

Coastbusters

The Cross Currents Newsletter for Mid-Atlantic Paddlers

November 2019

Dolphin Galaxies

Ginni Callahan

Sometimes you just need to go. Get outside. Sleep under the stars. Remember what all the computer work is for.

So I did. At about 7:30 in the evening I shut the half-done projects into my laptop, their cries for attention muffled by the closing of the lid. I put the kayak on wheels and loaded the sleeping essentials into an Ikea bag, along with a few granola bars, some nuts, and dried fruit, and headed out the driveway. Locked the gate behind me, and pulled my kayak down the middle of the street, as you do in Loreto.

I love living in Loreto, Baja, a block from the water. The hotter it gets into the summer, the earlier I'm going paddling or running each day. Now I go before sunrise, and even then often drenched in sweat. It's a little fresher after the rain this week, Loreto's first rain in 8 months.



The sun is setting over the mountains now, casting a last red glow on Isla del Carmen 9 nm to the east. My destination. I've become comfortable finding more familiar beaches by ear, bioluminescence and skyline silhouette in the starlight. But this part of the island I travel less often, and only once before have I paddled directly from Loreto to there. I'm not exactly sure which peak to aim for. So I guesstimate a little to the south and know there are several options to my left once I reach the island.

But I've a way to go. I empty the Ikea bag into my kayak, and pack the wheels into the hatch. I push off the beach and become amphibian. A live performer is torturing some chords at the waterfront Hotel Oasis where guests sit at outdoor tables draped in white linen. It's all-you-can-eat clam and oyster night. The sounds and lights of Loreto follow me into the dusk.

Swells are coming from both north and south, almost opposite each other, making for a syncopated rising and falling as I paddle less by sight and more by feel. A light headwind keeps me cool.

Isla del Carmen turns blue, then black. I notice a shadow moving back and forth on the deck of my kayak. A crescent moon hangs over my shoulder, bright enough to cast a shadow. A couple of planets keep it company. Stars come out, lighthouses blink in the distance. The Southern Cross slowly cartwheels back below the horizon.

I hear the splashes of fish on occasion, but these are bigger, and more persistent, and coming from all

around, almost like the churning water of a tide race. I stop paddling to listen. The staccato exhalations of dolphins accompany the splashes. I see one dark crescent break the water beside my kayak. They are behind, in front, and many to the right. I alternate between paddling and listening. Between excitement and gratitude, my smile another beaming crescent in the night. How can the presence of other beings bring such a flood of joy?

Big splash to the rear. I turn to see another leaping high in the moonlight. “Whoo-hoo! You are beautiful!” I declare.



Big Pod. Photo: Ginni Callahan

I wonder how they know exactly where the surface of the water is to take a breath in the dark on a wavy night. I wonder what they see of stars. I wonder if they can see anything through the thick brilliance of the bioluminescence streaming past their faces. My paddle sends galaxies spinning out beside my wake. I wonder what the dolphins know of galaxies.

I'm about halfway, a little over an hour into the crossing. Isla Danzante's distant blink and the silhouetted cone of Isla Coronados are on either shoulder. My path is crossing the line between them.

I will hear the dolphins off and on for the rest of the journey, until I also hear waves breaking on the rocks of Carmen.

There I am alone. I feel alone. There is a tall rocky point in front of me. Not a good place to sleep. It's 10:30pm. I know there are reefs along this side of the island, so I keep a cautious distance from the point as I head north, listening.

I have a headlamp hanging ready but turned off around my neck. It's not strong enough to cut the humid air all the way to the shore. I have a GPS in my day hatch, with a familiar beach already programmed. It felt like the responsible thing to do before I left. But I don't need it.

The waves change tone. The air smells slightly earthier. I head closer. This beach will do. I pull up the kayak, float myself for a bit in the sparkling water, then make my bed as the moon sets behind the mountains. The mountains are invisible, another darkness in the darkness. The moon disappears tail first into the darkness without touching the lit horizon of Loreto.

I lie down beside my kayak and look at the clouds of light swirling half-mixed with the darkness as the Milky Way rolls off Scorpius' tail just above the peaks of Carmen. I look until my eyes can't look any more, and then I dream to the sounds of water.



Carmen sunset. Photo: Ginni Callahan

Joint Sea Kayaker – Coast Guard Training

Paula Hubbard

On a recent mid-October weekend, a training session took place that involved a group of eight kayakers and the U.S Coast Guard based at station Wachapreague on the Virginia Eastern Shore. This is one of the smallest USCG stations and they are responsible for a relatively remote area along the Virginia barrier islands. The joint training session was inspired by a similar session several of us were involved in with the Coast Guard in Charleston SC two years ago.

The October session was the result of a joint planning effort between the Coasties and Cross Currents Sea Kayaking that stretched over several months. The basic idea behind the training was for the kayakers to understand more about how the Coast Guard works, especially in terms of search and rescue, and for the Coast Guard to get practical experience in dealing with sea kayakers.

Understanding communication, equipment and protocols

The first day was classroom followed by a tour of the two Coast Guard vessels at the station. The extremely high tide that morning had flooded the main street in Wachapreague, so we couldn't get to the actual Coast Guard station. Instead, the guys (yes, they were all guys) invited us to use the dining room in their living quarters a block away. They introduced themselves and shared their expectations regarding the training and the limits placed on the training by their superiors (e.g., no kayakers in simulated rescue situations; no helicopter involvement). Our first impression was the degree of professionalism demonstrated by these young men.

We launched right into a discussion of communication and the SAR (Search and Rescue) checklist that they would use in an emergency situation. Highlights for paddlers: 1) communications are fragile; and 2) being able to give your location is critical.

