# Coastbusters

The Cross Currents Newsletter for Mid-Atlantic Paddlers

November 2023

# Paninnguaq Korneliussen at Delmarva: "A Profound and Heartwarming Experience"

Mike Hamilton

There were few dry eyes in the place when our guest speaker Paninnguaq was telling the story that she came 2000 miles to share. Vulnerable, proud, angry, emotional, invested in and fiercely proud of her Kalalitt (Greenland) heritage, Paninnguaq left this year's Delmarva participants stunned. And extraordinarily thankful for her presence. She truly helped all of us deepen our appreciation of Greenland-style kayaking.

You know that the all-volunteer Delmarva Paddler's Retreat and its' sister QajaqUSA events are all about furthering the appreciation and development of Greenland-style kayaking in the United States. This year's retreat - the 34th annual - took place over three days at Camp Arrowhead, located on the shores of Rehoboth Bay, DE. About 75 participants filled the cabins, bunk houses and tents, with a few RVs thrown in for good measure. As in years past, we had a successful qajaq build class with seven new qajaqs made, a paddle class where nine new paddles were finished, the usual skills classes, and a tremendous sense of community.

# A Name from the Shadows: The Special Guest Presenter

Paninnguaq Korneliussen, a woman of Inuit ancestry who currently resides in Nuuk, the capital

of Kalaallit Nunaat (Greenland), is a mother and student of Culture and Social History at the Ilisimatusarfik Kalaallit Nunaat (University of Greenland). She also lived in Denmark for several years and speaks Greenlandic Inuit, Danish and English fluently. The story that she bravely told the group may have changed our understanding of the origin of modern sea kayaking forever. It brought her grandfather's previously unacknowledged role in the development of the modern sea kayak out of the darkness of obscurity and into the light of appreciation.



Paninnguaq Korneliussen Photo:

### The Euro-Centric Version

Here's how I learned the story before I met Paninnguaq. In 1959, a Scottish anthropology student named Ken Taylor was sent to Illorsuit Island, Greenland to study the Inuit culture. While there, he commissioned two qajaqs to be made in the local skin-on-frame style. One qajaq was for Ken and one was for historian John Heath. Both were outfitted with hunting implements (harpoon, line tray, screen, gun bag, float, knife etc.) but there was only enough seal skin available to cover Ken's qajaq. Following his return to Scotland, he held local demonstrations on Loch Lomond, resulting in a lot of interest. Several local boatbuilders made rough copies of the qajaq.



Ken Taylor on Loch Lomond 1960. Photo: Taylor Word Press

### Birth of the Anas Acuta

In 1964, Duncan Winning took the design drawings (see next page) and made them available to anyone at no cost. Later, Geoff Blackford made a plywood version and named it "Anas Acuta." Since fiberglass had been in use to make whitewater kayaks for some years, Carel Quaife and Alan Byde adapted the design to fiberglass. Together, these three sold the patent to Frank Goodman of Valley Kayaks in England. Goodman kept the name "Anas Acuta" and produced the kayak en masse, beginning in 1972. Thus, the Valley "Anas Acuta" became the first fiberglass sea kayak to be successfully mass produced and is still in production today, 50 years later. Many kayak companies have adapted this design for expeditions and other recreational uses, creating a proliferation of modern sea kayaks by P&H, Current Designs, NDK (SKUK), etc. Thus, the original Inuit gajag made for Ken Taylor was the progenitor of most modern boats.

# **Giving Credit Where Credit is Due: The Rest of the Story**

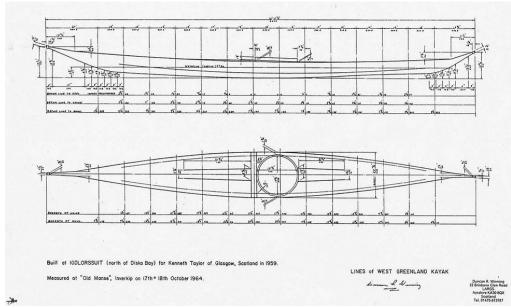
Here is the part of the story that is truly astonishing.

What the Euro-centric version of this story overlooks is the fact that the Inuit man who made the qajaqs for Ken Taylor in 1959 was Emmanuel Korneliussen, a resident of Illorsuit Island and local hunter. This year at Delmarva, we invited Emmanuel's granddaughter, Paninnguaq, to come and tell us about her grandfather. Her account of his life was both heartwarming and tragic.

Here's what Paninnguaq told us. In 1963, he suffered a stroke which left him paralyzed on one side, unable to speak and eventually resulted in the loss of one arm after an accident. Being a widower at the time, his family was torn apart and his nine children were fostered. Some did not see each other for 30 years and have only recently reunited.

Paninnguaq shared that her mom told her that there was an effort by Ken Taylor to contact Emmanuel in the 70's, but contact was not successful. One can only assume that due to his physical condition, the language barrier, and his isolation, Emmanuel was unaware of the subsequent development and popularity of recreational sea kayaking that resulted from his building effort. Paninnguaq shared: "I am both thankful and sorry that my *aataa* didn't manage to experience his huge impact on how people use a qajaq. I would have loved to see his reaction to how important his work was, and his legacy. His family was splitting apart, because of his condition, and he became alone all of his life again." He died in 1988 at the age of 82 years old.

"Qajaq" is the Inuit spelling for a kayak made with a wooden frame covered by skin that was used for hunting and travel in arctic waters; the pronunciation is roughly the same. The Inuit word for a kayak made from plastic, fiberglass or other composite material in the shape of a qajaq is "qajariaq" or like a kayak.



Duncan Winning's 1964 drawing of the Korneliussen-Taylor frame. Photo: Ken Taylor Wordpress



The Valley Anas Acuta. Photo: Valley Sea Kayaks

### **Audience Reaction**

It seems to be the consensus that Paninnguaq's presentation and subsequent conversations have left quite an impact on the Delmarva participants. Her delivery was revealing, heartfelt and honest, emotional and strong, leaving more than a few participants a little weepy, the author included. One participant later wrote that "It was one of the most profound and heartwarming experiences that I have had in decades." You could feel the empathy permeate the room. We did the right thing. We listened.

You can watch "A Conversation with Paninnguaq" here:

https://www.facebook.com/watch/live/?extid=CL-UNK-UNK-UNK-AN\_GK0T-GK1C&mibextid=Nif5oz&ref=watch\_permalink&v =263409980020249



Emmanuel Korneliussen completing the Korneliussen-Taylor frame in 1959. Photo: Ken Taylor Wordpress

### **New Beginnings**

Mark Heatfield of Virginia had just finished building a scaled-up replica of the Korneliussen design prior to Delmarva and it figured prominently in the proceedings. He brought it with him and with Peter Strand's help, they held a skinning demonstration. Perhaps the best part of the demonstration was that Paninnguaq contributed to the sewing of the skin, following in the footsteps of generations of Inuit women. It was ready for use on Sunday.



Paninnguaq sewing the skin Photo: Mark Heatfield

Paninnguaq had only been in a qajaq twice before and had a frightful experience in one as a child. She also reported that she had complicated feelings about using a qajaq for a recreational purpose as qajaqs are held as sacred in her heart, especially due to her grandfather.

The community at Delmarva suggested that she paddle Mark's qajaq and she accepted, eventually learning a balance brace! After seeing participants learning and practicing the ancient maneuvers, and seeing the respect that Delmarva gives to qajaqs and the Inuit who created them, she said that she now understands why we do what we do.

### **Deeper Understanding**

I am left hopeful that we have deepened our understanding of the origins of modern kayaking. Paninnguaq has helped us see that the story begins with the Inuit, not the European white man. She is justified in feeling both proud of her heritage and

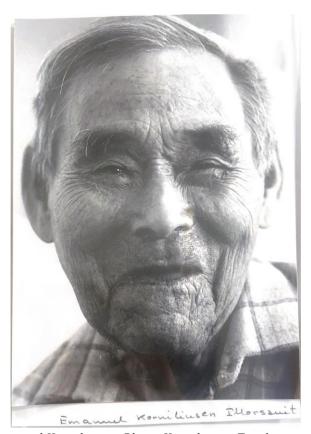


Paninnguaq performing a balance brace at Delmarva in the Korneliussen-Heatfield qajaq. Photo: Mark Heatfield

angry at those who benefit from it, at the expense of the Inuit. We have come to an understanding - Paninnguaq and those at Delmarva - we can celebrate and help preserve a slice of her cultural heritage and do it in a way that is respectful, caring and gives credit where credit is due. While kayaking comes from a place of necessity, hunting and migration, there is room in the modern world for kayaking as recreation. And that's ok.

