

# HULI

## Be Prepared!

1. Before going out check you boat ensuring it has safety equipment and bailers.
2. Check the local weather conditions, including wind, tides and possibility of fog.
3. Everyone **MUST HAVE** an approved PFD of appropriate size and it is recommended that it be **WORN**.
4. Be aware of **HYPOTHERMIA**. Wear clothing appropriate to the conditions both actual and potential. Take a dry bag with warm hat/jacket for after paddling. Never underestimate the possibility of changes in the weather.
5. Be aware of **HEATSTROKE**. Take a hat, sunglasses, shirt and **WATER** bottle.
6. Carry a dry bag with dry clothing, a towel and a plastic bag. It should be tethered to the seat with a 4-ft flat strap. This enables the bag to be accessed without creating an entanglement problem.
7. If every paddler has a 20 litre dry bag stowed under their seat, in the event of a Huli it will add buoyancy and displaces a large amount of water that would otherwise have to be bailed.
8. Be sure to remain hydrated throughout your paddle. Dehydration, caffeine and alcohol do not mix well with cold water swimming.
9. Regular swimming from the canoe during the warmer months and beyond helps by habituating you gradually to cold water swimming. With habituation your rate of core heat loss is reduced, you are in a familiar environment, your dry bag starts to contain the right stuff, and you learn how to efficiently get dry and get on dry clothing. Containing the wet stuff in a plastic bag within your dry bag. Don't kid yourself get dry! Core temperature drop over time can be subtle and deadly. Who wants a second Huli?
10. **Before leaving the dock review Huli procedure, deciding who will hinge, counterweight, collect/steer in the event of a Huli. Some crews determine who is first in the canoe by strength (strongest bailers go in first), ability to get back in the canoe (as the water is bailed out the canoe rises making it more difficult to get back in), ability to withstand the cold (smaller, thinner people may prefer to get in first as they get cold quickly), etc. Be sure to discuss with your crew any preferences or conditions that determine their position when recovering from a Huli.**

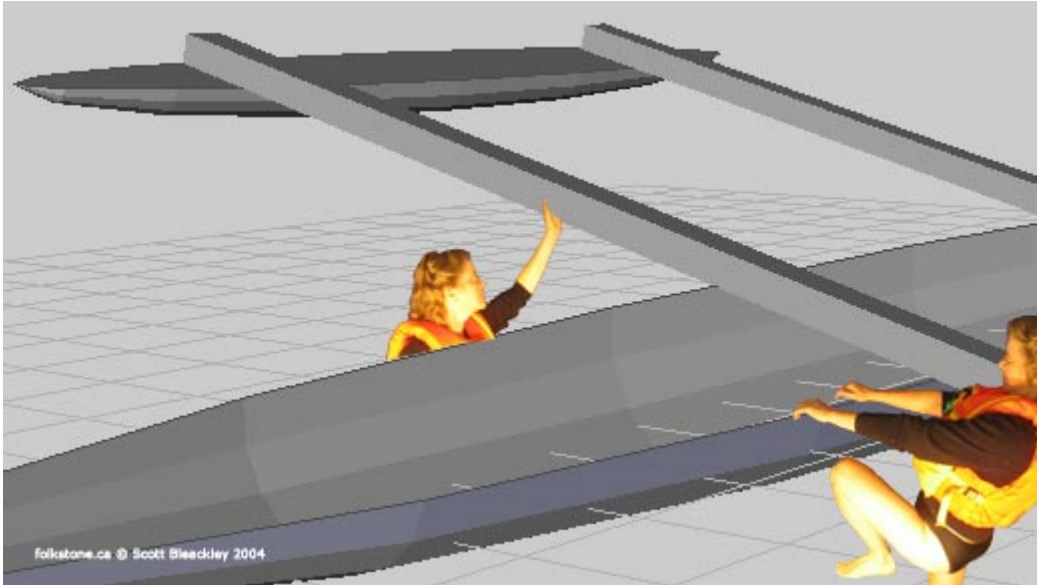
## **HULI PROCEDURE**

One of the most common causes of a Huli is hesitation and paddles out of the water. If you feel the ama lifting make your next two strokes strong ensuring that forward foot is centered in the canoe. A hip check to the ama side of canoe can also drop the ama as can bracing your paddle towards the canoe on the ama side.

We have learned how to right the outrigger without causing stress and damage to the ama. The most important aspect of this process is to lower the ama slowly and gently to the water. The damage to the ama occurs on righting the outrigger after it has rolled.

If the canoe does Huli, don't anticipate it, roll with it. Chances are you will be in the water before you know what happened. Seats 2 and 4 should pay particular attention to keeping their head down and rolling forward as the canoe goes over. Remember the iaku is right behind you and moving forward. Be aware so that it does not hit you as it comes over or as you surface.