For VHF communication, we reviewed the basic procedures including using Channel 16, the universal hailing channel and thinking "Hey You... It's Me". Repeat who you are calling three times (e.g., "all stations, all stations, all stations"), followed by who you

are three times (e.g., "this is kayaker 8, kayaker 8, kayaker 8"). In a life-threatening emergency, you would precede this with "Mayday, Mayday, Mayday". This alerts anyone in the area that this is an emergency. Then: 1) say who you are; 2) give your location, 3) describe your vessel(s), and 4) state the nature of the emergency. If you do not get a response, keep repeating the call. Sometimes they can hear us even though we can't receive them. VHF radio is essentially viable for line of sight. But the coastguard towers are higher and can provide better reception.

Once communication is established, the Coast Guard will give you instructions to switch to a working channel and walk through the items on the SAR checklist to get more complete information. They stressed not trying to speak in nautical terms or with what you believe is proper radio jargon if you are not familiar with them. Just communicate in your own terms as simply and completely as you can. Because radio communication can be dicey, they want to get their SAR checklist information as soon as possible in case communication is lost.

In This Issue

Dolphin Galaxies – Ginni Callahan	1
Coast Guard Training – Paula Hubbard	3
Sandy Hook to Coney Is. – Melinda Schlehein ...	7
Photos of the Month	10
Low Country Gathering – K. Lapolla, J. Ryan	13
Risk Assessment – Rick Wiebush.....	17
Upcoming Events	21
Contributors	22

A viable alternative to VHF radios is cell phone communication. It was interesting to learn that cell phone communication may work better than VHF Radio in certain locations. It's a good idea to program into your phone the local coast guard station numbers for areas where you frequently paddle. There is also a Coast Guard App that can be installed on your cell phone. <https://uscgboating.org/mobile/>

The Equipment

The rescue basket: this litter is designed for victims who are in the water. It sits in the water vertically with weights at the bottom of the litter and flotation at the top that keeps the victims head above water. They demonstrated how the victim would be strapped in for transport to an emergency facility. The original plan was to have the Coast Guard actually "rescue" some of the kayakers using this litter in the water, but that got shot down by the brass.



The Vertical Stokes Litter. Photo: Paula Hubbard

We had a chance to tour the two vessels stationed at Wachapreague. One is a 24' open response boat with a relatively shallow draft. This vessel can get into some of the creeks and marsh areas where kayakers may be. It is really important for the area they work in because the bays between the mainland and the barrier islands on the Eastern Shore are so shallow at low tide.



The 45' RB. Photo: Paula Hubbard

The other is a 1650 hp 45' response boat that has a water tight cabin with pressurized window seals. This boat is self-righting. If it should capsize in heavy seas, it automatically rolls back upright. (Some of *us* want boats like that!)

On Water Exercises

The second day of the joint training involved on-water activities. The plan was to paddle out into the Wachapreague channel, select a location that was suitable for the 45', then make a simulated distress call. For training purposes, we were instructed to use Channel 22A on the VHF radio, and preceded each call with "This is a drill, this is a drill, this is a drill".

One member of our group made the call. On the Coast Guard side, they had a trainee work through the SAR check list. This was an opportunity for them to receive a call from real kayakers. We worked through the protocol: hailed them, said who we were, gave our approximate location, the number of people involved, and the nature of the emergency. We waited for the response. Nothing. We repeated the information a second time and then they acknowledged. (When communicating with the Coast Guard, we should acknowledge all communication by repeating what they asked us to do to indicate that we understand.)

While waiting for the 45' vessel to spot us and approach, we formed an eight-person raft, and almost immediately drifted into the head-high marsh grass. To counter the wind and current, we set up a tow for the raft so we could stay in deep water. When the 45' came into sight, we radioed that we had them in sight, and our relative position. We also informed them that we had tow lines

in use. This is important information since lines in the water can be a hazard to both the Coast Guard response boats and kayakers.

We all learned the benefits of rafting up from this exercise. Although it was a clear day, the Coasties were somewhat surprised that they could see our raft so easily. In their experience, individual kayaks, or a group of scattered kayakers are much less visible. Interestingly, the raft also appeared on radar, where individual kayakers would be difficult to distinguish from noise.

Rescuing “Oskar”

The next training exercise was with “Oskar”. Oscar has the misfortune of being tossed overboard repeatedly for man-overboard drills. He is a 50 lb. training dummy with arms and legs that is designed for simulating rescues of people in the water. (For more life-like simulations, an Oscar can be filled with water and will replicate a 180 lb. person.)

We first observed each response boat recovering Oscar, then it was our turn. We retrieved Oscar from the water, got him on our decks, and then maneuvered to the response boat. We worked in groups of three or four so everyone would have a chance to help rescue Oscar. We tried several methods of getting Oscar to the Coast Guard boat so that our “victim” could be transferred. Towing a two-person raft was probably the most efficient and fastest, but has the disadvantage of having towlines in the water. If not handled properly, they have the potential to foul the boat’s propellers. Contact tows worked, but could be awkward with Oscar on your deck. However, they might be the only practical way to maneuver if there are only two rescuers.

Once at the rescue boat, transferring Oscar to the vessel had its own challenges. The 45’ RB has a stern swim platform that is a foot or so above the water and the transfer was fairly smooth. Getting him over the sides of the 24’ boat was more difficult. Moreover, the shape of the 24’ RB was challenging since it was possible for the kayakers to be pushed under the hull, especially in rough water.