By the way, the Inuit word for "thank you" is "qujanaq." Qujanaq, Emmanuel Korneliussen!

Paninnguaq's family was not aware of this history of her grandfather until recently, when Paninnguaq was searching the internet. The impact of this new knowledge has yet to fully sink in and the family is only now trying to grasp its meaning. For many years, she only remembered an old man with a loving smile; now she knows he was so much more.



Emannuel Korneliussen. Photo: Korneliussen Family

The Inuit word for "thank you" is "qujanaq." Qujanaq, Emmanuel Korneliussen!

### Classes at Delmarva

Many attendees come to the retreat for the sole purpose of learning skills. Most often, they want to learn to roll their kayak. Sometimes it's about learning how to get the most efficient and graceful strokes. Some folks want to see how deep the rabbit hole goes and endeavor to build a qajaq, carve a paddle or make some other kit. Some want it all.

This year, Norwegians Anders Thygesen and Jannie Heegaard led the qajaq build class. The participants built 5 Greenland-style qajaqs, 2 Iqyax (baidarka is the Russian name) and one Bering Straits qajaq. The class worked seven 12-hour days and all paddled away with water-ready qajaqs, complete with sea socks for safety. They held the qajaq christening ceremony and got right on the water in time to enjoy the rest of the event.

Don Beale from Oregon led the paddle carving workshop on Friday. Don has carved over 900 paddles, so the class was in the hands of a master.

The skills classes included a strokes class that utilized sculling as the basis for propulsion, an edging and bracing class that set the stage for rolling instruction, a dry land rolling prep class which allowed students to experience concepts and body mechanics without the concern for submersion, a harpoon throwing class and a topnotch rescues class. Additionally, we held yoga, functional training classes and rope gymnastics demonstrations.

### 2024

The 35<sup>th</sup> annual Delmarva Paddler's Retreat is scheduled for October 11-13, 2024. Registration opens on July 4, 2024. For more information and registration, go to: www.delmarvapaddlersretreat.org

### In This Issue

Paninnguaq Korneliussen at Delmarva – Mike Hamilton	1
Table of Contents	6
2024 Calendar Photo Contest	6
Solo to Bacalhoa – Ray Offenbacher	7
Level Up Your Skills in Anglesey – Tom Noffsinger	13
Photos of the Month	17
Unnerved – Rick Wiebush	20
Sea Shepherd: Chasing Thunder – Ian Urbina	24
Using Ranges - Rick Wiebush	30
Photo Essay: Georgia's Barrier Islands - Kathryn Lapolla	34
Contributors	40

## Photo Contest: Cross Currents 2024 Calendar

It's that time again! Every year we ask people to submit photos for consideration for inclusion in the Cross Currents calendar. We are now looking for photos for the 2024 calendar.

All photos are rated by a panel of eight kayakers. The 13 best photos make it into the calendar. There are some rules:

- the photo should include a kayak(s) OR
- a great scene taken from a kayak
- the photo cannot include the bow of the person taking the photo
- the pic can be from anywhere in the world
- maximum submission of five photos

Photos should be submitted in .jpeg format to Rick at crosscurrentsseakayaking@gmail.com

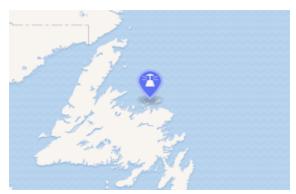
You can start sending photos now. The deadline for submissions is Sunday, 12 Nov. 2023

# Solo to Bacalhoa

## Ray Offenbacher

In some form or another I had been preparing for this trip for a decade. The thought of kayaking in Newfoundland had been the logical conclusion of tracing my finger as far northward as roads would allow on the east coast. From some young age the island had appealed as some mysterious northern archipelago, conjuring daydreams of dark heaving seas, serrated grey cliffs wet with spray, and quiet fishing villages frozen in a bygone era. I admit, maybe not everyone's idea of a relaxing kayaking vacation. But then I've always been drawn to paddle in wind-blown waves, sea darkened by approaching storms and rain on the water.

The final year before the trip I spent building my strength, practicing my rolls and solo reentry, gathering charts, and selecting my paddling destinations. My plan was simple: drive from Virginia Beach up though Maine, across Nova Scotia, ferry to Newfoundland and stop at various key locations for kayaking. Some would be day trips while others would be multi-night camp outs. My truck would serve as basecamp. I had scant need of hotels, restaurants, or camaraderie. As is my custom - I would be going alone.



Bacalhoa Island, Newfoundland location



Bacalhoa Island, northern Newfoundland

I departed May 28th. Later in the year, July or August, would have increased my chances of seeing whales and ensured better weather. I had gone for icebergs though and might have secretly hoped for that lousy weather I am so fond of. I would soon discover I was still very early, way too early, in the Newfoundland season for kayaking. The beginning of the trip had been plagued by wind, rain, snow and freezing temperatures. I saw no tourists and few locals. Those I waived to quickly darted inside away from the rain. Or was it me they were avoiding?

The first half dozen or so paddles went along well enough. Then I arrived in the small town of Twillingate. There I had several day trips and found numerous put-in's, public property for camping, an iceberg in the harbor, and many small islands to explore. It was very conducive to paddling. One evening, having been being kept off the water by a torrential downpour and howling wind, I found myself at a local public house, The Split Rock.



Photo: ??????????.

### The Split Rock – "In this weather? In a kayak?"

The small white colonial tavern overlooked the town bridge and was situated mere feet from Main Street, if the now mud and gravel mixture could be called street at all. Coming in from the rain I received the cliche reaction I both feared and expected; discussion in the bar seemed to slow to a stop and all faces turned to observe this stranger. Thankfully, within a short time I discovered the unsettling reaction to my arrival was probably more the result of letting in the foul weather than being a stranger. The pub was warm and welcoming. Most guests were blue collar and clearly fishermen, although a few of the town's new artistic types were present as well. Not such a surprise, as nearby Fogo Island has transformed itself into a contemporary art hub, featuring an ultra-modern hotel and futuristic studios, all set in a barren landscape of granite and sea.

In short order I was explaining my rather odd appearance to several locals over a pint. All inquired as to why I was in Newfoundland, as there are "none too many tourists this time of year". I explained my purpose, and received many excited responses of, "in this weather? In a kayak!?" Nevertheless, I received a great number of recommendations for where to paddle and launch

sites. I explained that I had generally toured the area but would like to find someplace for an overnight trip. Preferably someplace befitting *my ideal Newfoundland*: dramatic scenery, sea caves, icebergs, and tall cliffs. Inland paddling would not do.

Unfortunately, none had recommendations for any place to land and camp overnight, and I received one outright curt reply of, "don't be out on the water 'ere at night!". Eventually however, an old gentleman, seemingly in his 80's, thin, grey haired, coarsely shaven, and dressed in wool from tip to stern sat nearby and quietly began conversation.

### Llewellyen

"So it's adventure you be lookin for? I know a place. Yes 'bye. Bacalhao Island is where you go. Cliffs three hundred sum feet straight from the water. You can camp there. Yes 'bye." Despite his body being thin and seemingly frail and his face having all the weathering of driftwood, the excitement in eyes and voice was remarkable. It seemed as if he might live – vicariously through me - some adventurous opportunity lost in his youth. I half expected he would ask if he might borrow a kayak and come along!

I introduced myself, and he to me as *Llewellyen*. His Newfy accent, which I would best describe as British mixed with Irish and pirate, was thicker than most. I supposed he had never been off Newfoundland. I opened Navionics and began searching for Bacalhao. The island appeared just as he described and as just the place I was looking for. A lonely mass of rock rising nearly vertical from the ocean, it is about 2.5 miles long, but not a half mile wide. Its northern shore faces lonely out to the exposed northern Atlantic, and I supposed it might make for dangerous conditions.

