

Paddle Canada Level 2

Phillip Edward Island - 2011



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Horizons Adventures
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Level-2 Skills Course: overnight touring and intermediate boat handling

Aim

To provide the skills and knowledge for proficient kayaking in moderate conditions, on overnight trips along a moderately exposed shore with frequent easy landing opportunities.

Prerequisites

Paddle Canada Level-1 Skills certification or equivalent skill and knowledge.

Experience: At least 3, one day long, kayaking trips in different locations.

Wilderness First Aid (16 hours) with CPR strongly recommended.

Course length

5 days/ 4 nights.

Class ratio

2 instructor: 5 participants.

Location

Killarney Park Area- Phillip Edward Island. Moderately exposed coastline with frequent easy landing opportunities.

Conditions

Moderate winds (12-19 knots), combined sea state less than 1-metre with a moderate sea state.

Surf < 1 meter. Current < 3 knots.

Assessment

Activities focus on the practical skills for overnight trips. Well-developed skills such as a strong forward stroke, effective bracing, maneuvering in waves and current, rescue skills including rolling and towing are necessary. Activities that show control and confidence can include: paddling through narrow rocky channels with small waves or current or traversing moderate tidal races. At this level the participant must also engage in judgement, planning and navigation tasks relevant to an overnight trip along a diverse and moderately exposed shoreline.

In the case of a candidate with significant prior experience, knowledge and evident skill, assessment of Level-2 skills for certification may be conducted in a 2-day practical assessment. An overnight camp must be included.

Overview

Rescue skills	Paddling skills	Knowledge
• Assisted rescues	• Forward/reverse stroke	• Equipment
• Unassisted rescues	• Sweep forward/reverse	• Knots
• All in rescue	• Low/high brace turn	• Journeying and seamanship
• Rolling	• Draw/sculling draw	• Safety
• Towing	• Low/high brace	• Kayaking resources
• Communication	• Bow/stern rudder	

Level 2 Skills

Pre course homework

1. Develop a one day meal plan-
 - breakfast, lunch, dinner
 - minimum waste and packaging (all un-necessary packaging removed)
 - Light weight and long lasting
 - Must include at least one component of de-hydration done at home. (Not store bought)
 - No cans or pre-packaged bottles (nalagene style is ok)
 - No pre-cooking and then freezing -

2. **Develop a Camp Kitchen Plan to include** (min. 1.5 pages): **(Level 2 only)**
 - components of a safe, effective camp kitchen area
 - recipe for one evening meal including: nutritional values; quantities; ingredients; cooking method; fuel consumption; presentation; packing plan; waste disposal; dishwashing method

3. **Begin a Course Log with detailed weather observations for three days leading up to course (Start Date: July 15)** with an educated guess as to what weather we can expect for Day 1 and 2 of the course. (Don't get forecast - just guess!) Your observations might include: air and water temp; humidity; pressure; wind speed and direction; sea state; cloud cover (height / density) and precipitation. This log should be updated daily during course.

4. **Review all course materials and lists.**

Course Topic overview.

Weather

How to get it - Radio/internet/

How to interpret it. - Marine/inland/Mayfor

How to predict it - winds and Clouds

How to read it - Weather maps

Navigation

Piloting

Maps & Charts

Compass use

Route plotting

Predicting and assessing

Tides

Predictions

Area differences

Basic causes

Rips, overfalls,

Risk Management

- CLAP – Communication, Line of Sight, Awareness, Position of Effectiveness
- FAT – Flexible, Available, Teachable
- Me, We, the Sea
- Lemon management

Strokes: See below

Rescues: See below

CRCA Sea Kayaking Level-2 Training

This is a proficiency award and candidates must understand the likelihood of needing to take time, after training, for practicing new skills before completing a level-2 assessment. Some or all training will be conducted with fully-loaded sea kayaks prepared to travel along open coastal passages with frequent opportunities for landing. All training may take place in sea kayaks loaded with sufficient equipment for an overnight paddle trip including emergency bivouac supplies.

