Commissioner reappointed to Port Authority board

Rick Revoir was reappointed to the Duluth Seaway Port Authority Board of Commissioners for a second, six-year term by the Duluth City Council, effective Oct. 10, 2018.

An associate professor in the School of Business and Technology at the College of St. Scholastica. Revoir serves as chair of the Accounting, Finance and Economics Department and is director of the College's Sandbulte Center for Ethical Leadership. He has led four study abroad trips to China and another to Ireland. Prior to joining St. Scholastica in 2004, Revoir worked for 11 years in healthcare finance. Revoir earned a doctorate in education from the University of Minnesota-Duluth, an MBA from Arizona State University and is a certified public accountant (Arizona license). He and his family live in Duluth.



Rick Revoir

Young boatnerd sets course for life

Talk about getting your money's worth. In August, then 9-year-old Evin Poquette, of Hayward, Wis., became the youngest lifetime member of the Lake Superior Marine Museum Association (LSMMA). Evin has spent countless hours at the museum and around the waterfront, getting to know vessels that come and go on the Great Lakes, memorizing their features and cargos, and learning to recognize them on the horizon. He saved for the membership by stashing away his allowance, birthday money and donations from family and friends-raising the \$1,000 needed for lifetime membership over four years.

One benefit was a working trip aboard the pilot boat Sea Bear, owned and operated by Sea Service LLC. Capt. Ed Montgomery, a former LSMMA board member, extended the invitation to Evin and his family after hearing about the boy's contribution and enthusiasm for all things maritime. The voyage gave Evin realworld experience as a deckhand, as he helped prepare the vessel for



Evin Poquette gets hands-on experience navigating a pilot boat under the watchful eye of Captain Ed Montgomery.

sea, assisted with engine room pre-departure protocols, and learned procedures for undocking and mooring lines.

Should Evin pursue his dream of captaining a ship, time spent aboard the Sea Bear could count as credited sea time. Seems he already is setting that course.

Tugs in shipshape for winter

Heritage Marine is ready for winter icebreaking with a fleet of fortified tugs fresh from shipyard checkups and overhauls.

Tugs Nancy J. and Nels J. each spent six weeks at Fraser Shipyards in May and June. The Nels J. was sandblasted, repainted and heat exchangers were removed from her outside hull so she can work in ice. A lower sea chest was installed for a sea drive thruster and other components were inspected and re-machined. Work on the *Nancy J.* included a partial hull replacement and new shaft seals, requiring the removal of props. Owner Mike Ojard said U.S. Coast Guard hull inspections went well, and both vessels passed with flying colors.

"They are set for five years," Ojard said, noting the work was voluntarily completed well ahead of mandates. "I won't send crews out on a boat that is unsafe. We want to always keep good hulls and good propulsion. That is what we do."

Heritage Marine's main icebreaker, the 90-ft. *Helen H.*, spent much of her fall in dry dock at MCM Marine in Sault Ste. Marie, Mich., where she was outfitted with large ice bars on the front to reinforce



Two Heritage Marine tugs in dry dock at Fraser Shipyards for inspection and repairs.

and increase hull thickness.

"Icebreaking puts stress on the hull," Ojard said. "You get one shot at it, and you have to be ready to go. We want to make sure there are no issues this winter."

Fraser building Ohio car ferry

Fraser Shipyards is building a new 26-car ferry that will run from Ohio's Catawba Island Township to South Bass and Middle Bass islands, two of Lake Erie's most popular recreation destinations.

The new all-steel ferry is being built for Miller Boat Line. It will be 140 feet long, 38.5 feet wide, and named *Mary Ann Market* in honor of the late matriarch of the family that now owns the company. The ferry will have drive-on/drive-off capability and will join Miller Boat Line's four other ferries.

"We have a long tradition of building Great Lakes vessels at Fraser, including car ferries," said James Farkas, president of Fraser Industries, Inc. "We are proud to be Miller Boat Line's partner. We look forward to delivering a modern vessel that meets all of their needs."

Miller Boat Line President Billy Market said Fraser was



chosen "due to their enduring high quality, integrity, value and with consideration of recommendations from industry professionals including marine surveyors, lake captains and engineers."

The ferry is being constructed in modules, which workers will then assemble. Fraser will deliver the vessel to Put-in-Bay, Ohio, when it is completed in 2019.

MARAD grant will fund equipment upgrades at Fraser Shipyards

A \$500,000 grant from the United States Department of Transportation's Maritime Administration (MARAD) will help Fraser Shipyards in Superior repair and modernize equipment as well as train workers.