As I asked if there was a place to land on Bacalhao, we were apparently overheard as several others began to weigh in on the topic. "It's too dangerous". "Son, there's nothing up thar, its sheer rock". "They'll be no one to help you, if you get into trouble". Someone said something about haunted.

Llewellyen seemed to take personal offense at these remarks and returned to his solitary table. The bartender, who I suspect was not from Twillingate, as he spoke in "normal" modern English with no Newfy accent, explained. "A lot of these guys think that island is cursed. In the 1800's there was a famous shipwreck on Bacalhao, the schooner *Jessie*. Everyone aboard drowned. It's a harsh place. Anytime a building is put up, it's destroyed by a storm. The original lighthouse is still on it, but the keepers house had to be removed. They put up a fog horn, but the building for it was blown to pieces. Today all that's there is a concrete foundation and twisted metal.

### Undeterred

I was undeterred. In my experience, it's common for non-kayakers to underestimate the seaworthiness of our craft, never mind my personal affection for big waves. On numerous occasions I've been approached by boats in an inlet who stop to warn me, "Don't go out there in that thing!" only to discover three-foot waves and an afternoon of fun. I left the bar and went to Llewellyen's table. He was delighted at my arrival and with that same excitement conveyed all I needed to know: where to launch, and where to land. There was a hidden

cove on the leeward side of the island used by the keepers to access the lighthouse. "Go there, you'll see. You'll see! Yes 'bye. I spent my 'ol life around that island. You'll have a fine time!"

I inquired about the dangers. "Don't be believing them son, when was the last time you heard' o some phantom?" Not exactly what I meant or had expected. I clarified and pointed out the exposed coast. He seem perturbed. "There be no more hauntin's! These modern times... your technologies killed all our ghosts. Yes 'bye!". He eyed my phone and the electronic chart. I left it alone and questioned my life choices.

**Off to Bacalhao** (pronounced in the local dialect back-a-low)

By the next day I was packed and pushing off. To my joy the air was at last warm and the sun was out. The water, still just above 35 degrees required my dry suit, of course. The paddle was blissful. I glided through several small coves and *tickles*. Each rimmed with picturesque houses and fishing shacks. I passed several small icebergs, each about the size of average American home. In the ocean, the waves were small, rolling and gentle. Bacalhao came into view.



Bacalhoa. Photo; Ray O.



The low spot landing. Photo: Ray O.

The island did not disappoint. It seemed to be a single mass of solid rock rising from the ocean. When aligned with it lengthwise, it was evocative of a colossal whale breached to attack an offending ship. Near its western end I could faintly see the lighthouse perched atop a sheer cliff, it seemed much higher than the listed 300' feet.

As I neared land I saw on my left, out to sea, an enormous white form. An iceberg. A seemingly VERY large one. Maybe a hundred feet high. How far away was it? Three miles? Six? Could I paddle out to it? Should I paddle out to it? I had come about six miles... Are there currents out to sea? What if the waves pick up? What direction is the wind? What if the wind picks up? They'll be nothing between you and Greenland! Logic won and I continued on my way.

For the sake of brevity I'll spare elaborate description of the island and shore. Suffice it to say it was beautiful and exceeded all expectations. Further description would only do it injustice. Not long into the paddle I passed a comparatively low, flat portion of the shoreline. I could see the remnants of some buildings above and it looked as though landing there *might* be possible.

I continued on. After nearly circumnavigating the island, I came to the cove where Llewellyen described the dock used by the lighthouse keepers. I found the "dock". It consisted of a wooden ladder fastened to a vertical rock. The lowest rung of the ladder began about six feet above the water and continued up at least another six feet. "How am I supposed to reach that?! Had Llewellyen known this? Crazy old man! I shouldn't have come here! What then!?" The sun was setting quickly, I had

come at least eleven miles, and it would be no less than six to get back to the truck. Dark by then.

What about that low spot? It was only about a mile from the cove. It was an unwelcome proposition, but if I failed to land there, I could at least return home without going too much further. Again circumnavigating the island I found the low spot and by some grace managed to land without apparent damage.

### Foghorn

Surveying the land above I could find no flat ground, no place to set up a tent. I examined the ruins. There was a relatively clear concrete foundation, next to it a pile of twisted steel and shattered timber. I cannot fathom the power of a storm capable of such damage. The foundation would have to suffice for a campsite. As I setup the tent I became aware of a strange vertical pipe not ten feet away. The pipe, perhaps ten inches in diameter and made from heavy steel, was connected to a motor.

I had never seen a foghorn, but deduced the motor must control a blower and force air out of the pipe. A dread crossed my mine as I thought, what if it goes off tonight? I assured myself: it was a clear night, the sun was setting and I could already see the brightest stars beginning to come out. Besides, what would it be connected to? The building here had been destroyed, and I could see no power cables.

### Oh, No!

As I laid down to sleep my tent began to flap. The wind had picked up. Over the next few hours clouds began to form and I could hear the gentlest taps of rain. I tried to sleep but could not.

WAAAAAAAAAAAAA! The sound was heart-stopping and pain inducing. It rang my ears, but I could feel the vibration in my entire head and chest. As I emerged from my tent, I observed a heavy fog had rolled in. I braced for the horn, but it didn't come again. Was it done? WAAAAAAAAAA! The sound was unreal. My fingers plugged my ears, but it made little difference. It induced a physiological reaction: LEAVE.



The foghorn ruins. Photo: Ray O.

### Stay or Go?

After several bursts, I determined the horn would sound every three minutes. Between sounds I ransacked my dry bag and pulled out toilet paper. I wadded the paper, damped it and plugged my ears. It was eleven o'clock and I was done packing my things and launching my kayak. It was very dark, no moon, and the stars were obscured by fog. I deliberated. WAAAAAAAA! This was insane, but I had no other options. If I stayed I would be deaf and truly insane by morning. If I left I would be in an unfamiliar sea, with vertical rock cliffs and rocks hiding among the waves in the middle of the night. I like my kayak. I'm comfortable in it and it has always taken care of me. Kayak it is. Besides, I had a secret weapon: Navionics. Using a iPad mini in a waterproof case on my deck, I had mapped my route in, and by following the track I would in theory be able to retrace my steps exactly, safely through the rocky waters.

It was working. The foghorn faded as I headed out into the ocean. I mostly kept my head down as I paddled and carefully watched the screen. I could hear the nearby sound of waves crashing on rock, but the there was nothing visible through the fog and blackness. Beside the glow of my navigation, I began to notice the water was putting off wondrous green sparks - bioluminescence. With every stroke sparks poured off the edges of my paddle blade in long green streaks. Occasionally some larger algae or plankton would spin away leaving a trail of green twisting light.

I dare say I was enjoying myself, but soon I perceived something had changed. A feeling of terror, like water through a broken neck gasket poured over me. Not from some new understanding of my predicament nor some irrational fear, but instead the terror of feeling that I was being watched. The foghorn had ceased. The waves themselves seemed to go quiet. The fog had begun to part, and out to the north, not a hundred feet away was a white outline. Pale, tall shapes rose above high above the fog.

They seemed to move. Sails? A ship? No surely it was the iceberg I had seen earlier – it had now moved into shore.! I stared intently through breaks in the fog trying to convince myself and sort out the apparition. The tall white facade fluttered in the wind. PADDLE! I dug in deep. Frantic and flailing: Paddle, paddle, paddle!

I heaved with all I had and for as long as I could. At long last I made it back between the islands and was nearing the safety of the tickle. The fog had subsided and I could see a great deal around me. No sign of the ....iceberg. The water calmed. Safe at last. I would be at the truck soon... nearly 2 am. Exhausted, I finally leaned back and relaxed my shoulders then slumped forward. With another stroke, the bioluminescence again poured off my paddle. I relaxed and dipped my hand into the water and swished it about. The result was spectacular. Millions, perhaps billions of tiny green lights illuminated the darkness. Beneath the surface, in the cool green glow, I could make out a face. It stared coldly into my eyes. It was Llewellyen.