Background knowledge (reading)

- Tides and current tables.
- Chart #1 - study for interpretation of marine charts.
- Aids to Navigation, published by CCG.
- Small boating safety regulations, published by CCG.
- A working knowledge local marine weather hazards.
- A working knowledge of local marine charts and topographical maps.
- Paddling skills

Technical skills

Each stroke has considerations for the orientation of the boat, the body, and the paddle blade. Candidates will gain an understand of proper paddling technique in all three aspects

SKILLS

Launch & land	A variety of boat entry & launch options B in less than 1 metre surf. Maintaining forward controlled if the sea kayak is surfing. Side surfing (purposeful broaching before a wave). Backwards landing should be demonstrated as well.
Forward	Efficient forward paddling including: good upright posture, evidence of torso rotation, extended front arm, paddle blade close to the sea kayak (depending on boat design and paddle length).
Stopping	Stopping the sea kayak within 4 strokes while maintaining a consistent heading.
Reverse	Controlled reverse paddling reasonably accurate. Looking over one shoulder and unwinding of the trunk to produce power.

TURNING

- Sweep** Pivot the sea kayak 360° in both directions with a combination of forward and reverse sweep strokes while holding the sea kayak on edge. With steady forward motion turn the sea kayak in by means of a forward sweep strokes while edging to the outside of the turn.
- Low brace turn** While moving forward with good speed turn the sea kayak by means of a low brace turn. Leaning the sea kayak inside the turn necessitating an effective bracing action and a good turning effect.
- High brace turn** Turn the sea kayak in both directions by means of a high brace turn. Commitment to leaning the sea kayak inside the turn necessitating an effective bracing action and a good turning effect.
- Bow rudder** While moving forward with good speed turn the sea kayak in both directions by means of a bow rudder while edging outside the turn, away from the paddle, to increase the turning effect.

Moving Sideways:

- Draw** Move the sea kayak sideways while resting. The blade is to remain submerged throughout the stroke, the top arm is no lower than shoulder height and the body is rotated. The lower arm extends at the beginning of the stroke and top hand acts as a pivot.
- Sculling Draw** The body should be well rotated and the paddle shaft vertical with the blade fully immersed in the water. For both draw and sculling draw, an effective sideways movement must be in evidence without the kayak turning.

Supporting & Recovery Strokes

- Low Brace** With elbows up, the back face of the paddle blade will make contact with the water. Some slapping of the paddle may occur, however a primary means of recovery is an evident hip flick with proper torso and head motion.

High Brace With the elbows down, forearms near the vertical and wrists straight, the power face of the paddle will make contact with the water. The primary means of recovery is an evident hip flick with proper torso and head motion. It is of increased importance with a high brace to keep a safe posture with the elbows in near the body.

Stern rudder The sea kayak will be kept running straight, downwind on waves, or crossing an eddy line with the paddle kept on one side of the boat. Edge away from the paddle, to increase the turning effect. The candidate should demonstrate good torso rotation while still looking forward.

Rescue Techniques

Rolling The candidate will be introduced to the roll in calm conditions. Failure to roll at this level requires that the candidate demonstrate a higher than average competence in other aspects of the course.

All-in Capsize all sea kayaks simultaneously and have all paddlers re-enter their sea kayaks.

Flooded boat Rescue a sea kayak with one watertight compartment fully flooded.

Towing Tow a disabled sea kayak/paddler using a variety of methods with and without the use of towlines.

Theory

Boat design: Performance characteristics of various styles and construction materials. Different parts of the sea kayak. Hull shapes and their effect on performance. Decklines, deck bungies, end toggles, rudders, skegs, and other appropriate features.

Paddles: Variety and use of different paddles; construction materials

Spray Skirts: Neoprene vs. nylon and more.

Outfitting: Basic outfitting of a sea kayak for personal fit, control and safety.

Clothing: Appropriate clothing while paddling various environments.

Safety: Basic equipment and how it is used for safe kayaking; CCG minimum small boat regulations.

Warm-up and stretching exercises to prevent common injury. Good paddling technique to prevent injury.

Rescue Equipment: Tow ropes: deck mounted vs. body mounted

Journeying and Seamanship

The paddler will gain knowledge as it applies to an overnight journey in level II conditions. Particular note should be made to the overnight component. Topics will include:

- trip planning
- organizing gear & packing
- launch and landing options
- navigation and route selection
- weather and water interpretation
- kayak handling
- group awareness
- campsite selection
- communication
- knots

Ethics Issues of camping, land access, and encroachment on wildlife habitat.