Transferring Oscar. Photo: Rick Wiebush

Testing Signaling Devices

After we saved Oscar several times we started heading back to the station and tried some different signaling devices. It was interesting that they had a hard time seeing a reflection off a mirror, but clearly saw several other things on our boats that were more reflective. Although laser flares are designed for use at night, we wanted to test one to see whether it might work during the day. The crew of the 24 ft. boat reported that it could be seen, but it was faint and the boat was only 40 yards away from the person using the laser flare. The most effective signaling device – at least among the ones we tested - seemed to be a loud whistle. Even in moderately windy conditions, they heard and could get a direction from the whistle.

Unfortunately, we were not allowed to test one of the best daytime signaling devices: orange smoke. We had a canister ready to go, but the higher-ups had squashed the idea of actually setting it off.



Retrieving Oscar. Photo: Rick Wiebush

Takeaways

The joint exercises helped establish that kayakers don't need to be passive participants. They can be active participants in the rescue of their paddling partners or themselves. Communication regarding location and intended actions is critical.

The Coast Guardsmen were very impressed at our ability to cover distance quickly and maneuver precisely in 17 and 18 ft. sea kayaks. They also understood that our group of well-trained people was not typical of most

kayakers that paddle in their area, and certainly not typical of a group that might require rescue. We were equally impressed by their interest and willingness to learn about sea kayakers, the energy and clarity with which they described their equipment and procedures, and their dedication to their jobs.

This training gave us all insight into SAR operations, Coast Guard vessels and protocols, the effectiveness of various signaling devices in day time and, most importantly, how to communicate with the Coast Guard. Here are some of the key takeaways, as reported by the sea kayaking participants:

“It is most important to convey the information in a format that can be understood rather than trying to remember the nautical/Coast Guard terms.”

“Staying aware of your location at all times so that you can call it in if necessary”

“What was most valuable was the discussion between our two groups so it really did feel like a joint exercise with each group learning from each other. In a previous Coast Guard training in Charleston (which was very cool), they arrived and did their part but there was no give and take. it wasn't the same as talking back and forth to identify and solve problems.”

“We had an opportunity to interact directly with the Coast Guardsmen, have discussions, and share what each group does on the water.”

“What is really important is to remember that these people are smart, professional, and care about what they do. They are good at communicating with the non-military and non-nautical public, very approachable, listen carefully, and give clear instructions. Don't be embarrassed to communicate with them.”

“The Coast Guard personnel are truly committed to saving lives, whatever it takes. It was clear that they embrace this as their mission. It's not just a job.”

Padding in a Perilous Paradise: Sandy Hook to Coney Island

Melinda Schlehlein

The trip from Sandy Hook to Coney Island, as the sages of our paddling club warned me, is the most infamous: the distance is too much for the endurance level of the average paddler; the swells lining the channels are too long to avert and too risky to negotiate without a bombproof roll; the channels are cluttered with too many vessels that deny the existence of kayaks; the landing beach is too crowded and too troubled with a derelict element in the summer; the regulations are too strict to allow anyone either to land or to launch on Coney Island, thus threatening any would-be paddling visitor to be at the mercy of the NYC parks patrol and a hostage never to return to NJ.

But since Bob Molloy, who was my inductor into the Jersey Shore Sea Kayak Association, and who ran this trip successfully several years ago, promised a water adventure like no other, with Nathan's hotdogs as the half-way reward, I dreamed of making the approximately 8.5- statute mile crossing and returning in kayaker's glory.

Fast-forward to Sunday, September 22, 2019. I recently had been able to be the obstinate instigator and convince great people to help plan and re-execute this mission impossible. I thank Larry Meisner for allowing me to tap into his navigational genius; Ted Gormley for his detailed insights about the beach at Coney Island and the connection he helped me make with Derek Osborne of the Sebago Canoe Club; and Marshall Seddon, Tom, (Marshall's friend and co-participant in Operation Deep Blue), and Lynne Basileo, for agreeing to join me: you came expertly prepared.

We launched from Horseshoe Cove in Sandy Hook Park at 9:30am, just past slack at the tip so we would not have to fight the northwest flood through Sandy Hook Channel, the first of the three channels

we needed to cross. The day started out with perfect conditions that made me feel as though I was wandering into a 75F degree-cerulean abyss tinged with grey, almost seamless between sea and sky, and hardly a breeze.

We crossed Sandy Hook Channel, then Swash, encountering neither boat traffic nor confused water, before reaching our first transit, Romer Shoal. It has a privately owned lighthouse I have always wanted to see, and which greeted us with a horn blow every several seconds and a couple of fishing boats that had obviously planned to break there, as we did. After playing in gentle surf, we double-checked with fishermen that the tall buildings in the north were indeed on Coney Island.



Romer Shoal Light. Photo: Lynne Basileo

Without need for a compass (visibility was great) or a securite call (still hardly a boat in sight), we used the amusement park's parachute tower on Coney Island as our next transit. Although I had been concerned that the sharp, sudden change in the



Lower New York Bay showing Sandy Hook and Coney Island

depth of the ocean floor between the middle of Ambrose Channel and East Bank would bring steep, confused waves, conditions were so benign that we concentrated only on the tower, then the Ferris wheel. No doubt a key factor that contributed to the ideal sea state we encountered was planning this trip at neap tide, as Larry had suggested, so that the currents would be weaker than usual.

We finally landed on Coney Island around noon. While the beach and surroundings were serene and the passersby curious and friendly, we decided against hot-dog hunting, since we came with plenty of provisions. Further, we had no worries about some petty beach patrol with antisocial impulses interrogating us for kayak permits. Tom, a law enforcement agent, enthusiastically approached the first patrol truck to tell them who he was and that he and Marshall were part of a team training for Operation Deep Blue, a 225-mile paddle fundraiser for fallen police officers. Hence, no need for lying, hiding, or begging for empathy on behalf of lost and desperate NJ paddlers. The patrollers suddenly forgot about “off-season” permits and warmly invited us to stay as long as we liked. Advanced paddling tip to other kayakers: it pays to have the law on your side!