### The Bacalhoa Lighthouse



The lighthouse is an iron tower that was built in 1894 and is still in operation.. This photo from 1900 shows the keeper's house, which was connected to the light via the covered passageway (now gone). The name "Bacalhoa" is a variation of the Spanish word for cod, which was the mainstay of the Newfoundland economy for centuries. Source: Lighthouse Friends. Photo: Canadian Coast Guard.

# **Level Up Your Skills in Anglesey**

## Tom Noffsinger

The world is filled with so many amazing places to paddle – how can we ever decide where to go next? If you want to grow your sea kayaking skills in a challenging environment with world-class coaches, make plans to visit the Isle of Anglesey in Wales.

There's a reason Anglesey is the home of Sea Kayaking UK (Nigel Dennis Kayaks) and dozens of the industry's top sea kayak coaches — it provides an amazing playground that offers something for nearly every level (protected areas abound, in spite of what you'll read below). And no matter where your skills are when you arrive, they will be better when you leave!

### The Venue

Anglesey features a rugged, rocky coastline with limited launching and landing spots, which can mean long paddles on a coastline exposed to the fury of the Irish Sea. The tidal range averages 20 feet (6 meters) and currents can exceed seven knots. Here's a description from the Wales Natural Resources office:



"Sea conditions around this section of coast are complex due to seabed topography, exposure and strong tidal currents. The immediate coastal waters are affected by strong tidal races running off headlands, including Penrhyn Mawr, The Fangs, Rhoscolyn Head and the famous Holyhead Race (whirling around the Stacks). These areas are associated with a steep, confused and breaking sea especially when the wind and tide are opposed. [It is] is defined by its high energy wave environment; the adjacent

coastline feeling the full force of Atlantic breakers in prevailing south-westerly winds. Submerged rocks and islets form dangerous obstructions throughout the coastal waters, associated overfalls combining with the volatile sea conditions overall to create a particularly notorious stretch of coastline."

### The Paddlers

In October a dozen US kayakers headed to the described coastline in Holyhead, Wales, for five days of sea kayaking adventure. This was no ordinary group – almost every paddler is an ACA coastal kayaking instructor, and most have dozens of days on the water together. The street creds ranged from L-3 instructors through a L-5 ITE, with a heavy component of L-5 coaches. Even so, we hired a local guide, Mirco Goldhausen, to assist with local area knowledge and day-play recommendations based on each day's weather and tidal forecast. Mirco was invaluable in helping us get dialed in to the local conditions, and keeping us safe.



Threading the Rocks. Photo: Mirco Goldhousen

### The Paddling

Although the week started with 25 knot winds gusting to 35+, one advantage of Anglesey is there is always a protected place to paddle in the lee of the island. Day one found us in Menai Straight, a river-like environment of tidal current where we played in eddies, ferry glided between rock outcroppings, attained around small headlands and bridge abutments, and nestled behind a Roman-era fish impoundment in the "Swellies" area of the Straight. We saw seals, Canadian geese, dozens of local birds and a few dozen other sea kayakers as well.

That's one of the more interesting aspects of paddling in Anglesey – it's a kayaking destination for paddlers from around the world and at times I felt like I was attending a symposium – every day on the water I saw others out paddling – clubs, classes and small groups practicing their skills or

just enjoying the water, regardless of the weather and conditions.

Day two was a paddle at Rhoscolyn on the south side of Holyhead, involving more exposure to big rocks, big waves and easing into tidal races.



Photo: Kathryn Lapolla



Getting slammed near Rhoscolyn. Photo: Kathryn Lapolla

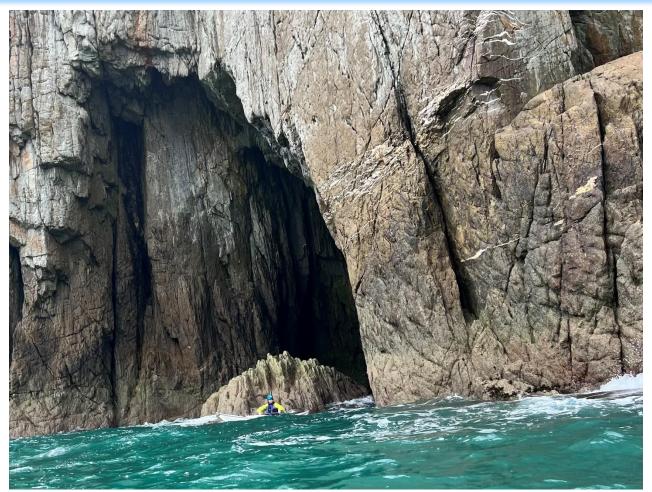
Day Three was "around the stacks" – leaving from the Holyhead harbor area and paddling counterclockwise around North Stack, South Stack and eventually playing in the world famous Penrhyn Mawr tidal race. It was smallish and confused that day, but a hoot for everyone!

Some of the tidal races, like Penrhyn Mawr, have eddies behind rock islands that allow for rest and recovery. Others, like South Stack, are a constant push against the current, and are much more tiring even with the benefit of standing waves to help you maintain your position.

The fourth day saw another heavy southwest wind, so many of the crew headed to the north coast for rock hopping, sea cave exploration and miles of smiles. Day five saw a return to Rhoscolyn, with an out-and-back journey north along the coast to find large and small sea caves and the odd semi-surfable wave breaking over nearly exposed rocks.

Although the group included some of the top names in US sea kayaking coaching, it's fair to say every participant learned or experienced something that makes them a better paddler today. Whether it's strategy for planning and executing challenging day paddles and managing groups in no-shit environments, or personal discovery and adding new tricks to the toolbox after a week paddling in strong currents, big waves and around lots and lots of rocks.

You don't need to go to Anglesey to become a better kayaker. But if you go, it's impossible to leave without leveling up your skills!



The author in front of "Parliament House" cave near North Stack. Photo: Kathryn Lapolla

### Tom's Lessons Learned from Delayed Luggage

My luggage was delayed until the last day of this trip. Fortunately my amazing paddling partners loaned me everything from base layers and Crocs to a drysuit and paddles. Here's what I'll do differently on my next paddling trip:

Pack paddle clothing in my carry-on bag. It's easy to borrow a spare paddle, PFD and spray skirt. It's hard to find a drysuit or paddling top, pants and shoes that fit comfortably. Use a small carry-on that is less likely to be force-checked. Next on the list if I have room: my own helmet and spare paddling glasses/sunglasses.

Get a printed boarding pass (save it), and make sure you get your copy of the sticker the airline puts on your bags. Take a photo of the sticker and passes (in case you lose them) and of your bags. Those numbers and your flight info are key to tracking down missing bags. Try to use the same airline for all your flights. I'm convinced the switch from Delta to Virgin caused the problem.

Get an international calling plan for your cell, and load airline apps, WhatsApp and similar apps before you go. Create accounts and log into them so you're not hunting for passwords when you're stressed.

Go with friends that are the same size ②.

# **Photos of the Month**



# **Lots of Boats in Locks**

Photo: Parks Canada

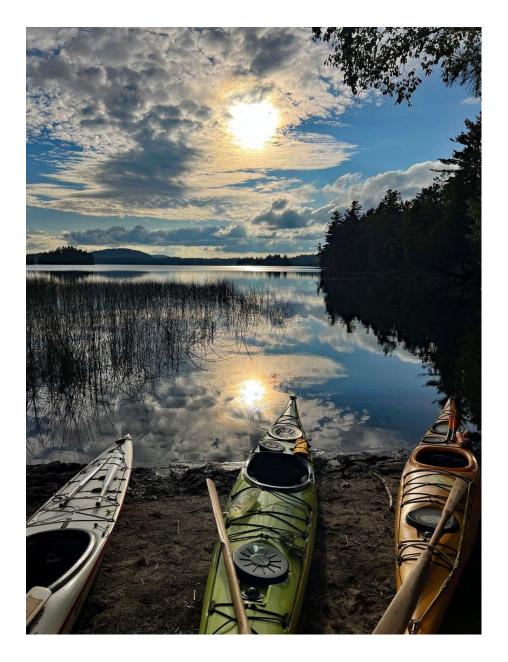
**Photos of the Month** 



# **Ohio River, Cincinnati**

Photo: Michelle Westermeyer

# **Photos of the Month**



Saranac Lake

Photo: Jesse Aronson

## **Unnerved**

### Rick Wiebush

There I was: constantly having to be alert, always on edge. Paddle, paddle, brace. Paddle, brace, brace, get surfed, paddle, paddle. And then it would get even more nerve-wracking as we crossed the shoals.