Fraser Shipyards was among 29 recipients nationwide and the only facility on Lake Superior to receive a 2018 Small Shipyard Grant from MARAD. U. S. Senator Tammy Baldwin of Wisconsin cosponsored legislation to create the grant program. The funding will support the purchase of two self-propelled modular transporters and a high capacity forklift.

"We look forward to the productivity gains we will garner with the new materials handling equipment," said James Farkas, president of Fraser Industries, Inc.



Bob

BusinessNorth owners purchase Lake Superior Magazine

Lake Superior Magazine, well known for its beautiful lake-related photography and articles, is under new ownership. Beth Bily and Ron Brochu, publishers of BusinessNorth and Scenic Range News Forum, purchased Lake Superior Magazine from longtime owners Cindy and Paul Hayden. The sale was effective August 31.

"For 36 years, Paul and I have loved working with our talented staff, photographers, contributors and advertisers to bring Lake Superior's beauty and stories to everyone who cherishes this big lake," said Cindy Hayden in a news release about the sale. "We've thought about retirement in recent years, but we weren't going to until we found the perfect fit. Beth





Ron Brochu

and Ron share our passion, and we're excited to leave this business in their experienced hands."

BusinessNorth has covered business news in Northern Minnesota and Northern Wisconsin since 1992, and has been owned by Bily and Brochu since 2010. Bily and Brochu also have owned the weekly Scenic Range News





Cindy Hayden

Paul Hayden

Forum in Coleraine since 2013.

"Lake Superior Magazine's loyal readers and customers won't notice any changes, because it already serves its readers well," Brochu said. *"Its focus will continue to be on Lake Superior while BusinessNorth will continue to focus on the region's entrepreneurs and economy."*

Port draws visitors from across the state and around the world



September brought another group of grain buyers to the Port of Duluth-Superior from as far away as Spain, Italy, Algeria, Panama and China to learn about grain handling, ship loading and inspection operations here in the U.S. As part of the Grain Procurement Management for Importers course offered by NDSU's Northern Crops Institute in Fargo, these international visitors heard a port overview by Adele Yorde, Port Authority public relations director. Joining in the discussion was Steve Sydow, vessel agent with Daniel's Shipping Services, and Greg Ukkola, operations manager for the Wisconsin Department of Agriculture grain inspection office in Superior. The visitors later toured the CHS grain terminal before taking a harbor tour aboard the *Vista Star*.



Members of the Midwest Global Trade Association (MGTA) learned the functions and benefits of a free trade zone as well as warehousing and transportation options available through Duluth Cargo Connect when they visited the Clure Terminal Sept. 19. The fact-finding mission was part of a Duluth field trip that also included tours of ME Global and Cirrus Aircraft.



Great Lakes Aquarium educator honored with prestigious award

Great Lakes Aquarium's Learning and Engagement Director Sarah Erickson has been named the 2018 Non-Formal Environmental Educator of the Year by the Minnesota Association for Environmental Education. The award recognizes innovative and exemplary effort in providing environmental education opportunities for audiences outside the formal school system. The Aquarium serves nearly 10,000 school children each year through field trip visits and classes, preschool and nature play programs, and summer and school year camp experiences. It also hosts an annual series of professional development workshops.

"The Aquarium is outside the realm of what some think of as environmental education. It is absolutely what we are doing here," said Sarah Erickson, who began her career at the Aquarium in 2005. "We take our work of fostering personal connections to water and wildlife seriously — and have a great time working with members of the community in the process."



Sarah Erickson

Water has power to heal: exhibit at Great Lakes Aquarium





Under the Surface: A Photographic Journey of Hope and Healing is on display at Great Lakes Aquarium through January 10, 2019. The exhibit features underwater photographs taken by at-risk youth in a residential treatment program called Northwest Passage, based in Webster, Wis. Some images were shot around the Apostle Islands in Lake Superior. Participants also wrote stories and poetry describing their experiences or feelings about the images—revealing the healing power of water and the natural world.

Minnesota Sea Grant welcomes business and industry liaison educator

The University of Minnesota Sea Grant Program recently welcomed Ashley McFarland as business and industry liaison extension educator. McFarland has more than 10 years of water-related extension experience in community program development, delivery and support. She has tackled a variety of of water-quality challenges facing agriculture, logging and mining industries through research and extension work in Iowa, Idaho and Michigan.

"Ashley brings a fresh intensity and expertise to serving the diversity of Minnesota industries who are impacted by water and water science," said Minnesota Sea Grant Director John A. Downing. "We think our business and industry stakeholders will benefit from her finely honed, diplomatic and service-oriented approach." McFarland most recently served as coordinator of the Michigan State University Upper Peninsula Research and Extension Center, where she led a number of novel projects, including a statewide malting barley research and extension program to supply Michigan's growing number of craft breweries. While at the University of Idaho Extension, she taught waterquality courses on forest hydrology



Ashley McFarland

and river management to professional loggers and miners and developed a citizen science effort to collect basic waterquality data for Idaho streams called IDAH20.