At 1pm, we had to make a critical decision: should we wait a couple of hours for slack and end up fighting the predicted 13kt SW headwinds, or leave immediately and simply fight some current? The choice was easy: we were back on the water by 1:30.

At first the water was lumpy under 6-7kt winds, but by the time we were halfway to Romer Shoal, we were mounting and skirting down hills of waves lightly crested with foam. Too choppy to surf but not aggressive enough to capsize any of us, the 1-2.5ft waves posed conditions that were fatiguing, never threatening. As I began to lose myself in the rhythm of using a forward stroke as the only needed brace, I took for granted that we were starting to



The Return Crossing. Photo: Lynne Basileo

approach Sandy Hook Channel. But the strong ebb had pushed me at least 100 meters starboard of my friends before I realized what my short lapse into oblivion had caused. Marshall saw that I had strayed, too, but he appeared by my side faster than I could reach for my VHF to respond to his call. No harm, and no need for embarrassment with such a good friend and strong paddler. But I learned a lesson: never let fatigue conquer my concentration on the rest of the group.

As we approached Sandy Hook Bay, a couple pods of dolphins made their presence known, boosting our morale as we fought lactic acid-induced aches for the last few miles. While the guys finished slightly earlier, Lynne and I finally reached the launch at 6 PM, exhausted but exhilarated, with my Garmin reading nearly 20 miles - my goal distance for the summer.

As I enjoyed the sunset at the campsite while changing into dry clothes, I began to reflect upon the enormity of our accomplishment. With great advice, very strong paddlers, good teamwork, perfect weather, and a little bit of luck, we made what could've been a paddler's hell into paradise. Hmmmm... next time, I might take my surf ski!

Photos of the Month



Photo: Betsy Carmona

Photos of the Month



Photo: Bill Vonnegut

Photos of the Month



Photo: Rachelle Marie Skrzysinski

The Low Country Gathering

Kathryn Lapolla and Jenn Ryan

Plans A, B, C and D

The motto of this year's Low Country Gathering in Charleston was definitely, "go with the flow and where the wind blows." Looming ominously over our planned long weekend of paddling was the news that Tropical Storm Nestor was quickly approaching the area. On the horizon for Saturday and Sunday was a forecast of 20-30 kt winds (gusting to 40-50), 2 – 4 inches of rain and big surf. It takes skilled instructors and the positive attitudes of intrepid kayakers to love Mother Nature even when she is moody. Her temperament gave the gathering lots of adventure and variety this year, from sunny skies and gently rolling waves, to high winds, down pours, and angry seas.

As our group of 10 gathered Thursday night in Folly Beach, we knew we'd have to adapt, but also wanted to make sure we could get in the really fun stuff with the small window of good weather we'd have on Friday. The group voted unanimously to hit the surfing waves while they were still the size for mere mortals, and to do a night navigation trip in Charleston Harbor while the weather allowed.

Seizing the calm Friday morning, we met at the south end of Folly Beach for several hours of surf play with nice wave variations for different skills. For part of the pre-launch beach talk, Jeff used small mounds of sand and a small foam kayak to do some great wave modeling. That included – and we aren't sure how he pulled this off – actually making his two-inch "sand waves" move across the beach, propelling the toy kayak in front of them! While Jeff and two of our advanced paddlers ventured out into the bigger breakers, Rick served as coach for a group of six who were less experienced in the surf zone. Before actually surfing, we learned to launch through smaller waves, paddle into the beach under control, and to use low braces when we were sideways to the waves. By the time we set out for



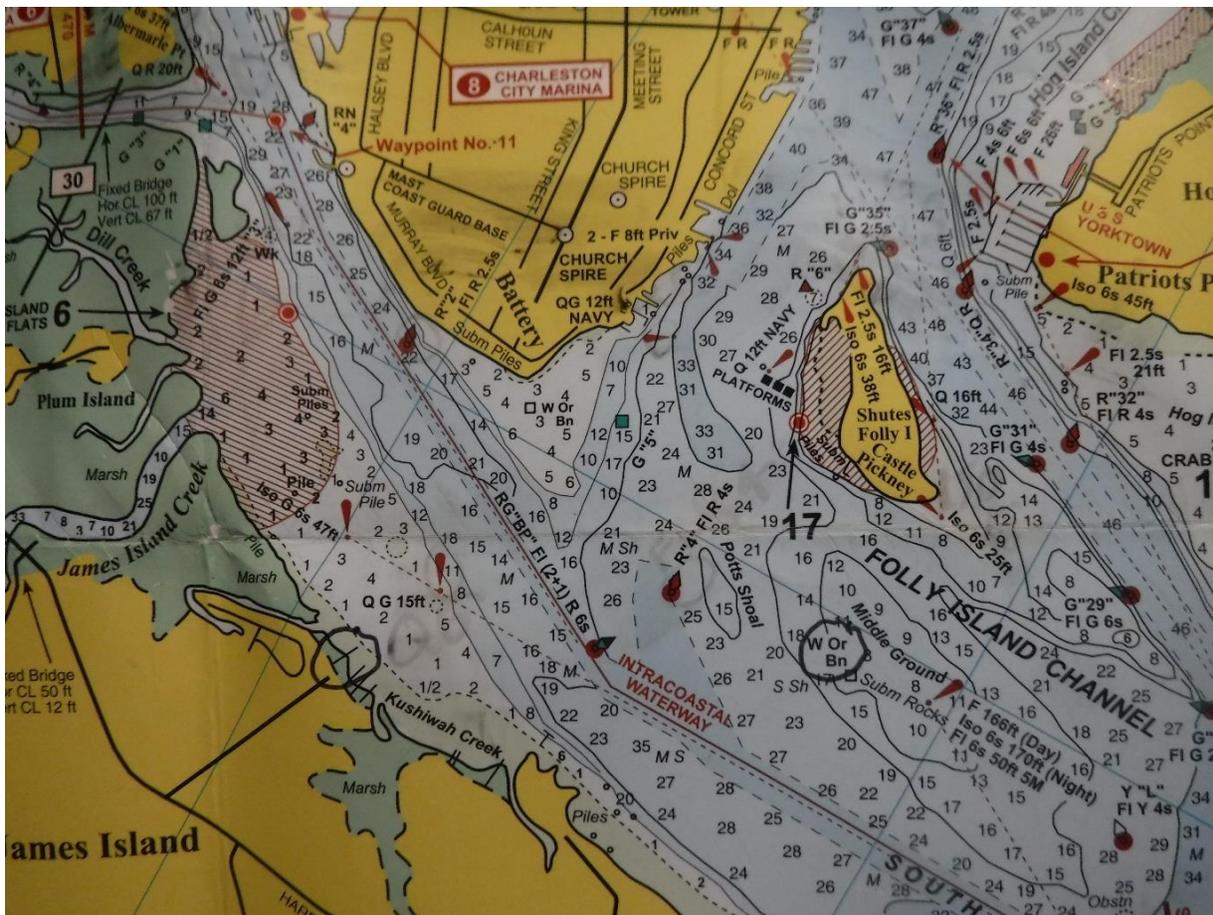
Charleston Harbor, 8 PM. Photo: Rick Wiebush

