

**Paddling to
unfamiliar areas
on the open coast
or
“Die if you want to
you
misguided martyr.”**

A presentation to
Nanaimo Paddlers
on Newcastle Island
in the summer of 2011
by Glenn Lewis

John Kimantas says in Wild Coast I, "There are generally two types of paddlers - flatwater paddlers who prefer leisurely jaunts in protected water and those who have graduated to open water. Paddlers who make the leap won't look back. The open coast holds the greatest attractions: the best beaches, the best landscapes, the greatest wildlife and the most secluded areas." And I will add, generally the best fishing.

As there are some risks on the open coast and everywhere one paddles, the object of this presentation is to learn to avoid and/or manage the risks so you can as much as possible avoid a stressful experience.

THE ANALYTICAL STRUCTURE

Paddling occurs on a continuum between managing risk and avoiding it.

The risk manager will accept a certain amount of risk and will:

- wear immersion gear, helmet, tow belt, and other related safety equipment
- improve paddling skills through courses, workshops and practices in difficult sea states with a goal to increase his or her risk tolerance

The risk avoider will learn how, when and where not to be on the water when conditions exceed safety and comfort level and will:

- understand weather prediction
- be informed about local wind patterns and current effects
- know all the places where you can get off the water
- be able to calculate how long it will take to get to the next safe place
- avoid dangers like boomers, heavy kelp, etc.

Although laudable, it is not necessary to be a strong or particularly skilled paddler, wear a dry suit, or have a boat load of high tech gear to paddle safely pretty much everywhere on our coast. Indeed, if a paddler thinks depending exclusively on these assets makes them bullet proof they are quite possibly liabilities to the expedition and to themselves rather than assets.

RISK AVOIDANCE

The key is to **determine the paddling conditions in which you are safe and comfortable and then stay within those conditions.** Gear and paddling skills can expand your comfort zone but if you ignore the rule to stay off of the water in conditions outside whatever your zone is, then you are less safe than the less skilled paddler who knows his or her limit and stays within it.

The facts: let's have a look at some numbers to get a feel for what the risk of serious injury or death is.

A 2010 study by Transport Canada and the Canadian Red Cross looking into boating immersion and trauma deaths in Canada for 16 years between 1991 and 2006. Immersion deaths include drowning and hypothermia while in the water.

- Only a couple of people die every year from water related hypothermia and who are not in the water when they die
- Reported that most people drown when their extremities seize up from cold which happens before core temperature drops, therefore before the most serious hypothermia.
- About 200 people per year die in Canada in recreational boating events involving an immersion death. Of those about 1/3 are non-powered boats.
- Kayaking accounts for a little over 4 of these deaths per year. I think this includes both river and ocean kayaking. Canoeing is about 4 or 5 times more likely to get you.
- Of the deaths, 93% of those between 15-74 were males and your chances of dying in a non-powered boat if you were between 15 and 24 were twice as good as for other ages.
- For adults about 1/2 had alcohol as a contributing factor
- About 16 % of those who died in non-power boat immersions had on an appropriate, properly worn flotation device.
- Among unpowered boat deaths, lakes and rivers account for 87% of deaths and the ocean the other 13%.
- Data is not complete apparently, but about 45% of immersion deaths occur in water over 10° C
- Most of the recreational deaths occurred in the May to October time frame
- About 1/3 of deaths occurred during darkness or twilight.

- **Statistics for wind and sea state were not well documented with a majority falling in the unknown category. However for those that were documented about 40% involved rough water and/or difficult wind conditions for non-powered boaters.**
- Most who died were with another adult with only about 25% being alone.

Net. It is fair to assume that of the four or five people who die from kayak related immersion deaths in Canada each year more than 95% are males, not wearing a proper flotation device, likely drinking and probably made a poor decision to be out in cold, fresh, water during difficult conditions and/or in the dark. It didn't matter much whether they were alone or with other adults.

The processes of keeping safe

1. The comfort zone

The first and most important step is to assess your own abilities in a hard nosed way and then commit yourself to staying within the parameters of where you are safe and feel safe. I mention feeling safe as I think that once a paddler goes from feeling safe to not being sure, anxiety sets in and a person's ability to manage their boat and themselves can diminish quite rapidly. It is a poor situation if your ability is going down hill as conditions are getting worse. Probably a factor in most of the deaths.

My comfort zone is to be under 15 knots of wind - more than just a few white caps but not much- and I can generally manage the unrest caused by opposing current and local land effects at that wind level, comfortably.

People new to paddling in open water should generally be more conservative and therefore be **prepared to give up on the schedule** and take whatever time is needed to be safe. This does not need to be a bad thing as most of us paddle to explore territory. I have found that when on the coast there are so many interesting places that most of them get missed in an effort to cover a prescribed amount of territory. If you get beached short of where you want to be, sit back and enjoy and it may turn out to be a bonus. There are usually many places to stop and camp and going from one JK site to the next means you will miss most of them. I think John's books list perhaps a couple of hundred camping spots on the more remote coast and there are probably at least ten times that many decent enough spots. If you can't find something interesting and appealing with the less well known locations, the problem probably lies with you rather than the location.

