

GOAL	To develop safe, effective, and efficient paddlers who are competent when venturing into advanced sea conditions.
How	This guidance is structured around preparing you for the Level 5 (L5) Advanced Open Water Skills Assessment
	although an assessment may not be your goal. You may want to lead rough water outings for your paddling
	club, prepare for an expedition, improve your long boat surfing skills, or simply have the most fun possible!

LEARNING ENVIRONMENT This guidance recommends skills you should develop as an advanced sea kayaker, and what meets the standard for these skills for a Level 5 (L5) skills Assessment. Provided are pointers, aspects to consider, and different ways to approach developing as an advanced sea kayaker. Through training and practice, you will find the best solution for your boat, body, and paddle combination. Advanced sea kayaking skills are built on a foundation constructed at preceding levels and time spent paddling in open water. You are preparing to paddle in the surf, rock gardens and sea caves, through tide races, or on an expedition in winds that can be as strong as 25 knots, seas and surf up to 5 feet, and tidal currents above 4 knots. Training to kayak in advanced conditions takes many forms and it is unlikely that you will cover all the material in a single course. It is recommended that you work with a variety of <u>ACA Level 5 Instructors</u> to combine formal training, structured practice, and time in your kayak exploring destinations near and far! If you plan to participate in any ACA course you need to read, and acknowledge, the <u>Essential Eligibility Criteria</u> before attending.

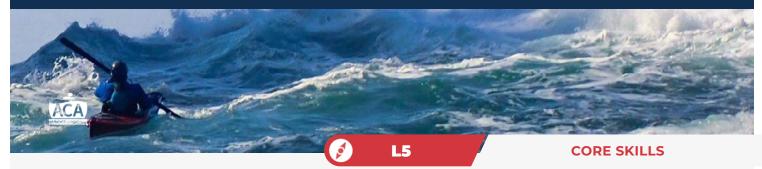
## **CORE SKILLS**

What is at the center of your sea kayaking ability? Your mindset? Your ability to move the kayak around?

Perhaps it's the rescue skills you've practiced or your ability to roll each and every time. Maybe it's your understanding of charts and interpretation of weather systems or the way you look after your teammates during a play session.

The answer: they *all* matter. These skills and attributes form the core of your ability to handle advanced conditions are transferable to wherever you want to paddle. No matter where you launch your sea kayak, these skills will serve you well.

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**BOAT HANDLING** So, you want to be an advanced sea kayaker? Work on using strokes and maneuvers to move purposefully in surf, tide races, wind, waves, and following seas. Each skill is not separate, you blend strokes and link maneuvers to do what's needed at the moment. Support from the blade is natural and reflexive, as the moves you make on waves, eddylines, and in strong winds may require momentary support or roll up spontaneously! Here are some skills to work on while handling your kayak in Level 5 conditions.

#### Make progress and hold your position in wind

and waves. Be able to paddle forward and reverse, accelerate, and hold your position, all while maintaining directional control. Applications might include: initiation strokes to catch a wave, holding position in the surf while timing a set, or making progress through the break or against headwinds.

Maneuver your kayak to reach a target, avoid hazards, maintain or shape a course, hold position, and avoid hazards. Be able to move the kayak laterally (with and without momentum), turn, pivot, and both maintain direction and turn with rudders at various positions alongside your kayak. Applications might include quickly turning 180 degrees to position for a wave, turning upwind and downwind, moving sideways to line up with a slot or reach a boat, or changing direction on the face of a wave.

## Amplify your maneuvers with edge control and blade support. Be able to maintain stability with blade support, recover when stability is lost, and keep your momentum when needing support on the move. Applications might include carving a turn, breaking through an eddy wall, balancing in a foam pile, and incorporating blade support into recovery phases of strokes to maintain edge or lean.

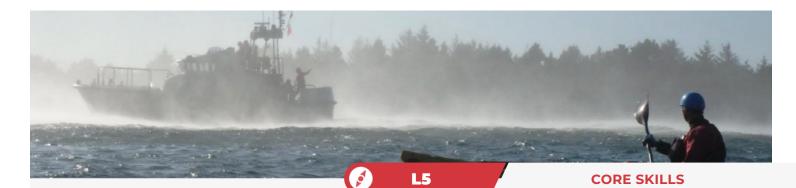
- Pay attention to landmarks to the sides, forward, and aft of your kayak.
  Knowing your current and intended position is key.
- □ The forward and reverse strokes you have been practicing and working to increase their effectiveness matter in L5 conditions.
- Experiment with varying paddle shaft and blade angle, and stroke timing and cadence.
- Efficient and well-timed strokes can drive you to your target.
- □ Yes, you can get there going forward. How about in reverse?
- Momentum is key to many maneuvers. Experiment with varying your boat speed as you make moves.
- □ Face your work and look where you want to go!
- □ Explore placing rudders at different points along the side of your kayak, and on the upwind/wave and downwind/wave sides of your boat.
- Vary your shaft and blade angles to achieve different results. A vertical paddle shaft equals movement but you may need some support in bumpy water.
- How many well-timed, well-chosen, and well-placed strokes do you need to make that move?
- On a wave or crossing an eddyline, more edge means more fun!
- Even a big wave impact can be mitigated by a stout low brace, but high braces can be safe too.
- □ Your blade supports you each time it enters the water.