This went on for about six of the 9.5 nautical miles of the open water part of the crossing between Cape Henlopen, DE and Cape May, NJ. Actually, the psychological experience was better measured in *yards* vs. nautical miles, since that's what I was paying attention to. Not how many nm to go, but how many *yards* to go. So the crossing was more like 19,558 yards. In other words, it seemedtogoonforfuckingever.

This was my fourth time doing this crossing and the least enjoyable, in spite of the facts that: 1) it was a sunny day, 2) we had a 5-10 kt SW wind at our backs, 3) our route planning turned out to be almost perfect, and 3) I was with a great group of very strong paddlers in Richard Essex, Mike Hamilton, Rob Garfield and Richard Costello. None of whom, by the way, seemed to be the least bit perturbed by the conditions we encountered. In a subsequent Facebook post, Mike referred to the conditions as "playful." Mike, wait, we were on the same trip, right?

I knew going into it that we would have some conditions to deal with. We were just a day or two removed from the end-of-August super blue moon and knew that as a result we would be encountering max currents of 2.5 kts in a couple of places. And we knew that there would be a three-foot swell rolling in from the Atlantic. The first issue we took into account in planning, so no big deal. The second would normally just add some fun to the paddle. Moreover, for most of the crossing we would be on the flood and, most importantly for me (or so I thought during planning), we were timing it so that we would hit the turbulent Prissy Wicks shoals on the New Jersey side right around slack. That timing did work out perfectly and, as it turned out, was the least of our - I mean mv - worries.

The launch beach was calm at 8 AM.



Cape Henlopen. Photo: Rob Garfield

It started out promising. We got on the water at 8:15, earlier than our planned launch time, thereby increasing the likelihood of hitting the NJ shoals, seven or eight miles away, at slack. Then, almost immediately, as we were paddling out the Harbor of Refuge toward the tip of Cape Henlopen, a couple of dolphins popped up right next to Richard's and Rob's boats. What a great way to start! But that was about the last of the pleasant surprises until we finished earlier than planned and were able to get on the 2:30 ferry back to Lewes, instead of having to wait around for the one departing at 4:30.

As early as the Harbor of Refuge light – about 1.5 nm into the trip – things started looking, shall I say, a little "concerning". The swell was absolutely *exploding* on the west end of the breakwater and the currents were swirling dizzyingly as far as 50 yards out from the light. After getting around that with just a furrowed brow, we set our heading at 70 degrees so that we would effect a course of 50 degrees over to Cape May Point.

### A 70-Degree Heading – Sort Of

A couple of things about this 70-degree heading. First, it was necessary to head so far to the east of our target of Cape May Point because we had to counter a potential four+-mile drift to the west due to the strength of the flooding current.

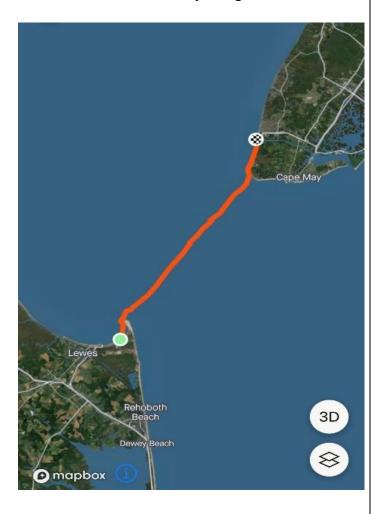


Heading to Portugal. Photo: Rob Garfield

Second, when you are sitting in your boat at Cape Henlopen, you can't see Cape May at all. And when your heading is as much as 70 degrees, all you see is an endless expanse of water in front of you and you just have the sense that you are heading toward Portugal instead of Cape May. It's a little unnerving.

The third thing about the 70-degree heading, and this will give support to my previous and subsequent claims of really rough water: Richard Essex, who was leading, said at one point that although he knew the heading was 70 degrees, all he could do – given how much we were getting bounced around - was "try to keep my deck compass pointing somewhere between 60 and 90 degrees." That's how "playful" the conditions were.

Nonetheless, we shot a fairly straight line across:





The swell was something like this. Photo: Ben Fontenot

### The Conditions

Let me back up my whining with some descriptors. The three-foot, and sometime four-foot, swell was coming at us on our right. These were fairly big, thick swells that were like a wall of water coming at you. But they were rollers, comparatively gentle, not breaking, and fun. (See photo above.) But these walls were big enough that at times the person in front of you would disappear if they were in the trough on the far side of the wave while you were in the trough on the near side. Cool!

The problem was that for most of the trip, there were also totally unexpected two-foot steep waves coming at us from our left stern quarter. They too weren't breaking, but when they met the oncoming swell, they created a jumble of reflecting waves that were usually over my head and that that tossed (my) boat to and fro. I absolutely hate it when my stern gets lifted up by a stern-quartering wave and then it goes sliding down the back side of that same wave. I hate it even more – I discovered this day – when I go sliding down the back of a wave going one way only to be met by a wall of water heading in the other direction. I estimated at the time that these clashing waves were about 27 feet high, but in retrospect, they were probably only 12 feet high. Well ok, maybe four feet high. Or something like that.

### **How I Felt**

So that's the waves. What about me? I was as jumbled as the waves, almost constantly nervous, watching apprehensively for what was coming next, bracing repeatedly in a defensive way.

And then having to brace for real three times to prevent myself from going over. And after those scares, I could feel myself tighten up, getting narrower and higher in my boat, and consequently making myself feel even more unstable. Everything I should *not* be doing.



It felt like this to me. Photo: Anglesey Coastal Spirit

About 10 years ago, I was part of a group that was doing a six-mile crossing in Baja. One of the guys got impending diarrhea about halfway across. His butt was clenched so tight trying to avoid an accident that when we got to the other side, he joked that we had to rock him back and forth in his seat several times to break the suction. My grip on the boat was sort of like that.

This constant tightness, vigilance and fighting went on for about two-thirds of the crossing, i.e., six miles. It was exhausting. At one point I was sweating (I never, ever sweat while paddling.) At no point did I feel confident enough to stop and drink water which made things worse. I could feel the sun burning my neck. I could feel myself getting dehydrated. It was dispiriting. It was why I was psychologically measuring distances not in miles, but in yards.

### Calm As Could Be

Meanwhile, all during this, I see Richard Essex way out in front, 50 yards ahead of me, paddling along strong, without any apparent care in the world. Worse, I hear Rob, Richard Costello and Mike behind me, just chatting away, telling stories, discussing instructional strategies, etc., as though they were on some flat-water lake, occasionally

Photos: Rob Garfield

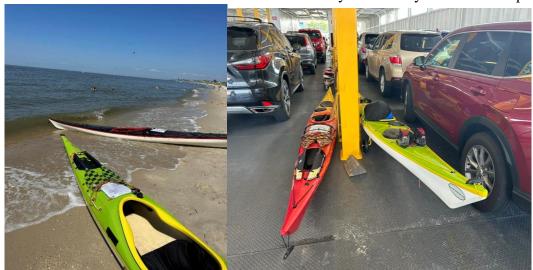
stopping to look at herons or some shit like that. I even think I may have heard one of them *humming* at one point.

### What's Up With That?

I still can't quite figure out what was going on. I'm always a little nervous in big (to me) water. But this – being nervous for six miles – was ridiculous. And the contrast between what I was feeling/doing and what appeared to be the nonchalant experience of the other guys was really jarring. I mean, they are better paddlers than me, but not *that* much better. Or are they? Was it a just a bad day for me? Am I getting too old for this stuff? Did I somehow forget everything I know about dealing with rougher water? I don't know if I'll be able to answer those questions.

This was one of those deals where it's really uncomfortable while you're doing it, but once you're done, there's a greater sense of satisfaction exactly because of the difficulties you faced. Nonetheless, I now know that the next time I do the Delaware Bay crossing, it will be on neaps, there will be zero swell and I'll pick a route that zig zags across so I don't hit any shoals. Failing that, maybe I'll just take the ferry both ways.