2. Knowing the territory

In developing weather, there is not much point in knowing how long you have before prudence would see you safely ashore unless you know your choices for landing and, just as importantly, how long it will take you to get to a safe place in the expected conditions (wind, current and land effects; we will get to those shortly).

The way I do it is:

- **get the best scale charts:** mark them with latitudes and longitudes, so that you can figure out where you are at with a GPS if you get lost, and
- **mark the sites:** study the route you hope to follow and the alternatives if conditions mandate a change. It used to be quite hard to mark all of the places where it was likely that a kayak could land (if you can land you can always camp) but things have gotten easier. When I first did the section from Cape Scott to Tofino, field guides were few and the information not very detailed. There was no Google Earth and even some of the charts were poorer detailed than they are now. My charts from those days have a large number of potential landing spots marked that turned out to be rock piles or worse. Its pretty simple now, get JK's books and not only mark the sites he identifies but have a look at them on Google. And while you are looking at Google, note, on the chart if you like, all of the places that look like they have a reasonably protected beach. My experience is that many places that are reasonable for a landing are not easily discernable from a kayak while staying far enough off shore to avoid the kelp and rocks, particularly as conditions start to deteriorate. If you don't have an idea where to look, many options will be missed. While you are looking at beaches on Google note the spots on the beach where there is little or no surf. Example, before we paddled the west coast of Graham Island we picked a spot called Peril Bay for a probably camp site. It is a large fairly open sand beach with surf typical of this sort of site. We noticed on Google that at the south end was a few hundred meters of beach with no surf. It was an area that the chart gave no clue about and we likely never would have gone there but for the pre-trip planning.
- **note areas of concern:** while you are looking at the chart, make a few mental notes about headlands, entrances to inlets and features that might have an effect on sea state or cause local currents. The tide floods up the west coast of the island at 1/2 knot or less but where it is forced to go around a headland, or

enter an inlet, it can run up to maybe 3 knots. If you have three knots of current in your face, it is not useful to know the next place to safely land because you are probably not able to get there. And if you have some wind and/or swell behind you, it is likely to be very rough. A good example is the stretch between Kwakiutl Pt and Lawn Pt. A relatively shallow area over which the water going into Quatsino Sound passes.

- **know where you are:** once you have determined the places to get off of the water, both before you and behind you, it is a relatively easy matter to make sure you keep track of where you are at. I keep a chart on my deck and I like to think I know where I am at to within about 100 meters, all of the time. But I get lost occasionally, and then I use a GPS. If your chart is marked with latitudes and longitudes you can estimate pretty accurately where you are at quite easily. Just by looking at the shore, particularly if visibility is poor due to rain, fog or mist it can be very hard to determine where you are on the chart once you are confused. The shore tends to look the same and it can be deceptive.
- **estimate your time of arrival:** assuming you know where you are at and where you want to go and, more importantly, where the next place to be safe is and how long it is going to take to get there, the next step to try and predict how the wind will change and what effect that might have on the sea state where you are going. In doing your time estimates, guess on the side of caution, there is no harm in getting somewhere before you planned, but if you are delayed or conditions are changing against you, not arriving can mean being out beyond your comfort zone.

3. Understanding the weather

I assume the weather forecast is correct and it usually is. But that doesn't mean that it can be taken literally for the spot where you are at.

- **southerlies:** You will recall from Jan's course that low pressure systems, generally bringing southerly winds, prefer to move eastward at about 20 knots. Sometimes they move faster or slower but there will be some clues in the forecast as to how fast environment Canada thinks a system is going to move. A problem is that the weather reporting areas are large and conditions will vary quite a lot across the area. For example the west coast of VI north goes from somewhere North West of Cape Scott to Tachu Point and maybe 100 nm off shore. Along the coast of the Island this area is maybe 150 miles. The widest spot in the area is probably 200 miles or more. If the front edge of a system (where the wind is starting to increase) is crossing this area it might take 5 or 6 hours for the conditions on the westerly extreme to make to the easterly side. That is long enough to get in a full days mileage even in the face of a report that calls for strong winds. Fortunately, there are weather buoys along the coast. Basically three lines of them. The Nomads are about 200 miles off shore. There are three of them North South and Middle. There is another line of buoys that follows a line roughly 30 miles off shore from Vancouver Island and the Charlottes. La Peruse in the south, to West Dixon in the north with four more in between. There is also an inshore line that starts at West Sea Otter about 30 miles west of Cape Caution and heads up Hecate Strait to Central Dixon. The buoy and automated weather station reports are updated each hour and if you listen shortly after the update the information is almost real time. So if you are expecting wind to rise from the SE and the buoy is 30 miles off shore from where you are at, it will probably start to pick up near where you are at about an hour to an hour and a half after it starts at the buoy. The co-ordinates for the buoys are given on the Marine Weather page and I mark my charts so I can figure out where they are at in relation to where I am at. Timing the weather and predicting wind speeds where you are at, is an art but it is a logical art and if you are a conservative thinker and you get off the water before things become problematic, you will get better at it with time.
- **westerlies:** The other event that is more common than southerly winds with the arrival of a low is the afternoon westerly or north westerly. If the weather is good over the more interior parts of the island in the summer, most days in VI north there will be a gale warning or close to it. And they are probably right, although in most of the area where people paddle the wind will not get over about 15 -20 knots - still too much but not so scary. If you take a look at the chart it is easy to figure out why the discrepancy. Solander Island is just off shore from Cape Cook where the wind speeds up as it goes around the Brooks peninsula. The weather station is about 700 feet off the water on top of this bald rock. Gales are the norm not the exception for this place but unless you are going there don't worry about it. Westerlies are the bane of the summer paddler on the west coast of the island. I simply plan my day to quit when the wind comes up around 11 or so. This means getting up and going early but it also means that you have all afternoon to explore your beach, have a nap, or both.
- **local effects:** Predicting the developing wind and knowing where you can get ashore is a good start but there is a bit more. Wind conditions can vary quite quickly and dramatically due to local topography. Be aware of this. Leaving the south Brooks on a beautiful morning can mean getting to Spring Island at 11 am with the NW wind blowing hard between it and McLean Island and a serious following swell and wind waves. If you are going the other way, timing won't matter as you will be in the lee of the Brooks as the westerly