## BOAT HANDLING cont'd

Roll the kayak from setup and non-setup positions. Be able to roll from both sides of your kayak.

- Rolling in dynamic conditions requires presence and patience.
- Work with the water. Currents and waves will help you become upright when you position yourself properly.

**What's Next?** Doing all of the above while displaying a significant degree of comfort and efficiency is the level of skill expected of Level 5 Instructors. Not a professional? That's okay, it just means you're paddling at a high level in advanced conditions!



**RESCUES & TOWING** A paddler who has honed their rescue skills is an asset to their team. You have been working to develop a quiver full of rescues and towing configurations, now it is time to draw the most effective one when it matters! What is a good choice for someone capsized in the surf versus inside a sea arch? And what happens when you come out of your kayak in dynamic water? Level 5 conditions are complex so maintaining a 360-degree sphere of awareness and calm demeanor are critical! Here are the rescue and towing skills you should be working on to be an asset to other paddlers in Level 5 conditions.

Know the rescue priorities and apply them appropriately: Know the priorities and sequence of rescuing a swimmer.

Help an able swimmer re-enter their kayak with a Side-by-Side, Scoop, Swimmer Carry, or T-Rescue. Be able to perform a rescue that is appropriate for the situation and move the rescue to a position of less risk when necessary.

- The first priority is the paddler, make sure they are "ok" and they are safe.
  Once the paddler is safe, then retrieve their kayak, followed by their gear.
- □ Knowing the sequence of rescue options will increase your safety. Know the mantra "talk, reach, throw, row, go."
- □ You should be familiar with all of these rescues and able to use one of them effectively in L5 conditions.
- □ Keeping the swimmer connected is key.
- □ Stay aware of what's going on around you and decide if you need to move the rescue to a less dynamic area such as an eddy, safe zone, or outside the break.

## **RESCUES & TOWING** cont'd

Put an impaired swimmer back into their kayak with a Scoop, Unresponsive Paddler, or Swimmer Deck Carry Rescue. Be able to perform a rescue that is appropriate for the situation and move the rescue to a position of less risk when necessary.

Get back into your kayak without assistance using a Re-Enter and Roll, Paddle Float, or Scramble Rescue. Be able to re-enter your kayak without the assistance of another paddler and then move to a place you can get sorted out.

Position or reposition a kayak using your towline with an In-Line, Rafted In-Line, or Anchor Tow. Be able to deploy your tow system cleanly, maintain personal safety, release your tow system while capsized and roll up, then quickly stow your tow line.

Move a kayak without your towline using a Contact Tow, Bulldozing, or Toggle Tow. Be able to choose the technique that is appropriate for the situation and move the rescue to a position of less risk.

## Manage your tow system before, during,

and after towing. Be able to deploy your tow system cleanly, maintain personal safety, release your tow system while capsized and roll up, then quickly stow your tow line.

#### Reconnect a paddler separated from their

**kayak. Be able to** connect a swimming paddler to their kayak if they become separated.

- □ You should be familiar with all of these rescues and able to use one of them effectively in L5 conditions.
- Each of these techniques will help you in different situations. Practice them all to be prepared for what comes your way.
- You should be familiar with all of these rescues and able to use one of them effectively in L5 conditions.
- Staying connected to your kayak and gear, and moving intentionally is key.
  Remember, slow is steady, and steady is smooth.
- Stay aware of your surroundings. Move to a less dynamic area such as an eddy, safe zone, or outside the break.
- You should be familiar with all of these towing configurations and able to use one of them effectively in L5 conditions

- You should be familiar with all of these techniques and able to use one of them effectively in L5 conditions
- □ Bring the kayak under control, connect securely, and quickly move away to engage the rope and get clear of the towed kayak(s).
- Deploy a proper amount of line for the conditions. In general, you'll want less rope when towing into the wind and more when you're paddling in following seas.
- Be prepared to release the tow system when it's presenting a high risk to you. Once you're done towing, make sure your rope is stowed quickly, and in a manner, it will release cleanly in the future.
- Move with awareness and a sense of urgency. Kayaks and swimmers are quickly separated in L5 conditions.
- It's generally quicker and easier to connect the kayak to the paddler than the other way around.