Level-2 Assessment

The following is a list of skills, knowledge and judgment the instructor will look for in level-2 sea conditions. This list is intended to clarify the nature and extent of skills required and is not, by itself, intended as a definitive test of skills.

Assessment will be conducted by oral test, practical evaluation of skills, awareness of the group and the paddling environment.

Each paddling stroke will be assessed for proper consideration of: the orientation of the sea kayak, the paddle blade and the paddler's body. The candidate must demonstrate physical and emotional control with an orderly progression of technique through all rescue exercises.

Paddling skills. The candidate will show the following:

- Efficient and sustained forward paddling (6 nautical miles in 2-hours).
- Effective sweep turns
- Brace turns; this skill is best demonstrated when crossing well defined eddy-lines.
- While moving forward with good speed move the sea kayak sideways, maintaining a consistent heading, The sea kayak must be moved approximately 1 meter laterally without lose of significant speed. The single draw stroke should blend cleanly into the next forward stroke and the sea kayak will continue along a consistent heading.
- Controlled paddling approaching and landing on a beach with a shore break.
- Efficient paddling and maneuvering in a current of 2 - 3 knots.
- Ferrying across a current of 2 - 3 knots while maintaining an up-current position.

Rescues

- Re-enter the sea kayak un-assisted. This exercise must be completed confidently and completed in a timely manner.
- Assist a swimmer back into their sea kayak. This exercise must be completed confidently and completed in a timely manner.
- Tow a sea kayak with a long towline and with a contact tow.
- Have the ability to treat an injured and hypothermic victim.
- Respond to simulated incident and rescue scenarios demonstrating good leadership, teamwork and individual participation.
- Demonstrate the ability to communicate with signals using, hands, sound devices, the paddle and other techniques.

Leadership & navigation

- Complete a formal float plan.
- Lead a group on a one-hour trip in moderate conditions with simulated hazards/capsizes & rescues.
- Maintain personal awareness and group safety in dynamic sea conditions.
- Determine a safe and efficient route plan for a short trip in sea conditions described for level-2 training and assessment.
- Determine tide height and current information for reference and secondary stations, and make estimates of current in passages not listed in the tide and current table.
- Record and maintain dead reckoning information
- Estimate distance and time to various destinations, take bearings and back bearings, determine ferry angles across current.

Equipment

- Advantages and disadvantages of rudders skegs and deck lines.
- Various features of different sea kayak paddles.
- Various materials and construction of spray skirts.
- Advantages and disadvantages of foot, deck, hand held, and electric pumps.
- Supplementary features available on a PFD designed for sea kayaking.
- The attributes of various fabrics and pieces of clothing designed for paddling in harsh conditions.
- Features of rescue and safety equipment necessary for coastal kayak tripping.
- Interpretation of charts and maps to plan and execute an extended trip.
- Preparation and understand the use of a basic First Aid Kit.
- Preparation a general repair kit.

Kayaking resources

- Research various sources of information such as: Tide and Current tables, Guidebooks, Navigation texts, Chart #1, hydrographic charts, topographical maps, other books, videos, websites and a wide variety of resources that pertain to kayaking.

Journeying & Seamanship

Journeying and seamanship refers to the practical skills, equipment preparation, trip planning and judgments that are on going throughout the planning and completion of an overnight trip. The following list is not exhaustive and is provided here as a guide to areas of judgment necessary for safe and enjoyable paddling in a level-2 environment.

Preparation

- Organize the gear and packing for an over-night outing.
- Create a list of minimum gear for an over night trip.
- Describe the methods of outfitting a kayak to properly fit the paddler.
- Organize the gear and packing.
- Pack a kayak with a balanced and stable load for an overnight trip.

Navigation and route selection

- Use charts to interpret aids to navigation and determine potential hazards.
- Use marine charts and/or topographical maps to navigate a route.