At the end, even our boats were tired. They slept on the ferry on our way back to Henlopen:



# **Sea Shepherd: Chasing Thunder**

lan Urbina



The Thunder in Antarctica. Photo: Simon Ager, Sea Shepherd

Note: This article originally appeared in The New York Times on October 3, 2022 It has been edited slightly for length -Ed

As the Thunder, a trawler considered the world's most notorious fish poacher, began sliding under the sea a couple of hundred miles south of Nigeria, three men scrambled aboard to gather evidence of its crimes. In bumpy footage from their helmet cameras, they can be seen grabbing everything they

can over the next 37 minutes — the captain's logbooks, a laptop computer, charts and a slippery 200-pound fish. The video shows the fishing hold about a quarter full with catch and the Thunder's engine room almost submerged in murky water. "There is no way to stop it sinking," the men radioed back to the Bob Barker, which was waiting nearby. Soon after they climbed off, the Thunder vanished below.

### **An Extraordinary Chase**

It was an unexpected end to an extraordinary chase. For 110 days and more than 10,000 nautical miles across two seas and three oceans, the Bob Barker and a companion ship, both operated by the environmental organization Sea Shepherd, had trailed the trawler, with the three captains close enough to watch one another's cigarette breaks and on-deck workout routines. In an epic game of catand-mouse, the ships maneuvered through an obstacle course of giant ice floes, endured a cyclone-like storm, faced clashes between opposing crews and nearly collided in what became the longest pursuit of an illegal fishing vessel in history.

Industrial-scale violators of fishing bans and protected areas are a main reason more than half of the world's major fishing grounds have been depleted and by some estimates over 90 percent of the ocean's large fish like marlin, tuna and swordfish have vanished. Interpol had issued a Purple Notice on the Thunder (the equivalent of adding it to a Most Wanted List, a status reserved for only four other ships in the world), but no government had been willing to dedicate the personnel and millions of dollars needed to go after it.

So Sea Shepherd did instead, stalking the fugitive 202-foot steel-sided ship from a desolate patch of ocean at the bottom of the Earth, deep in Antarctic waters, to any ports it neared, where its crews could alert the authorities. "The poachers thrive by staying in the shadows," Peter Hammarstedt, captain of the Barker, said while trying to level his ship through battering waves. "Our plan was to put a spotlight on them that they couldn't escape."

The pursuit of the Thunder until its sinking in April, pieced together from radio transmissions, interviews, ship records and reporting on board the Bob Barker and its fellow ship, the Sam Simon, demonstrates the anything-goes nature of the high seas, where weak laws and a lack of policing allow both for persistent criminality and at times, bold vigilantism.



The Bob Barker. Photo: Hobart Mercury.

### **Poaching is BIG Business**

Illegal fishing is a global business estimated at \$10 billion in annual sales, and one that is thriving as improved technology has enabled fishing vessels to plunder the oceans with greater efficiency. While countries, with varying degrees of diligence, typically patrol their own coastlines, few ever do so in international waters, even though United Nations maritime regulations require them to hold vessels flying their flags accountable for illicit fishing.

That leaves room for organizations like Sea Shepherd, which describes itself as an eco-vigilante group, flies a variation of the Jolly Roger on its ships and often cites the motto, "It takes a pirate to catch a pirate." In chasing the Thunder, Sea Shepherd's goal was not just to protect a rapidly disappearing species of fish, its leaders said, but to show that flagrant violators of the law could be brought to justice.

Banned since 2006 from fishing in the Antarctic, the Thunder had been spotted there repeatedly in recent years, prompting Interpol to issue an allpoints bulletin on it in December 2013. The vessel was described as the most egregious of the ships then on its Purple Notice list, collecting over \$76 million from illicit sales in the past decade, more than any other ship, according to agency estimates. The Thunder's prime catch was toothfish, more popularly called Chilean sea bass, known on docks as "white gold" because its fillets often sell for \$30 a plate or more in restaurants in the U.S.



Patagonia Toothfish Photo: Jeff Wirth, Sea Shephard

Consumer demand for toothfish skyrocketed in the 1980s and 1990s after a Los Angeles-based seafood wholesaler decided to rename the oily fish Chilean sea bass to make it more appealing to the American market. An ugly bottom dweller, found only in the earth's coldest waters, the toothfish can grow over six feet long and weigh more than 250 pounds. The rebranding worked a little too well. More fishing boats targeted toothfish, and now some scientists say that its population is disappearing at an unsustainable rate, though it is unclear how fast.

### **Maintain Hot Pursuit**

On its second day of prowling for the Thunder last December, the Barker spotted its prey. Appearing first as a red blip on an otherwise barren radar monitor, the vessel was moving slowly, at 6 knots, and heading against the tide of floating icebergs, some the size of tall buildings. Captain Hammarstedt sailed within 400 feet of the Thunder before reaching for a reference binder - an

Interpol "mug shots" guide featuring silhouettes of illegal fishing vessels. He radioed the Thunder's officers, most of them Spaniards or Chileans. Speaking through a translator, he warned that the Thunder was banned from fishing in those waters and would be stopped.

The Thunder responded: "No, no, no. Negative, negative. You have no authority to arrest this vessel. You have no authority to arrest this vessel. We are going to continue sailing, we are going to continue sailing but you have no authority to arrest this ship, over."

"We do have authority," the Bob Barker said. "We have reported your location to Interpol and to the Australian police."

The poachers replied, "O.K., O.K., you can send our location, but you can't board this ship, you can't come in or arrest us."



Thunder being chased by the Bob Barker and the Sam Simon. Photo: Simon Ager, Sea Shepherd

The Thunder's crew, which had been working on its aft deck, abruptly disappeared inside. The ship (a trawler that had been converted to do other types of deep-sea fishing) soon doubled its speed and made a run for it, the Barker close behind. They were in a stretch of Antarctic sea called the Banzare Bank, known among mariners as "The Shadowlands" because it is among the planet's most remote and inhospitable waters, nearly a two-week journey to the nearest major port.

On that first night of the chase, Dec. 17, Captain Hammarstedt made a note in his ship's log: "Bob Barker will maintain hot pursuit and report on the F/V Thunder's position to Interpol."

### An Angry Sea

Built in 1969 in Norway, the Thunder had many names over the years (Vesturvón, Arctic Ranger, Rubin, Typhoon I, Kuko, and Wuhan N4) and was registered to fly the flag of as many countries (Britain, Faroe Islands, Seychelles, Belize, Togo, Mongolia and most recently, Nigeria). During its final months, the ship's crew included 40 men — 30 Indonesians, the Spanish officers and the captain, Alfonso R. Cataldo, 48, a Chilean.

After being spotted in Antarctica, the Thunder bolted north toward the "Furious Fifties" and "Roaring Forties," a perilous strip of latitudes spanning the Southern and Indian Oceans. Winds there routinely top 70 miles per hour in storms. Waves reach 60 feet tall.

The Barker's Captain Hammarstedt, 30, a baby-faced Swede, was respected by his crew for his seafaring skills and calm under fire. A decade of antiwhaling work had exposed him to a fair share of angry storms and violent confrontations. Still, he worried as he prepared to follow the Thunder into a huge low-pressure zone.

As the wider, heavier Thunder held firm over the next two days in the storm, the Bob Barker swayed back and forth, listing 40 degrees as it was battered by 50-foot waves. Below deck, fuel sloshed in the Barker's tanks, splashing through ceiling crevices

and filling the ship with diesel fumes. In the galley, a plastic drum tethered to the wall broke free, coating the floor in vegetable oil that bled into the cabins below. Half the crew was seasick. "It was like working on an elevator that suddenly dropped and climbed six stories every 10 seconds," Captain Hammarstedt recalled.

Emerging on the other side of the storm, the ships settled into several days of radio silence. As much a battle of wills, this endurance race was also a test of fuel capacities. While the Barker never left the Thunder's trail, the Sam Simon split off several times to resupply. Each time the two vessels moved close enough to connect a refuel hose, the Thunder turned 180 degrees and sped toward them, wedging between them to disrupt the effort.