## **RESCUES & TOWING** cont'd

Assist a paddler's recovery from capsize by presenting your kayak or paddle. Be able to move your kayak into position and maintain position while the paddler uses your kayak or paddle to right themself.

Help them, help you, when you've come out of your kayak. Be able to maintain contact with your kayak and equipment, flip your kayak right-side up for the rescuer, and await their instructions.

Roll using your spare paddle following a capsize. Be able to connect a swimming paddler to their kayak if they become separated.

Assist a paddler's recovery from capsize by presenting your kayak or paddle. Be able to roll your kayak without the use of your primary paddle. If you are not able to roll with your spare paddle, then you should use your spare to reenter and roll.

- Move with a sense of urgency and an awareness of the paddler's position.
  Waving hands means they are ready for you.
- Approach under control and connect your kayak or paddle shaft with their hand.
- Any part of your kayak, as well as a properly placed paddle shaft, can be used by the paddler to right themself. Once you make contact, stay connected until they're sorted and ready to go.
- Make sure any gear that is on your deck or in your cockpit is secured. When you come out of your kayak you will only have to keep a hold on your kayak and paddle.
- Re-enter your kayak or look for a teammate. When a teammate approaches, flip the kayak upright and help them contact your kayak.
- $\hfill\square$  Work actively to be part of the solution.
- Move with awareness and a sense of urgency. Kayaks and swimmers quickly separate in L4 conditions.
- Connecting the kayak to the paddler is generally quicker and easier than the other way around.

**What's Next?** Level 5 Instructors own more than one technique for rescue and towing situations. Not a professional? That's okay, it just means you're paddling at a high level in advanced conditions!





## **CORE SKILLS**

**AWARENESS & SEAMANSHIP** Paddling on exposed coastlines requires you to have a high level of knowledge and awareness. As you venture into dynamic waters, you'll be presented with choices affecting the safety and wellbeing of yourself and your group. Decisions to be made are less prescriptive and you're determining how much risk is worth the reward. Your skills and knowledge need to keep you safer. Your interpersonal skills need to keep you connected to other paddlers. Your equipment should let you go farther and play harder. Here are the awareness and seamanship concepts you should be developing to be an asset to other paddlers in Level 5 conditions.

Understand how your outing will be affected by the interaction between conditions and land masses. Know how wind, waves, tides, and currents will increase the level of challenge when they interact with the seabed and shoreline. Use your knowledge to choose a venue conducive to the goals for your outing and set the team up for success.

Treat the environment with respect by following LNT and marine wildlife viewing guidelines. You follow best practices as outlined in the Leave No Trace Principles and the NOAA Marine Wildlife Viewing Guidelines.

Know the causes, prevention, recognition, and treatment of health issues created by exposure to cold and exposure to heat. Know how to prevent hypothermia and hyperthermia. When you see signs and symptoms, treat them if you can. Know when and how to call in Emergency Medical Services.

Make decisions based on the capability of the group. Know your limits and the limits of those you are paddling with. Your route choices and trip decisions should keep everyone within their limitations.

- Spend time paddling with those who've spent a lot of hours in the dynamic environment of open water. Conditions will change based on water height, speed of the current, wind direction, wave period and a host of other factors. Let their experience build your knowledge.
- Learn what the surface of the water is doing and how the surface changes as the environmental conditions shift. Note how the wind, waves, tides, currents, and the shore nearby are affected by the changing conditions. How do these change over time?
- □ Familiarize yourself with both of these guidelines, easily found online.
- Be an ambassador for sea kayaking, providing a stellar example and raising awareness with others.
- Familiarize yourself with cold and heat-related health issues common to sea kayaking. Taking a wilderness medical course is a great way to obtain experience with these issues.
- Pack warm and sugary drinks, a quick snack, storm cags and a dry change of clothing to help stave off hypothermia.
- Staying hydrated is key for you and your paddlers. Use sunblock,
  appropriate clothing, sunglasses, and a wide-brimmed hat to keep cool.
  Plan a route that provides for rest breaks in the shade if at all possible.
- You need a solid team to paddle safely in L5 venues and conditions. Know your teammates' strengths and areas needing support. It's only fun if everyone is having fun.
- Leaders need good followers and followers need good leaders. Be a cohesive member of the team no matter the role you play.
- Make decisions that have you returning home happy and healthy. There's more fun to be had on the next trip.