Leadership change at Northspan

Former Duluth City Councilor Elissa Hansen has taken the helm of The Northspan Group, succeeding Randy Lasky as president and CEO of the nonprofit business and community development consulting firm.

Hansen has worked in business, community, economic and organizational development across central and northeast Minnesota for more than a decade. Her previous experience includes positions with Brainerd Lakes Area Development Corporation, Area Partnership for Economic Expansion (APEX) and, most recently, Steam Creative Consulting. She served on the Duluth City Council from January 2016 to June 2018, stepping down to take the Northspan position.



Elissa Hansen

Sky Harbor runway relocation enters new phase



The second phase of a runway relocation project at Duluth's Sky Harbor Airport took off in early September and continued through October. Phase two is focused on adding surcharge material to consolidate lake bottom soils and materials placed in 2017. It began with the installation of erosion and traffic control measures followed by barge delivery and onsite placement of sand for surcharge and then topsoil. Deliveries also included timber for the submerged crib structure. The airport's paved runway and seaplane base have remained open for use.



Port Passings

Robert Berg Rhode, 104, of Duluth, died August 27, 2018. Rhode was a 30-year employee of the Duluth, Missabe and Iron Range Railroad, including 19 years as chief engineer. Major projects during this period included the design and construction of the taconite-handling facility adjacent to the Duluth ore docks, the Two Harbors unique ore thawing shed using infrared heating, modernization of all old-style bridges on the Missabe, and track upgrades to accommodate current loading. He retired from the DM&IR in 1978. Rhode was a life member of the American Society of Civil Engineers and served on its national board of directors for several years. In 1956, he served on the mayor's task force on development of the major highway plan through the City of Duluth. He was preceded in death by his wife, Elizabeth Tennant Rhode, in 1979. He is survived by three sons, a daughter, six grandchildren, 11 great-grandchildren and several nieces and nephews.

Gary A. Nelson, 61, passed away October 13, 2018, in Duluth. Nelson served in the U.S. Marines after high school and worked as a deckhand on the Great Lakes Fleet as well as numerous other jobs over the years. He is survived by his mother, Violet Riggio, five siblings, five nieces and nephews, extended family members and many friends.

CORRECTION: We carried an obituary in the summer issue of North Star Port about Bernhard Josef Abrahamsson of Denver. The correct date of his passing was May 14, 2018, and his PhD in economics was granted by the University of Wisconsin-Madison not NYU. We regret the errors.

IN FOCUS: Jon Dyess

This is the latest in a series of profiles about the gifted photographers whose images bring the Port's working waterfront to life.







How did you first get into photography, specifically the shipping scene?

My wife and I bought our first DSLR (digital singlelens reflex camera) for our honeymoon to Australia. After our return to Duluth, I



Jon Dyess Fine Art Photography facebook.com/ jondyessphotography

started photographing North Shore landscapes and wildlife. I was inspired to try my hand at capturing ships by some of the great photography I had seen in local galleries and online. My first planned outing to capture a Great Lakes freighter was to Wisconsin Point on a -10° F. morning to shoot the arrival of the

Burns Harbor. The combination of ice fog, sunrise and the frozen ship made for a stunning image. I was hooked.

What draws you to Great Lakes shipping and the working waterfront?

I am fascinated by the history of the Great Lakes shipping industry, and I enjoy seeing the shipping industry at work. The Twin Ports provides many unique opportunities to capture maritime photographs. I also enjoy shooting frozen landscapes, northern lights, wildlife and anything in black and white.

Is photography your primary business?

No, photography is my hobby. I have a PhD in structural geology from the University of Minnesota and have worked at the University of Wisconsin Superior as an academic advisor/instructor for almost three years.

How do you choose your vantage points, and are most shots planned or spontaneous?

Lighting conditions always determine my composition and the mood of the image. However, shipping schedules do not always account for lighting conditions, and sometimes I just have to do the best with what I have. I usually consider what

compositions of a given ship I've already captured when planning my next shot. That may change when I arrive at the waterfront and see the lighting and weather conditions. Shots go as planned about half the time. It is important to be flexible.

What makes a great shipping or harbor shot? Do you know immediately when you get one?

A great shipping shot makes the viewer feel like they are actually on the harbor. These shots almost always have a good sense of place or capture a unique moment of action. I usually know right away when I capture something special.



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