### It Gets Ugly

On Feb. 7, tensions erupted. After the Thunder threw out fishing nets, Captain Hammarstedt tried blocking the ship's path. The Thunder responded by charging toward the Barker. Captain Hammarstedt immediately pulled his throttle into reverse, avoiding a collision by about one yard.

The next day, the Thunder's deckhands began preparing their nets, with officers radioing beforehand to alert the Barker that they intended to fish. "If you do, we will cut your nets," Captain Hammarstedt threatened.

Moments later, as the Thunder's mesh hit the water, he gave his crew the go-ahead. They began lifting and cutting the buoys, causing the nets to sink. Captain Cataldo, on the Thunder, exploded.

"You are taking our buoys!" he said over the radio. "That is illegal. We are coming."

The Barker responded that it had seized the fishing gear as evidence of a crime.

"We are coming next to you to get our buoys," the Thunder's captain replied angrily. "You have to give them back." Shortly after, he added: "You started this war." urning the chaser into the chased, the Thunder headed full throttle at the Bob Barker, which fled, its crew delighted that their adversary was wasting fuel. Three hours later, the Thunder's captain returned to his original course.

# Sea Shepherd

Though its ships are unarmed, Sea Shepherd is not averse to confrontation. The group is best known for its antiwhaling campaigns, which have included ramming Japanese vessels. Some critics dismiss its work — depicted on "Whale Wars," the Animal Planet television show — as counterproductive publicity stunts.

Sea Shepherd spent more than \$1.5 million chasing the Thunder, and it has a fleet of five large ships, a half-dozen fast inflatables, a crew of more than 120 and units in more than a dozen countries.

Captain Hammarstedt said he draws the legal authority for actions like confiscating the Thunder's nets from a provision in the United Nations World Charter for Nature that calls on nongovernmental groups to assist in safeguarding nature in areas beyond national jurisdiction.

Several maritime lawyers and international policy experts, though, said that obstructing fishing vessels and confiscating their gear is probably illegal. "But no one would prosecute this because it pales in comparison to what the Thunder was doing," said Kristina Gjerde, an expert on high seas policy. "Sea Shepherd knows this."



Rescuing Thunder's crew. Photo: Jeff Wirth, Sea Shepherd

### Thunder Goes Down

The distress call came at 6:39 a.m. "Assistance required, assistance required," the Thunder's captain pleaded over the radio. "We're sinking." The Thunder had collided with something, he said, possibly a cargo ship. "We need help."

The Sea Shepherd officers were shocked. While they noticed some commotion on the Thunder, there was no hint of a collision. Still, they quickly agreed that the more spacious Sam Simon would take the Thunder's crew on board. Captain Chakravarty called a meeting on his bridge. "We're outnumbered two to one. This is very dangerous for us."

Everyone was to change out of shorts and T-shirts and into uniform, he instructed. The guests were to be escorted on bathroom visits. There would be two-man watches from the upper deck at all times. No one was to ask any questions about fishing. "This is strictly a rescue operation now," he said. At 12:46 p.m. on April 6, the Sam Simon's log noted of the Thunder: "Going down very fast."

Meanwhile, three Barker crewmen were climbing on board in hopes of salvaging evidence. "I'm giving you 10 minutes," Captain Hammarstedt said in a radio call to his men. After grabbing binders, charts and computers from the bridge, they headed to the engine room, finding it almost completely submerged. In the galley, a defrosting chicken sat on the table.

Captain Chakravarty contacted the nearest port officials in São Tomé and Príncipe, the small island nation off the coast of West Africa, and arranged for the police and Interpol officials to meet them.

On arrival, the Thunder's senior crew members were arrested. Three officers were charged with a variety of counts, including pollution, negligence and forgery. But losing the ship — and the evidence that went down with it, including the fish in the hold, onboard computers, various records and fishing equipment — makes prosecution more difficult, Interpol and Sea Shepherd officials acknowledge.

While relieved that the Thunder is no longer in action, the Sea Shepherd's crew members, along with law enforcement authorities, are suspicious about how the great chase ended. No other vessels had been near the Thunder before it sank, and its cabin doors were tied open rather than sealed shut to keep water out. That suggested the \$5 million ship might have been intentionally scuttled, possibly to avoid being seized by the police, according to the authorities in São Tomé and Príncipe and Sea Shepherd officials.

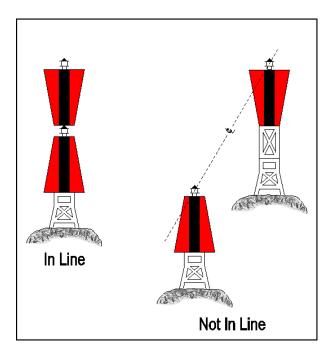
The Sam Simon crew remembered something else. As their ship carried the Thunder's crew back to land, Captain Cataldo climbed onto a five-foot-high stack of his confiscated nets on the back deck. Stretching out, he went to sleep. But just before that, as the Thunder finally sank, he had pumped his fist and cheered.



Thunder going down. Photo: Simon Ager, Sea Shepherd

# **Using Ranges**

Rick Wiebush



(Ed. Note: Ranges can be used to help a boat follow a straight course and they can be used as a line of position (LOP) to help a boater know where they are. This article focuses on the first of these purposes.)

Three sea kayakers are going to make a two-mile crossing between Point A on the southside of the estuary and Point B on the northside. (See Figure 1, next page.) There is a two-knot current flowing from west to east (left to right). The paddlers have similar skills and paddle at about the same rate - three knots/hour. So they figure they can do the crossing in about 40 or 45 minutes. They all see that there is a point of reference on the other shore – a church - that is on a slight hill just above the spot where they want to land at Point B. It's a big church that has a dome with a steeple on top.

### **Three Different Strategies**

Each of the paddlers decides to take advantage of the church, but each takes a different approach to the crossing.

The paddler in the red and yellow boat decides to take a bearing on the steeple and follow that course the whole way across. After adjusting for variation, he gets a heading of 0 (zero) degrees. The second paddler, in the black boat, doesn't like messing around with charts and compasses, so decides that she will just keep her bow pointed at the church steeple the whole away across. She can see where she wants to go, so she'll just keep aiming at that steeple.

The third paddler, in the orange boat, has heard about using ranges for a crossing like this. She noticed that she could just make out a red day marker on the other shore that visually was just below the church. She thinks that if she keeps the red day marker and the church steeple lined up — one always right behind the other - the whole way across, that will keep her going in a straight line.

### Oops!

The paddlers get on the water and take off at the same time. But have very different experiences getting to the other side. The guy in the red and yellow boat was feeling good that he was able to keep the heading on his deck compass at zero degrees the whole way across. It also seemed that he was going to make it across in the expected 40 minutes. But as he neared the other side, he realized that he wasn't looking at the church dome anymore, and that he was going to end up landing near the trailer park on the outskirts of town. Scratching his head, he got out his chart and saw that he had landed about two-thirds of a mile downstream from the take-out at point B. Yep, his deck compass was always pointing to zero, but instead of always pointing at the dome, it was constantly pointing at different things on shore as the current swept him downstream. Now he had to figure out how to get his ass back upstream to the take-out.

### Ugh!

The woman in the cool black boat ended up in the right place, but she took a circuitous route and it took her over an hour to make the crossing. That's because even though her bow was always pointing at the steeple, she too was getting swept downstream and she ended up paddling a route to the other side that looked like a big arc (see Figure 1.) Even worse, in order to end up at the take out, she had to paddle upstream, against the strong current, for almost the whole second half of her crossing. Which is why it took so much longer.

### Nice!

The third paddler did it right. As soon as she got on the water, she paddled over until she reached a point where she could look across and see that the tip of the red day marker was directly in front of the steeple on the dome. As long as she kept them in line she'd be good to go. However, once she got into stronger current, she kept getting knocked off the range, getting moved to the downstream side. So she had to paddle hard back to the left (upstream) to get back on the range. After this happened a couple of times, she remembered about ferry angles. So instead of trying to keep her bow pointed at the day marker and steeple, she pointed it slightly upstream and focused on keeping on the range by using her sight instead of her bow. Once she got the right ferry angle, she had no problem staying on the range and her GPS showed that she had shot a straight line across to Point B in 45 minutes.