## AWARENESS & SEAMANSHIP cont'd

Have awareness as to your teammates and how everyone is doing. Be able to position yourself in a place that is useful to the group, maintain line-of-site with group members to the extent possible, stay aware of hazards, and communicate effectively.

Keep your kayak in proper working order and know how to use your kit. Your kayak should be suitable for paddling on exposed coastlines, well-maintained, and have proper decklines and rigging. It should be packed in a manner that allows easy access to what you may need while paddling, and trimmed so that it does not negatively affect your performance.

#### Perform repairs so you can paddle back

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#### Carry appropriate signaling devices.

You should carry the signaling devices required by the Coast Guardly. Required means mandatory.

Tie some "go-to" knots. tie a Bowline, Clove Hitch, Figure 8, and Trucker's Hitch.

- □ Be accountable to, and responsible for, each other.
- Learn C.L.A.P. Communication, Line of Site, Awareness, and Positioning (a mountaineering method) applies to groups on the sea.
- Paddling formations and positions of usefulness are dependent on the situation, place, and people. Cohesive means connected and unified.
- □ Your kayak should be in good condition with floatation, lines, fittings, and rigging all in good order.
- □ You should have the proper amount and distribution of equipment in your kayak.
- Placement of equipment allows quick access to gear needed on the water and doesn't hinder your ability to maneuver the kayak.
- □ Small waterproof containers and water bottles make great homemade repair kit housings.
- □ Have what you need to fix your rudder or skeg, replace a blown hatch, make simple structural repairs, and adjust a seat back and foot pedals. Don't forget to have what you need to repair gaskets or other damage to your outerwear
- Small waterproof containers and water bottles make great homemade repair kit and first aid kit housings.
- □ Have what you need to fix your rudder or skeg, replace a blown hatch, make simple structural repairs, and adjust a seat back and foot pedals. Don't forget to have what you need to repair gaskets or other damage to your outerwear. Be able to make simple "people repairs" in your first aid kit.
- □ VHF radio
- □ Whistle
- □ White light
- □ Know how to use these signaling devices properly.
- □ Know how to call and signal another vessel

during the day or night.

- □ Mirror
- □ Flares
- Don't tie a lot because you're clueless about (basic) knots! Written and visual tutorials are available from a wide variety of sources.

What's Next? Level 5 Instructors use their wisdom to teach and develop other advanced sea kayakers. Not a professional? The more you know, the safer you are and the more fun you can have!



## **CORE SKILLS**

**INCIDENT PREVENTION & MANAGEMENT** Does stuff happen? Not if you can help it. You know that staying safe is a mindset, and most issues can be prevented before they become an incident. Your approach to safety starts before you get to the water and continues until you return home. In case of an emergency, you have a quiver of rescue skills, are calm under pressure, and work with your team to solve the problem. Here are the skills needed to keep your plan on track and prepare for when things go wrong.

#### Safely transport and carry your kayak.

**Know** how to properly secure your kayak to a vehicle's roof rack or a trailer. You unload and carry kayaks in a manner that keeps you and others safe.

Participate in planning and debrief sessions. Be engaged in planning your day on the water and active and supportive in wrapping up the day

Launch and land in a safe manner. Be able to launch and land in L5 conditions.

**Communicate with a calm demeanor. Be able to** keep a cool head and communicate in a well-received manner that promotes an efficient rescue.

Work as part of a team to perform rescues. Be actively engaged in the rescue effort, whether taking direction or leading the team.

Use a VHF radio to hail another vessel or the Coast Guard. You should Know how to check the weather and use proper etiquette and language when communicating with a VHF radio.

- You could kill someone with that kayak. Have a properly secured roof rack or trailer, and use good straps or rope with well-tied knots. Always, always, always use bow and stern lines on rooftop kayaks.
- Load and unload your kayak in a way that does not ruin your day, your auto, your body, your friends, or innocent by-standers.
- Participate in planning the day. Contributing members of a group are well familiar with the details of the planned trip and do not rely on a leader for information.
- Debriefing the events that happened during your trip is an important part of growth and development for you and your paddling team.
- Practice launching in less challenging conditions. Make hard moves in easy water and work your way up to comfort in L5 conditions.
- Emphasize safe positioning of your body to the outside of the kayak when near shore.
- How you communicate is important. Does your style of communication facilitate an effective solution to the problem at hand? If so, good. Is everyone still friends at the end of the day? If so, good.
- You may be called to take the lead or support the team. Whatever the case,
  be a part of the solution and work together to get it done.
- You are solution-oriented, and capable, and help move the rescue to an area of less risk when necessary.
- $\hfill\square$  Have access to your VHF radio when on the water.
- Know how to switch channels and use the features (for example, scanning and weather watch) of your radio.
- Know how to contact another vessel or the Coast Guard and when, and how, to make "securite," "pan-pan," and "mayday" calls.