Hawaii Five O surfing, we were all comfortable on the waves.

The Night Nav Challenge

After a mid-afternoon break, we reconvened just before dusk at Demetre Park with a sweeping view of Charleston Harbor. Here we prepped our navigation skills for a six-mile circumnavigation of the harbor – in the dark. We huddled around navigation charts as Jeff explained the details of the various symbols for aids to navigation. Critically, we reviewed the color and flash patterns of the lights we'd be using as our reference points around the harbor. It is impressive that every light has a different flashing sequence and intervals, so that one can be distinguished from all the others. Clearly that's pretty significant when navigating open water in the dark.

But the real challenge set up for us was to find, two-thirds of the way through the trip, an obscure, *unlit* marker, in the middle of the harbor, using only a compass bearing – in the dark! So our goal was basically to find a needle in a haystack!



Charleston Harbor (hand drawn circle on lower left is put in; circle lower right is the unlit beacon)

Head lamps? Check. Rear deck white lights? Check. Glow sticks? Check. We then plotted our route and determined our bearings, noting the shipping channel and other hazards. And to make sure we didn't get lost, we paid particular attention to the lighted marker closest to our launch site: FL 2+1R 6S 16 ft. 5M "BP" – a red light flashing twice, pausing, then flashing once more, repeating every six seconds, on a structure 16 ft. high and visible for five miles.

Setting off just before sunset, our route was clockwise: first, north from Demetre Park across the South Channel and Ashley River, heading for the small beach at the Battery in Charleston. As the daylight dimmed and the city sparkled, we then set off to the east, across the Cooper River toward the small island of Shutes Folly. The half-mile crossing was highlighted by the stunning Ravenel bridge, its lights contrasting with the darkening sky.

Shutes Folly is an interesting place. It holds the circa 1808 abandoned fortification of [Castle Pinckney](#). Now occupied only by hundreds of brown pelicans, all flushing skyward at our approach, the island is an eerie sentinel at night. Heading south down the east side of the island, we arrived at the rotting remains of the fort's original pier.

Situated at the southern tip of the island, the pier was the start point for our big challenge. We had to: 1) take a bearing from the pier to the unlit "Ripley day beacon" (160 degrees); 2) identify something on the far shore along that same bearing line to serve as a reference point (conveniently, the blue lights of a commercial anchorage); 3) follow the bearing in the dark; 4) do some dead reckoning to estimate distance travelled (about a half mile); and 5) when we thought we were getting close, spread the group out in a horizontal line to make sure we didn't miss the mark.

We didn't. There, looming in the night, and to our great pride, was the white and orange special-purpose beacon (OR W BN) that we had been aiming for! Shouts of success and accomplishment rang through the night air, followed by the group photo against the backdrop of the marker (just to prove we had found it), and the subsequent handrailing along the coast to get back to the put in.



The secret beacon (the apparent light is from the camera flash)
Photo: Kathryn Lapolla

Plan B for a Stormy Saturday: Navigation Jeopardy and Current Play

When it rains, play in puddles. The weather prediction for gale-force winds and heavy rain came true on Saturday. Although we were all anxious to get out to paddle, heavy rain, off-shore winds and an out-going morning tide tested Jeff's knowledge of alternative places to paddle in these conditions, but we came up with a great plan B.

We decided to wait until the afternoon and the incoming tide to take advantage of Elliot's cut, which is both wind-protected and a fun place to play in strong (3-4 kt) flooding current. In the morning, we tested other skills - in a well-protected dining room - by playing navigation jeopardy. Sorted into four teams, we took turns selecting one of four navigation-related categories (aids to navigation; charts; wind, weather, waves; tides and currents) and answered (or not) increasingly difficult questions worth 5, 10, 15 or 20 points. There was much laughter and learning, and ultimately grumbling when, after five rounds and clear evidence that our team had trounced everyone else, MC Rick announced that it was a tie.