rises. Except, there will be a couple of places where the wind spills over the top of the Brooks and down some valleys. They are easy to see as you are heading there if you remember to look. Also along the way at Ououkinsh Inlet, there is likely to be a strong afternoon inflow created by this steeply walled relatively deep inlet. Those who have traveled between the Bunsby's and Acous will be familiar with that effect.

- **Currents:** Another factor is that currents are going to cause sea state to deteriorate if they are against the wind and/or swell. Like the wind, the tidal currents tend to increase in speed when they are forced to go around something or are pushed into a constricted area. Look at the chart, think about where current will likely be a factor and then think about what the wind will likely be doing when you get there. Sometimes current can be hard to predict but it generally floods up the coast and ebbs down. In island mazes it can reverse but that is local knowledge.

The key is to be constantly aware that you are in a dynamic system and try to anticipate how that system will change. It is not usually that hard but it is a process that doesn't stop until you are safely on shore. So it is fine to oohing and aahing at the sea lions and whales but don't forget that things can change quickly and you are the one primarily responsible for your safety.

A comment about fog. I usually don't worry about it much as it is usually not windy when it is foggy. I use a GPS and part of the pre-trip planning is to have a few way points loaded for crossings where it is not fairly easy to follow a longitude or latitude. We have used a combination of compass and GPS successfully for managing when the shore is not visible and current is a factor. The idea is to start out with a compass course and then modify it using the GPS as you go along. If you just try to follow a longitude or latitude with a GPS, it tends to make your course something like a minesweeper going from side to side across your bearing line. My experience with electronics is not reassuring. I have had a GPS quit on me once in fog and not work properly another time in rough water. Last year Reale had one with charts on the Moresby trip that packed it in. On that trip we started with 5 VHF's that worked and ended with 2 that worked.

Summary.

The idea is to be on the shore when the sea state is not to your liking by keeping track of the three elements of the land, the sea and the sky...local effect, navigation, tides currents and weather, to do it effectively. In practice the only thing that changes quickly is the weather as it unfolds, so what I do, is sort out the other two before I go and then I just have to worry about trying to predict the wind speed and direction and occasionally the visibility.

What I have been talking about is sometimes called soft skills. Jan's course tries to bring them together and then apply them to a trip around Gabriola Island. They take a while to learn but the reward will be that you will have greater control of what happens to you on a trip. For those who just like to paddle and don't want to spend time learning these skills, my suggestion is to stick to areas where there is somebody to come and get you if things get out of hand.

Communication. VHF radios work pretty much everywhere on the coast except when surrounded by land, and even then the coast guard seems to be able to hear you even if you can't hear them. But if you inform yourself of where help might be coming from in the event of an emergency, you will probably come to the conclusion that your task is to get to shore, no matter what, and then call for help if you need it. On most of the coast help from the coast guard will be several hours away at best.

Life boats are stationed at Tofino, Bella Bella, Sandspit and maybe Port Hardy, Port McNeil, or Hope Island (I'm not sure) but they go 20 knots so you figure it out. During business hours the cormorant will get there quicker, but not much if you go north of Cape Caution. There are also many local volunteer SAR organizations but they tend to cover the less remote areas. For example, Nanaimo has one that is regularly in the news.

A closing thought. When Doug Alderson was up giving a presentation to the club, he referred to a couple of quotes from an old British Seamanship book. Basically, they said that it is important to pay attention to all aspects of your surroundings when things are going well so that when they aren't you will be ready. I agree. Be thinking about what is happening with the weather and looking at the local topography all of the time and try to anticipate what you want to avoid. It doesn't have to be that hard if you make it your habit. And the rewards are like John Kimantas said, the best beaches, the best landscapes, the greatest wild life and the most secluded areas.

Which brings us to the end and the title reference to Jesus Christ Superstar. I have learned that if you don't have much to say, a catchy title is a good idea. In addition, a plan C, after taking care of yourself and hoping for rescue have failed, is a prayer for divine intervention. Better not to end up there if you can help it.