## **CORE SKILLS**

**TRIP PLANNING & NAVIGATION** Plan your paddle and paddle your plan. Paddling along exposed coastlines in L4 conditions is no simple matter. To be successful you must keep all the factors in mind. Here are the trip planning and navigation skills you should be comfortable with when planning an open-water trip.

**Gather and utilize appropriate forecasts. Be able to** gather pertinent weather, surf, and tidal data.

- Know what resources are useful for the location and gather important information, such as wind direction and speed, swell height and period, surf height, high and low water times, max and slack times, rate of tidal flow, and general weather forecast information.
- Have the information at hand remember it or write it down on waterproof paper or your deck.
- **Combine chart work and weather forecast information to plan a trip. Be able to** pull together pertinent weather, surf, and tidal data and factor the information into your trip plan.

**Incorporate wind, waves, and swell into your trip plan. Be able to** use wind, swell, and surf forecasts when planning a trip and then adjust your plan based on actual conditions.

#### Incorporate tidal movement into your trip plan.

You should know how to determine water depth using soundings on a nautical chart and a tide chart/log, how much you will drift when paddling with, against, or across tidal current over a specified amount of time and know how to determine the speed and direction of the current when given a chart and tide stream data. You should be able to apply your calculations to a trip plan that includes a crossing of tidal current that spans at least three hours.

Navigate by chart and compass to paddle a course. Be able to paddle your planned route using a chart and compass.

- Use your chart, local knowledge, and the data you have gathered to build a forecast model of conditions you will likely experience along your route.
- Let the data and your forecast model inform your trip planning choices.
- Understand how wind direction and speed, and swell direction, height, and period will likely affect conditions along your planned route.
- Make good decisions based on your planning and what you are experiencing while on the water.
- Tide apps are cool but also learn how to use rules of thumb (Rule of Twelfths, Rule of Thirds and 50/90 Rule) to be a true master of open water navigation.
- Understand how the depth of the water will change the character of the conditions at various points along your route.
- Combine DED reckoning with tidal calculations to reach intended locations along your paddling route.
- Make good decisions based on your planning and what you are experiencing while on the water.
- You've done all the planning, now transfer the planning to your desktop chart.
- □ Use deck-mounted and handheld compasses to find your way.
- □ Know your location at all times.
- GPS is a fine tool but should only be relied on as a backup to navigating by chart and compass.

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## TRIP PLANNING & NAVIGATION cont'd

#### Know the signs and know the rules.

You should know the system of buoyage, common aids to navigation, Nautical Rules of the Road, and how to paddle safely in boat traffic.

**Be able to navigate in limited visibility conditions. Be able to** navigate in fog and at nighttime and complete at least a 1.5 nautical mile point to point journey.

- Familiarize yourself with the system of buoyage and symbols on your chart.
  If something is unfamiliar, look it up.
- Familiarize yourself with how to paddle in relation to aids to navigation and other boats. The "rule of gross tonnage" and a "defensive paddling" mindset are critical.
- Navigating at night is harder than it seems. Using the red light setting in your headlamp, your watch and even backlighting on your compass is a top tip to keep your eyes adjusted.

What's Next? Level 5 Instructors are expected to be able to teach these skills to paddlers. Not a professional? That's okay, proficiency in the above skills means you're operating at a high level!

L5

## **VENUE SPECIFIC SKILLS**

WHERE ARE YOU PADDLING? It's a big, wonderful, world full of fascinating places to take a sea kayak. When you have a solid core of skills and knowledge, the seas are full of oysters. We learn to kayak for various reasons, and each of us have our own motivations to venture into dynamic waters. For some, the thrill of riding a wave cannot be beat. Some are entranced by the pulse of the tides textured by waves and wind. For others, it's the adventure of loading up our kayak with the gear that would have gone into our backpacks and setting off to get away from it all. No matter your preference, being highly competent in at least two of the following venues makes you an advanced open water sea kayaker Become proficient in at least one of these areas:

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Tide Races	p13
Surf Zone	p15
Rock Gardens and Sea Caves	p17



**EXPEDITION PADDLING** Use your knowledge and experience to plan a journey grappling with the elements - wind, waves, surf, or tide races. Landings are not constantly available, but you choose the ones that set you up for success when it's time to launch on the next day. You understand your approach to the day affects how you feel on the days ahead and you adjust the plan when necessary. Here are the skills and concepts to develop to journey on exposed coastlines comfortably:

#### Gain experience with overnight kayaking

**trips. You should have** prior experience with kayak camping trips. The more trips you have done, the better. The more places you've paddled, the better. The wider variety of conditions you've experienced, the better.