And then the tides turned in our favor. So after lunch we headed to the playground that is Elliot's cut, where the incoming tide creates strong current as it gets squeezed in a 80-yard-wide channel. By the time we hit the water, the rain was falling, adding to the beauty of the inlet and fun of learning swift water river skills in a sea kayak.

We ferried back and forth, usually facing forward with our bows pointed downstream, but also sometimes trying it in reverse. We found eddies and did peel outs. We ran the current downstream and broke in, using fast, low-brace turns. But the most fun was practicing 360 spins in our long sea kayaks by sitting right on the eddy line and having the current assist the turns. That was truly amazing. Edging, bracing, and timing were essentials for the day. A number of dolphins graced our visit, seemingly curious at our play. They came so close that once a fast-moving, ferrying paddler only narrowly averted a collision!

The group of hungry kayakers returned to our five-bedroom, four-bath house and a delicious low country boil Jeff prepared for us. It is difficult to say whether the sausage, shrimp, corn or potatoes were the tastiest. After more laughs, excited talk of our adventures, and some good wine, we called it a good night. With more challenging weather on its way, Jeff and Rick began to plan our last day of the low country gathering, knowing that our first two days on the water would be difficult to beat.

Opting for Wind Protection, Sort Of

Winds were still high on Sunday (offshore 15 - 18 kts) and a small group set out with Jeff to take on some big surf on the south end of Folly Beach. “Big” as in: larger sets of 6 – 7 feet! When they got there, they didn’t particularly like what they saw: large sets breaking on the outside with highly confused breaking sets on the inside of the inlet. They stalled for a while, hoping the wind would drop. It didn’t, so they decided to launch and play on the inside breakers before working to the outside. The conditions were challenging, tiresome, and required frequent breaks on the beach.

Lee ventured out to the outside break where the waves were breaking more cleanly, but really powerful when they broke. He continued to work the far outside break and had some amazing rides (and combat rolls). Dirk, Mike, and Jeff worked on rough water conditions with cross breaking waves in the middle of the inlet. Around 2:30 p.m. – after the tide started ebbing – they called it a day because of the potential dangers of an outgoing tide and off-shore wind in those bigger conditions. Even though they only played for about three hours they considered it an exhausting, yet exhilarating day.



Big surf day at Folly. Photo: Dirk Rossouw

Meanwhile, instead of challenging that kind of surf, everyone else in the group chose instead to go for a more relaxed nine-mile jaunt with Rick through the protected beauty of Shem Creek. Admiring great egrets, snowy egrets, great blue herons, and tri-color herons, we wound our way through the narrow salt marsh creek. Heading east toward the source of the creek, we paddled until the creek got too narrow to navigate. We then retraced our route, heading back toward Charleston Harbor, with stomachs grumbling as we passed a number of waterfront restaurants near Patriot’s Point.

Once we hit the exposed harbor the nature of the paddling changed and we played in the strong head wind and incoming tide. This was a great chance to ply our bow rudders and work on stroke efficiency, both by observing others and refining our own. We slogged and grunted our way past Patriots Point, found a sheltered area, and relaxed for a view of the historic U.S.S. Yorktown docked near the Ravenel Bridge. Riding fast with the tail wind on the return, we sailed back to the launch in record time, packed our boats and gear, and exchanged hugs and contact info with new friends before heading home after a grand weekend of wild and wooly weather, new skills, and community.



Ravenel Bridge and USS Yorktowne Photo: Rick Wiebush

Risk Assessment for Sea Kayakers

Rick Wiebush

In my “real job” I spent much of my time helping child welfare agencies develop assessment tools to inform caseworkers’ decisions about how to handle cases involving child abuse and neglect. One of those assessments – typically referred to as a “safety assessment” – was used during the caseworker’s initial home visit to assess whether certain factors might be present in the home that would constitute an immediate threat to the safety of the child(ren).

The safety assessment required the caseworker to consider 10 – 15 family characteristics which, if present, could mean the child was in a dangerous situation. These characteristics included issues such as serious substance abuse; domestic violence; significant mental health issues; hazardous living conditions; and others.

The assessment also included guidance for how the worker should respond if one or more safety threats were present. One potential response was the development of a safety *plan* that would allow the child(ren) to remain in the home. Such plans put short-term interventions in place to control the threatening behaviors or conditions. For example, a physically abusive father might be required to leave the home for a period of time, or a grandmother might be asked to move into the home for a week while an alcoholic mother went through de-tox. However, if the family did not want to cooperate, or the issues were so serious that a safety plan couldn’t control them, the presumptive decision would be to remove the child and place him/her into foster care.

The defining characteristics of these types of assessments are that they: 1) identify a key set of characteristics that have to be considered in every case by every worker; and 2) require the development of a Plan B (and maybe a Plan C) if one or more of the dangerous characteristics were present.

Sea Kayaking Assessments

Similar assessments have been developed for use by sea kayakers. While these vary in their structure and content, and are often referred to as “risk assessments”, they share the characteristics of the safety assessments used in child welfare. That is, they typically list a range of factors that *always* need to be taken into account when planning a trip, specify what is considered “dangerous” and, if a certain threshold of danger is met, either require the development of a “safety plan” (e.g., move to a different location where the winds aren’t blowing offshore) or if a reasonable plan can’t be developed, canceling the trip because the risk is too high (the equivalent of removing the child from the home).

This is the first in a series of articles that will examine some of the risk assessment tools used in sea kayaking. Each article will describe how the assessment is intended to be used, provide some examples of its’ application, and discuss each assessment’s pros and cons.

The Sea Conditions Rating System (SCRS)

This risk assessment was developed by Eric Soares, former leader of the Tsunami Rangers. That group is famous for paddling in very challenging conditions on the west coast and although many of us would call them crazy for doing the things they do, the group is very safety conscious. The SCRS was developed as a way for the Rangers – and all sea kayakers - to take a structured, disciplined approach to assessing the multiple potential threats posed by the sea.