### **Types of Ranges**

Ray Killen ("Simple Kayak Navigation") defines a range as "any two natural or man-made objects that appear in line from your perspective". The range that the third paddler used was an example of a natural range in that the two objects weren't designed as a range – they just could be conveniently used as one. Moreover, we often paddle in areas that don't have convenient buildings, or radio towers, or day markers that can be used as ranges. So we have to get creative and try to identify two "natural" things that we can line up, such as a big pointy rock near the water on the opposite shore and the tip of a big pine tree directly behind that rock. When making a crossing, it doesn't really matter what objects we use, as long as we can keep them lined up one behind the other, giving us a straight course to follow when we otherwise would be pushed off our course by wind or currents.

*Man-made ranges* are part of the system of aids to navigation and they are used primarily to help larger

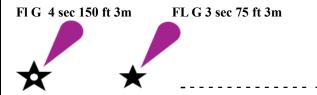
boats stay in a channel and avoid shallow or dangerous areas. As with our smart kayaker, ships need to keep the front and back ranges aligned to maintain a straight course. The figure on the first page of this article shows an example of a manmade range – both when it is aligned from the boat's perspective and when it is not. Another example is shown below in which the range markers are bright lights. Note how – as with all ranges – the two markers are separated from each other by distance and by height. (Also note that since manmade ranges help keep ships in a channel, kayakers don't use them!)



Range lights Photo: Unknown.

On nautical charts, the symbol for range lights is like that shown in Figure 2 below. In this example the range is for a boat coming from the right. There will be two symbols for lights (the "exclamation points") – lined up with each other – and a dotted line extending out along the range. Note that the rear range light is a lot taller (150 feet) than the front range light (75 feet).

Figure 2. Example of range lights on a chart



### **Correcting a Course**

In the photo of the range lights in the first column, the perspective shows that the vessel is not on the range. The back range light is to the left of the front range light. So the vessel would need to move to starboard (right) in order to get the front and back ranges lined up.

In our earlier kayaking example, we saw that the paddler had difficulty staying on the range due to the current. She saw that the tip of the dome (the back range) was moving to the <u>right</u> of the red day marker (the front range). Consequently she needed to paddle more to the <u>left</u> to get the two points lined up again and get back on the range.

If she had seen that the tip of the dome was moving to the <u>left</u> of the day marker, that would have been an indication that she was paddling too hard. In that case, she would need to fall off a bit, until the current moved her back to the right and back on to the range.

Making course corrections to stay on a range may also involve making adjustments to the ferry angle. In situations involving cross winds or cross currents (!!!), we need to have our bow facing partially up into the wind/current to offset its effects. How much of an angle we take depends on the strength of the wind or current. If those forces are fairly weak, our angle may be fairly shallow; if they are stronger, we'll need a bigger angle to stay on the range. And, since the strength of the current will likely vary as we are making the crossing, we will need to make adjustments to the ferry angle as we go.

The next time you are on the water, paddle from one point to another across some current. It doesn't have to be a long crossing – 25 feet will do it – and there only needs to be maybe one knot of current. Cross once using what "feels" to you like a straight line. Then pick out two things to use as a range and do it again. You'll be amazed at the difference!

# Photo Essay Georgia's Barrier Islands

Kathryn Lapolla

A group of 14 people just got back (Oct 28) from a week-long Cross Currents trip to Tybee Island and the other barrier islands that lie along Georgia's coast. There was a wide range of skill levels in the group and ages ranged from 25 to 85. The paddling venues were similarly varied. We had surf and fun two-foot zippers off the north end of Tybee; we squeaked through the narrow marsh channels of

Jack's Cut, Joe's Cut and Mosquito Ditch; we visited the boneyards on Little Tybee; dealt with high winds (15 kts) and strong current (2 kts) on our 14 nm round trip out to the north end of Wassaw Island, and floated slowly among the 100 year-old Bald Cypress and 1,200 year-old Tupelo trees along Ebenezer Creek. Oh, and Savannah restaurants! What's not to like? (*All photos by Kathryn Lapolla*).





The Boneyard on Little Tybee



Textured Waters



Through the cuts





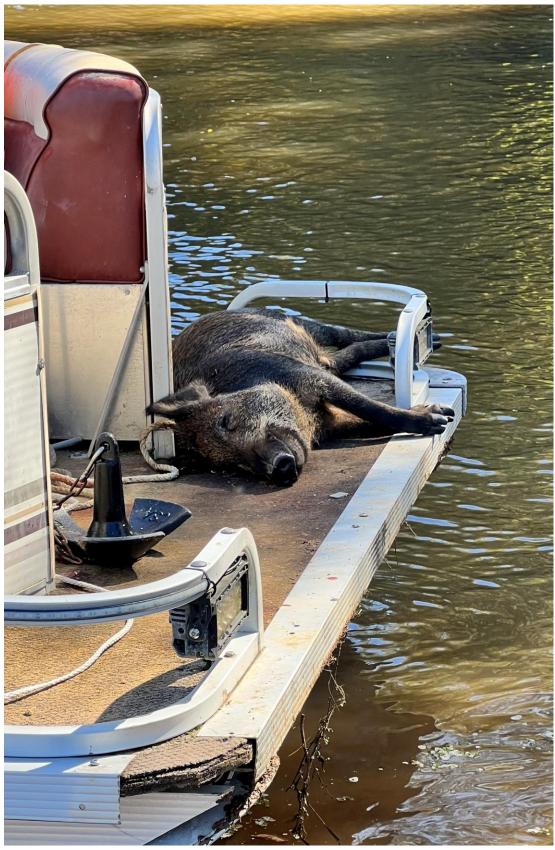
Heading to Wassaw Island and walking boats at low tide





Ebenezer Creek





While having lunch at the confluence of Ebenezer Creek and the Savannah River, two guys showed up in a flat bottom boat. They had just returned from a successful hunt for wild pigs.



Jimmie in awe (above); Jack in joy (below)



### **Contributors**

Mike Hamilton – is an ACA L4 instructor who specializes in Greenland paddling and is one of the main organizers of the Delmarva Paddler's Retreat. Mike lives in Sykesville. MD.

*Kathryn Lapolla* - operates Savannah Coastal EcoTours. She is an ACA L4 instructor and a Georgia Master Naturalist.

Tom Noffsinger - has been involved in water sports his entire life, beginning with canoeing, surfing and windsurfing, before discovering sea kayaking. He is an ACA Advanced Open Water Instructor (L-5) and has been teaching for nearly 20 years, with an emphasis on surf zones and rough water paddling. Tom and his wife Amy are currently nomads in their Airstream travel trailer, exploring the US while he works remotely.

Ray Offenbacher – Ray O. grew up kayaking the bayous of Louisiana. Twenty something years of paddling later, he and his kayaks have ventured as far north as Newfoundland and as far south as Key West. Ray is largely self-taught, paddles alone and longs for big conditions. He currently works for the US Coast Guard in New London, CT.

Ian Urbina - Ian Urbina is the director of The Outlaw Ocean Project, a non-profit journalism organization based in Washington D.C. that produces investigative stories about human rights, environment and labor concerns on the two thirds of the planet covered by water. Before founding The Outlaw Ocean Project, Ian spent roughly 17 years as a staff reporter for The New York Times. He has received various journalism awards, including a Pulitzer Prize, two George Polk Awards and an Emmy.

Rick Wiebush – runs Cross Currents Sea Kayaking and is the editor of Coastbusters. Rick has been paddling for 20 years, and is an ACA L3 IT and British Canoeing 4\* Sea Leader. Rick lives in Baltimore.

Coastbusters welcomes submissions of trip reports, incident descriptions and analyses, skills and "how-to" articles, boat and gear reviews, book and video reviews, and sea kayaking-related photographs. We are interested in receiving submissions from all paddlers. It just so happens that some of this month's contributors are instructors. That is not a requirement. Articles should be limited to about 1,000 - 1,500 words and submitted in Word. Photos should be submitted in .jpg format. Please send your submissions to Rick Wiebush at rwiebush@gmail.com.

Coastbusters is a publication of Cross Currents Sea Kayaking