# Plan a multi-day trip along an exposed section of coastline. Be able to pull

together planning resources pertinent to the trip. Consider the breadth of the trip in your plan.

## While not required, keeping a paper log or online journal of your expeditions is a fun way to remember your trips and measure your progress as an expedition sea kayaker.

- How you approach your time in camp is critical to the success of your trip.
  Your camping equipment, food, amount of rest, efficiency of set-up/teardown, and loading of kayaks all affect how you perform on the water.
- □ Times and distances should be within the collective capabilities of the group.
- You are paddling on a coastline that is exposed to the full elements of the sea so you should have "go, no go" decision points and contingency plans.
- The places you choose to land should set you up to successfully launch the next day.

#### Make appropriate decisions during the

**trip. Be able to** make a route plan that is realistic for all members of the group, and you should make decisions that keep the whole group safe.

- □ Choose realistic times, distances, and places to launch and land.
- □ Manage energy levels with pacing, appropriate distances, and adequate provisions.
- Be observant of changes. Changes in the environment, as well as changes in the group members. What are the changes telling you? By making these observations and understanding them, you may need to re-think your plans.
- When you made the trip plan, you should have made a "plan B", and maybe a "plan C", or more. It is better to make such contingency plans before they become necessary.

## **EXPEDITION PADDLING** cont'd

#### Have the right equipment.

You should know the appropriate equipment to take care of yourself on and off the water.

- Having the proper, well-maintained equipment in your "kit" is vital to a safe and successful expedition.
- Knowing how to use that equipment properly and having it accessible when you need it, is just as important as having the equipment.

## Have an evacuation plan. You should

**know** who to contact at various points along your route.

- Know who can help, have their contact information, and a means to make contact. Include this information in your float plan.
- In case of an emergency, know proper call etiquette and assist rescuers in finding your location. Be helpful when they arrive but do not interfere.

#### Perform in L5 conditions with a heavy

**kayak. Be able to** handle your kayak, perform rescues, and tow with a fully laden kayak.

- Before heading out on an expedition, practice paddling in conditions with your kayak fully loaded. Perform all the strokes, maneuvers, rescues, and towing.
  Now is the time to take note of the difference in performance.
- While you are practicing the paddling of your packed kayak, note the trim. Is it different from paddling without your gear? Is it off balance? Now is the time to sort these things out.

**What's Next?** Level 5 Instructors are expected to be able to teach these skills to other kayakers. Not a professional? That is ok, you now know how to prepare to be an open-water expedition paddler.



## L5

## **VENUE SPECIFIC SKILLS**

**TIDE RACES** Watching the videos of kayakers gliding through moving water produces a "wow" factor in many of us. At Level 5, you are the inspiration! You incorporate local knowledge, tidal information, and forecasts to plan fun and challenging sessions. You are in control moving through and playing in the race. When you or a team member come out of your boat (we're all between swims) you know how to handle the situation and can get sorted out again. Here are the skills and concepts to develop your skills in whitewater of the seas:

#### Know features found in tide races.

**Be able to** identify areas of downstream flow, eddies, eddylines, and waves.

## Form a plan for the tide race. Be able to

create a plan for paddling and playing in the tide race.

- Know the factors that form the race you plan to visit. Is it an open water race highly affected by wind and swell against tide? Is it a race found further up an inlet formed by a constriction and ledges?
- How does the race work on the ebb versus the flood, and how does it change as it goes from slack to max flow?
- Be able to identify features and understand how they may change as you move towards max or slack flows
- Consider how the character of the race will change depending on the rate of flow and sea state.
- When is the best time to go? Do you want to arrive at max ebb for immediate fun and then paddle back on the flood? Or should you arrive near slack and warm up while conditions build?
- Make sure the plan is achievable for all members of your team. They may not all be playing on the same feature, but they should all be capable of paddling in and out of the area.

#### Paddle through the tide race.

**Be able to** maintain control when paddling through the tide race and return to the top by eddy hopping or surfing.

- Using breaking into eddies is a good way to control your progress and watch your teammates. Think of running a river and apply those concepts to a bigger environment!
- Use swell to your advantage and surf against the flow. A fun and effective way to move to the top of the race.

#### Break in and out of eddies. Be able

**to** maintain control and stability when performing eddy turns.

- Visualize your line. Where do you want to cross the eddyline, and where should you be to make that happen?
- □ Your angle of approach helps determine how quickly you turn.
- □ How fast is the current moving? How fast should you be moving?