The SCRS assessment assigns points to 10 different factors (e.g. wind, swell, water temperature, distance from shore), then uses the point total to classify the level of danger into one of six categories, much like the river rating system used for white water (i.e. Class I through VI rapids). The higher the SCRS point total and resulting classification, the greater the danger.

Figure 1. The Sea Conditions Rating System

Risk Factor	Scoring Method	Max Points	Your Score
Water Temperature	1 point for each degree less than 72	40	
Wind Speed	1 point for each mph of wind	50	
Wave Height	2 points per vertical wave foot	40	
Swim Distance to Safety	1 point per 100 meters	20	
Breaking Waves	30 pts if waves over 2 ft are breaking	30	
Rock Garden	20 pts if playing near rocks	20	
Sea Cave	20 pts if going into caves	20	
Night	20 pts if is, or will be, night	20	
Dense Fog	20 pts if minimal visibility	20	
Miscellaneous	10 pts or more for other dangers	No max	
Total Score			

Figure 1 shows the 10 SCRS factors and the scoring method for each factor. Note that the risk factors are *weighted*. That is, some of the factors have more potential points assigned to them due to their relative contribution to risk. For example, the presence of either cold water, high winds, or large waves will carry a greater weight in the assessment than factors such as distance from shore or playing in rock gardens.

Once all the items are scored and a point total determined, the SCRS system divides the total points by 20 to arrive at an overall risk classification. The risk

Figure 2. Risk Classification

(Determined by dividing SCRS point total by 20)

Risk Class		
Class	Pt Range	Definition
I	0 – 1.9	Easy to moderate difficulty, danger, and skills required
II	2.0 – 2.9	Intermediate difficulty, danger, and skills required
III	3.0 – 3.9	Advanced difficulty, danger, and skills required (e.g., reliable roll needed)
IV	4.0 – 4.9	Extreme conditions; advanced techniques needed; loss of life possible
V	5.0 – 5.9	Very extreme: life-threatening conditions
VI	6.0 and up	Nearly impossible conditions; team of experts only; death likely if mishap

classification categories are shown in Figure 2. Each risk classification is defined by three things: the level of difficulty, the degree of danger associated with it, and the skill level required to deal with it.

The SCRS also provides guidance in how to score each of the 10 items. A summary version of the scoring guidance for each item is shown in Figure 3.

Figure 3. SCRS Scoring Guidance

Scoring Notes	
Factor	Note
Water Temperature	Measure directly with thermometer if possible
Wind Speed	Use mean high wind speed in mph; if frequent gusts, use gust speed
Wave Height	Use largest wave sets to estimate; use vertical distance from trough to crest
Swim Distance	Assumes lost boat; if no safe place to swim to (e.g. cliffy shore), auto 20 pts
Breaking Waves	Score only if breaking waves are 2 ft or more
Rock Garden	Score if intend to enter rock gardens
Sea Cave	Score if intend to enter sea caves
Night	Score if paddling at night or will be night during some portion of trip
Dense Fog	Score if minimal visibility
Miscellaneous	Add 10 points for each unusual circumstance such as strong rip tides or currents, heavy boat traffic, etc.

Examples

This section uses a few examples to illustrate how the SCRS can be applied.

1. A Downwinder on the Chesapeake

A small group of friends is planning a downwinder on the Chesapeake Bay on a sunny day in mid-April. The plan is to go about 11 miles from North Point at the mouth of the Patapsco River to Sandy Point Park near the Bay Bridge. The wind is from the north at 15 knots with frequent gusts to 20 and the water temperature is 58. NOAA says there will be 2 – 3 ft waves. At the put-in you see that prediction looks about right: the waves appear to be about two feet high. But you know that with the long fetch from the top of the Bay, the waves will be more like three feet when you get farther down the Bay. You also see that the bay is filled with whitecaps as the waves start breaking. You decide to use SCRS to assess the conditions. Here's what you come up with:

1. Water temp: 14 pts (72 degrees – 58 degrees)
2. Wind speed: 20 pts (1 pt per mph; we used 20 mph due to frequency of gusts)
3. Wave height: 6 pts (3 ft waves x 2pts per foot of wave height)
4. Swim distance: 8 pts (you expect to be ½ mile off shore or 800 meters; 1 pt per 100 meters)
5. Breaking waves: 30 pts (3 ft breaking waves)
6. Rocks: 0 pts
7. Caves: 0 pts
8. Night: 0 pts
9. Fog: 0 pts
10. Misc: 10 pts (there is a lot of boat traffic, including tankers, at the mouth of the Patapsco)

Total Points: 88

Risk Classification: 88 divided by 20 = 4.4 or, "Extreme Conditions; advanced techniques needed"

Decision: Although this is a sobering assessment, everyone in the group has solid level 4 skills and the group decides to go for it.



Cold water, breaking waves and rocks. Photo: Bill Vonnegut

2. A Surf Day in Charleston

The plan for this Sunday was to spend the day surfing off Folly Beach with a group of nine people. Three of those people had extensive experience in surf and were L4 paddlers. However, the others were roughly L2/L3 paddlers with not much experience in surf. Folly can usually accommodate two groups like this, since the less-experienced people can surf the smaller breaks closer to shore.