1. Buddy count 1&2 3&4 5&6 Check that everyone has surfaced and is OK.
2. Place Paddles under the canoe at your seat. They will stay in the boat.
3. Steer the outrigger into oncoming wind and wave action (perpendicular – nose into the oncoming wind/wave). Usually seats 1&6 swim while pushing the outrigger.
4. Take your time. Don't Panic. Think about what you are doing carefully.  
If you have been swimming on a regular basis your cold water habituation should kick in.
5. Two people hinge. Usually seats 2&5. On the ama side: climb onto the Iaku and over the outrigger while holding onto the Iaku. A wrist-lock with the person acting as Counter-Weight will make this maneuver easier, transferring the hinger's hands to the iaku.
6. Two people Counter-Weight. Usually seats 3&4. Once the hingers are in position draped over the canoe and holding on the iaku the counter-weight people should position themselves near the center of the canoe between the iaku. The counter-weights then reach under the canoe and landmark the opposite side of the canoe. Once you have this, start righting the canoe by having the hingers slide their bodies into the water while holding on to the iako (their body weight will help them to pull the iako up and start rolling over the canoe).
7. As the outrigger starts to roll over and the Iaku becomes vertical, the counter-weight people catch the non-ama edge of the outrigger with both hands with their knees on the side of the canoe (this happens very fast). This edge is low in the water, and rolls up out of the water as the outrigger rights. To slow the fall of the ama, the people holding the non-ama edge lean back, bracing their knees on the side of the outrigger (acting as counter weight to the ama). This causes the rotation to slow only just before the ama hits the water. The ama then can be lowered gently to the water.



8. Once the rotation of the canoe is established the hingers should push up on the ama. The hingers use their flotation in the water to help guide the ama gently to the surface of the water. If done correctly there should be no smack on the water at all. Practice this slowly. With increased skill it can be done very quickly. Better to have an ama that floats than one that is cracked and takes on water.

11. The hingers will end up on the ama side of the canoe, and will get in the canoe one at a time. The first person starts bailing with the large bailer, with the second person entering once 3 to 5 buckets have been bailed. **Water is bailed on the ama side of the canoe to prevent another Huli.** The second person starts bailing the canoe.

12. The counter-weight people will be on the non-ama side. **All entry is on the ama side, so they must swim around the canoe.** The counter-weight people enter the canoe one at a time as the water level in the canoe allows (If too many people enter the canoe when it is full of water they can sink it, making it impossible to bail out.) [If the water conditions allow it, the hingers can hold the ama down while the counter-weight people get out of the water and into the canoe from the non-ama side. This can only happen if the ama is being held down by the hingers. This cooperative entry reduces the requirement to swim around the canoe in cold water.]

13. In rough weather two people should continue steering the nose of the canoe into the oncoming wind and wave to prevent the waves from refilling the canoe. They will be the last to enter the canoe.

14. **Bail the outrigger. Adding counter weight people and steer/collection people to the bailing crew as floatation and water conditions allow. Bail the water only to the ama side to avoid another Huli. Bailing from outside of the canoe will result in bruising.**

15. Once the canoe is dry and out of rough water. Take off wet clothing and replace it with dry clothing from your dry bag so that reheating goes to you and not drying your cloths. If no dry clothing is available fleece can be wrung out to reduce its water content and increase its warmth.

16. Use the plastic bag that you carry in your dry bag to contain your wet gear in your dry bag.

17. Paddle On. Good paddling technique after a Huli is important. Using big muscles generates the heat necessary to rewarm the core of your body. Placing your forward foot (paddle side foot) in the very centre of the canoe, push the canoe forward with your foot. It starts with your foot and travels up using your leg, hips and abs before the upper body and finally the paddle in the water provides the bracing necessary to complete pushing the canoe forward. An imaginary string from your hip to the blade of your paddle pulls your hip forward on the paddle's recovery so that you can again push the canoe forward with your foot. Use big muscles to keep warm. Feel the rest of the canoe as you do this. Remember when you first learned to pump a swing; the only difference is now you have six people are on the swing, or in this case in the canoe.

18. Be aware that cognition changes with cold water immersion. Memory and sequential processing functions differently. These changes are an evolutionary adaptation/habituation that we don't often exercise. Becoming comfortable with these changes over time reduces panic in the event of an accidental Huli.

19. Hypothermia is not an option. A well practiced recovery will minimize time in the water and in wet clothing. After a Huli do several verbal checks, over fifteen or twenty minutes, up and down to canoe to ensure that everybody is dry and re-warming. Remember that your body was warmed up and working when you hit the water. Use that to your advantage to re-warm.

### **File a Huli Report with the Safety Director**

Provide the details of the Huli:

- crew members
- weather and water conditions
- what happened, where
- what you did
- any problems, etc.

Your report is essential to the ongoing safety of the Club. Problems with rigging, boat condition, equipment, etc. can be fixed – preventing another crew from experiencing a huli. Weather conditions, wave conditions, location, time of day, boat used, crew experience, water hazards, etc. enables the Club to develop appropriate safety procedures, keeping everyone safe and making paddling fun. *Sharing your experience can help prevent future huli's by allowing others to learn from your experience.*