## Ferry glide to an eddy or target. Be able to maintain your angle and reach the target whether paddling forward or in reverse.

## TIDE RACES cont'd

#### Attain to an upstream eddy.

**Be able to** move against the current into an upstream eddy using a wave or swell.

- □ What's your strategy? Use speed and shoot up into the eddy, or surf a wave?
- Visualize your line. Where do you want to cross the eddyline?
- $\hfill\square$  Your angle of approach will determine success on this move.
- □ How fast is the current moving? How fast should you be moving?

Surf and play in the race. Be able to

maintain control paddling down the tide race, using eddies to control your descent.

Perform rescues and towing and move the rescue when necessary

**Be able to** reach the rescue and perform the rescue efficiently.

- Become reflexive in your movements.
- □ Use the features presented to you to paddle down a tide race in control.
- □ In the event of self-rescue, get it done. Now move the rescue into the closest eddy so you do not float out to sea.
- □ Use a progression to develop your rescue and towing skills in tide races and currents.
- □ Practice, practice, practice! Remain comfortable, confident, and in control.
- □ Make rescues happen. Too long of a delay and you may be floating out to sea!

#### Break in and out of eddies. Be able

**to** maintain control and stability when performing eddy turns.

- □ Visualize your line. Where do you want to cross the eddyline, and where should you be to make that happen?
- □ Your angle of approach helps determine how quickly you turn.
- □ How fast is the current moving? How fast should you be moving?
- Complete a journey with a crossing using vector analysis. Be able to complete a journey with a crossing that requires you to calculate multiple headings due to changes in current speed and direction.
- Plan your paddle and paddle your plan. Use skills from the Core: Trip
  Planning and Navigation section to hit landmarks along the way.

**What's Next?** Level 5 Instructors — you should have these tide race skills dialed in and be ready to teach! Not a professional? That's okay, proficiency in the above skills means you're operating at a high level!



## **VENUE SPECIFIC SKILLS**

**SURF ZONE** Surfing a wave is some of the most fun that can be had in a sea kayak! To amplify your fun, you must level up both mentally and physically. You incorporate local knowledge with surf forecasts to plan fun and challenging sessions. You are in control on the paddle out and the paddle in and are shredding waves in between. When you or a team member come out of your boat (we're all between swims) you know how to handle the situation and can get sorted out again.

Know the features of the surf zone. Be able to identify the soup zone, impact zone, the outside, rip currents, and longshore currents.

- Know the type of break you plan to surf and how tide, swell height/period and wind direction/speed will influence the character of the surf at the break.
- □ The "surf zone" contains many features, learn to recognize them and what their effects are on your paddling within them.

Form a plan for your surf session. Be able to create a plan for paddling in the surf zone.

Be familiar with surf etiquette and be polite to other surfers. Know how to behave in the surf zone and ensure the safety of others with your actions.

Have a proper kayak surfing setup. You should have a kayak that is suitable for paddling in L5 surf conditions with proper floatation and rigging. Any items that may be on your deck must be secured.

Launch and paddle through the surf zone. Paddle back to the beach and land in control. Be able to identify a route to the outside and independently paddle through the surf zone. From the outside, you should be able to identify a route and paddle through the surf zone, landing high on the beach.

- $\hfill\square$  Use your knowledge of the surf zone and waves to plan your time surfing.
- Your plan should include how you will communicate on the water, provide support to each other, and avoid collisions with other surfers and beachgoers.
- There are likely to be others surfing the waves with you. Whether a board surfer, a SUP surfer, or a kayak surfer, everyone has the right to be there.
   Respect begets respect.
- If you are new to the area, observe the etiquette displayed by those present.
  Do the board surfers have an area separate from the kayak surfers? Respect the established protocols.

- □ In launching and landing, timing is critical. Do not rush it.
- Take the time to learn patterns. Identify larger sets of waves to avoid on your way outside the break.
- Consider your tactics for the paddle back in. A controlled landing could mean slowing your progress and using the back of the wave, or it could mean surfing a smaller set, so you don't get crunched by a bigger wave.
- How you make contact the beach is critical. Life and limb are important so keep your kayak between you and the beach when landing.

## SURF ZONE cont'd

#### Maintain control when surfing. Be able

to establish and maintain position on a wave, refining or changing direction to extend your ride. You should be able to turn and move diagonally along the line, exiting the wave at an appropriate time or maintaining balance and control if in a side surf.