There was one problem. A tropical storm had recently developed in the Atlantic and was expected to produce 15 – 20 knot winds with gusts to 25, and four to six-foot waves on that Sunday. These conditions were confirmed early Sunday morning by one of the group leaders. Moreover, the winds were offshore. Those factors were enough to call off the surfing for the less-experienced group and take them to a more sheltered creek. But what about the three people who wanted to surf? The leader used the SCRS to conduct the risk assessment. Here are the results:

1. Water temp: 0 pts (water was 76 degrees)
2. Wind speed: 18 pts (1 pt per mph; based on a wind speed estimate that morning)
3. Wave height: 12 pts (6 ft waves x 2pts per foot of wave height)
4. Swim distance: 1 pt (surfing would be within 300 feet of shore; 1 pt per 100 meters)
5. Breaking waves: 30 pts (waves 4-6 ft high and breaking)
6. Rocks: 0 pts
7. Caves: 0 pts
8. Night: 0 pts
9. Fog: 0 pts
10. Misc: 20 pts (10 pts due to the offshore winds + 10 pts for dumping waves)

Total Pts: 81

Risk Classification: 81 divided by 20 = 4.1 or, “Extreme Conditions; advanced techniques needed”

Decision: the three L4 paddlers and the group leader surfed that day and had a great, but exhausting time. They stopped early afternoon, due to the combination of strong offshore wind + newly ebbing tide + tiredness.

Note: the score for the group that went to the creek was 15 pts and a risk classification of I. The only factor that got points was a 15 knot wind. The water was 76, there were no waves, they were never more than 50 feet from shore and there was almost no boat traffic.

Pros and Cons of the SCRS Model

The SCRS model makes a major contribution to safety assessment for sea kayakers. The included factors reflect almost all the conditions that potentially pose threats to paddlers, and which therefore should be routinely assessed when making paddling decisions. In addition, the “miscellaneous” factor allows for consideration of any additional environmental issues that may not have been taken into account via the other nine factors (e.g., offshore winds; rip currents).

A significant benefit of the assessment is that incorporating the threats into a structured tool ensures that decision makers routinely consider each factor, and that the cumulative impact of multiple factors is taken into account. The latter is especially important in more dynamic environments. There, strong winds by themselves may not present a significant threat, but those winds in combination with breaking waves, cold water, and rocks may up the ante substantially.



Rocks and big braking waves. Photo: Jen Kleck

The fact that the model incorporates scoring guidance is also important. The “item definitions” help ensure that the assessment tool is less subjective and therefore can be completed in a reliable way. That is, similar results would be attained by different people conducting the

assessment in the same location. (Note that Figure 3 shows summary statements. The original article has more extensive guidance and definitions.)

Finally, the model seems to work well when applied to various scenarios. It obviously worked for the Tsunami Rangers, who do very challenging things in an extremely dynamic environment. It also worked well for the three people who wanted to surf in the Charleston example above. What is interesting about that scenario is that the score (4.1) was a “borderline score” – just on the edge of Levels III and IV - and that borderline quality reflects the hesitation and concerns the group leaders felt in making the go/no go decision. In addition, although not shown above, I ran another very typical scenario involving L3 paddlers in three-foot surf, with 68-degree water, and a strong longshore current. That result – a score of 2.9 – fell into the appropriate Level II (intermediate) category.

There are some shortcomings to the model. One issue is that the model’s classification levels do not define or specify the types of skills that should be required at each level. The only specific skill is mentioned in relation to Class III conditions, where it says “reliable roll needed”. Otherwise, use of the

terms such as “moderate skills”, “intermediate skills” or “advanced techniques” aren’t very helpful when trying to determine what skills, ability, and knowledge paddlers at each level would need to operate safely at that risk level.

A second issue concerns the utility of the model for the wide range of skill levels found in the sea kayaking community. While it seems to work well for paddlers in bigger conditions, it may be unnecessary for the vast majority of “intermediate”-type paddlers. For example, there was no need to complete the SCRS for the L2/L3 paddlers in the Charleston example. Since they had minimal experience in surf, the only information needed by the leaders is that there were 4 - 6 foot waves and an 18 knot offshore wind. End of discussion.

Similarly, there is a huge number of paddlers who belong to meet-up or club groups and who are primarily interested in paddling in pleasant conditions with friendly people. For these folks, the presence of 15 knot winds, or 1.5-foot waves, or for that matter, rain, is the only bit of information they need to know to make the “no go” decision. Using the SCRS would be irrelevant.

Upcoming Events

Dates	Event	Location	Sponsor	Website/Contact
11/1 - 3	Autumn Gales	Stonington, CT	Kayakwaveology	galesstormgathering.com
11/9 - 17	Pacific Baja Rocks and Ledges	Ensenada, Baja MX	Jen Kleck, Cross Currents	Crosscurrentsseakayaking.com
11/16 - 21	Matanzas Rough Water Training	St. Augustine Beach	Dale Williams	Wavepaddler.com
2/8 -15	SW Florida Trip	Ft. Myers	Cross Currents	Crosscurrentsseakayaking.com
2/15 - 17	Matanzas Rough Water Training	St. Augustine Beach	Dale Williams	Wavepaddler.com
2/15 - 22	Jacksonville Journeys	Jacksonville, FL	Cross Currents	Crosscurrentsseakayaking.com
2/21 -23	Sweetwater Symposium	St. Petersburg, FL	Sweetwater Kayak	Sweetwaterkayak.com
3/28	Paddling Film Festival	Baltimore, UMBC	Cross Currents	Crosscurrentsseakayaking.com
4/18 - 25	Greece Trip	Poros, Greece	Cross Currents	Crosscurrentsseakayaking.com

Contributors

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Coastbusters welcomes submissions of trip reports, incident descriptions and analyses, skills and “how-to” articles, boat and gear reviews, book and video reviews, and photographs.

We are interested in receiving submissions from all paddlers. It just so happens that many of this month's contributors are instructors. That is not a requirement.

Articles should be limited to about 750 – 1,000 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