- Watch the sets, are they closing out quickly or staying foamy? Are they breaking right or left? Staying in control means you have presence of mind on the wave face and make a move to avoid the closeout.
- Where will your route take you? What are the hazards? Sometimes the best choice is to get off the wave before it steepens.
- □ Stay high on the wave, this is where you will have greater success at staying in control.
- You've ended up parallel to the wave. Your ride could have been better but now you have to regain control. Be present, establish your edge, and try to gain forward momentum.
- If your boat is a hazard to other kayakers and beachgoers, capsize. In most situations, you'll fall off the wave face.

Perform rescues and towing and move the rescue when necessary. Be able to reach the rescue and perform the rescue efficiently. If a self-rescue, get it done. You must understand when the risk is higher than the reward and make the right choice.

- □ It is paramount to practice rescues and towing in conditions that build your skills, and your confidence in those skills to the level you desire to paddle in.
- Having the comfort of knowing that you can rescue others and that others can rescue you in the conditions present, increases everyone's confidence of paddling in the conditions present. Everyone will be able to relax and be more effective and efficient when paddling in waves. Everyone is safer and has more fun!

**What's Next?** Level 5 Instructors — you should have these surfing skills dialed in and be ready to teach! Not a professional? That's okay, proficiency in the above skills means you're operating at a high level!



## ) L5

## **VENUE SPECIFIC SKILLS**

**ROCK GARDENS & SEA CAVES** Remaining in control when paddling in rock gardens and sea caves is, in many ways, the ultimate in paddling in unfriendly, yet exciting environments. Doing so requires the ultimate comfort and confidence in a challenging paddling environment. You are in control when paddling through rocks and sea caves and are running the fun features. When you or a team member comes out of your boat (we're all between swims) you know how to handle the situation and can get sorted out again.

#### Know the zones and features of a

Rock Garden Be able to identify safe zones, transition zones, danger zones, and play features.

#### Be appropriately equipped for rock

gardening. You should have a kayak and gear setup that is suitable for paddling rock gardens. Your kayak should be one that you know very well and are comfortable with using in challenging conditions. And one that you have a mastery of skills in.

#### Traverse rock garden zones safely. Be

**able to** choose through the zones of a rock garden and utilize timing, strokes, and features to stay on your intended course.

Run play features. Be able to choose features that have a high level of reward and a low level of risk and run those features in control of your kayak.

- Just as in the preceding venues, there are safe zones, transition zones, danger zones, and playtime zones (features)! Take the time to study the charts or the area to identify potential areas where rock gardens may be located. Identifying these areas on the charts and overlaying them with the effects of the wind, wave, and tidal forecasts, you will develop an idea of what they may look like at a given time. Be sure to look at the water depths and how they may change with the ebb and flood of the tide.
- When available, consult with local knowledge and do a scouting paddle to the area to check things out. Make note of the conditions present, particularly the wind and tidal status at the time of your observations.
- Rock gardening is visually stimulating! Learn what's real versus perceived when it comes to risk.
- Other equipment necessary for rock gardening is appropriate paddles. Again, one that you are familiar with, and has the proper degree of ruggedness to serve you while paddling in the rock garden; and your spare should be just as good as your primary. Wearing a helmet is very important. And, having the proper rescue, towing, first aid, and repair kits are necessary as well.
- From the safe zone, observe the flow through the playtime zone. Note the timing of the water flowing through, and where it "flushes" to. Ask yourself what happens if I capsize? If I lose contact with my kayak, where does it "flush" to? Will I be able to regain contact on my own, or will I need an assist from one of my teammates?
- Begin with the simple features, and gain confidence in your ability, as well as that of your team. Having this confidence will increase your comfort, making you less tense, which enables you to control your kayak better.
- Work your way up to the more difficult features. If not today, perhaps the next time after getting warmed up.
- □ Have fun!!!

## ROCK GARDENS & SEAS CAVES cont'd

Explore sea caves. Be able to decide if a cave is suitable for exploration

- Take into consideration all the features of the cave, as well as the environment. Waves and tides are huge factors to consider. Knowing what you know from your study of the information available (charts, tide tables, weather forecasts, and what the "locals" are telling you) you will need to make a "go/no go" decision.
- Error on the side of caution! The last place you want to be is in a sea cave with a low roof at slack tide plus 2 hours when the tide reaches its peak. Or, when a huge wave comes rolling in.

Perform rescues and towing and move the rescue when necessary. Be able to reach the rescue and perform the rescue efficiently.

- □ If this is a self-rescue, get it done.
- You must understand when the risk exceeds the reward and make the right choice.

**What's Next?** Level 5 Instructors – you should have these rock garden and sea cave exploration skills dialed in and be ready to teach! Not a professional? That's okay, proficiency in the above skills means you're operating at a high level.