- Use marine charts and/or topographical maps to determine possible launching and landing sites.
- Use tide and current tables for tidal predictions.
- Use a compass for simple navigation. Record, dead reckoning data and calculations.
- Use ranges and other simple piloting methods to aid in navigation.
- Introduce the use of basic GPS features in conjunction with a chart or topo-map.
- Use piloting methods such as lines of position formed by natural features, man-made structures, and compass bearings.
- Communicate your position and course to members of the paddling group and others such as rescue services and persons at a distance outside of the group.

Weather and sea conditions

- Obtain marine weather forecast, report and observations, and interpret the probable effect on paddling conditions.
- Understand the cause and effects of currents and winds, on sea conditions.

Group awareness

- Understand the nature and purpose of leadership in a paddling trip.
- For group control and awareness, use the concepts of lead and sweep boats, or home boat, and paddling buddies.

Communication

- Participate in a discussion of signaling devices such as, flares, whistles, horns, mirrors, strobes, radios, cellular phones, and EPIRB.
- Use visual and sound signals to effectively communicate on the water.

Knots

- Demonstrate and describe the use of various knots: clove hitch, bowline, figure of eight, rolling hitch.
- Understand the fundamental characteristics of line made of various materials.

Safety

- Hypothermia -Causes, effects and treatment (e.g., more in-depth understanding, the additional concerns with an overnight trip).

- Describe emergency procedures for communication with Coast Guard, Police and the commercial and public boating community.

Camping skills

- Describe the features of a good campsite.
- Using a chart or map describe how to determine locations likely to provide good campsites.
- Prepare a campsite for safety and comfort during inclement weather.

Heritage

- Relate traditional Greenland and Aleutian designs to contemporary kayak design features. Discuss the merits and challenges of the identified design feature(s).
- Identify at least 2 other genres of kayaking, and describe how the practice of kayaking differs in these genres (equipment, technique, environment), Flatwater racing, Slalom racing, Surf Ski, White water, Kayak polo

Environment

- Participants will provide evidence of their environmental ethics by describing the seven "Leave No Trace" principles and practices and work to integrate these principles and practices while on the trip

The seven Leave No Trace Principles are:

- Plan ahead and prepare
- Travel and camp on durable surfaces
- Dispose of waste properly
- Leave what you find
- Minimize campfire impacts
- Respect Wildlife
- Be considerate of other visitors
- Using a variety of resources (previous knowledge, other participants, leaders, guide books) , Participants will be able to identify 1-3 natural objects found during the trip.

Level-2 Skills

Food Chart for Level 2 course

Day	Breakfast	Lunch	Dinner	Dessert/	appetizer
1	Instructors	Everyone	Sandy C	Sandi R	
2	Sandi R	Everyone	Donna	Sandy C	Ted
3	Sandy C	Everyone	Dorothy	Donna	Sandy R
4	Donna	Everyone	Ted	Dorothy	Dorothy
5	Ted	Everyone			

Navigation – the art of finding one's way

What is...

1. The difference between a chart and a map?
2. The advantage of a chart?
3. The advantage of a map?
4. Cardinal points?
5. The difference between fathoms and feet?
6. The difference between miles, knots and kilometres?
7. Piloting?
8. Ded reckoning?
9. Latitude and longitude?
10. UTM grid system?
11. Contour line?
12. Sounding?
13. What is a range?
14. direction of travel, heading, bearing
15. deck mounted and orienting compass
16. High tide mark on a chart

Level 2 recommended Kit

- approved life jacket
- water proof flashlight (preferably headlamp--and petzls aren't the best in wet)
- mini-repair kit
- wetsuit/dry suit
- neoprene hat, gloves and/or pogies
- Emergency kit (ouch kit, first aid kit, fire lighting, immediate energy etc...)
- night lights (light sticks or other)
- towing system
- knife (on lifejacket)
- marine whistle and *other loud sound making device
- water tight boat with deck rigging
- self rescue system
- pens and paper
- waterproof notebook and pencil
- navigation supplies
- orienteering compass
- deck mounted compass * (but highly recommended)
- waterproof map case
- ruler
- GPS*
- bilge pump
- sling (14-15 ft non-floating rope made into a loop (useful to have carabineer on end)
- warm hat, gloves/mitts and spare clothing
- paddle tether or paddle park*

*= optional items

Plus...

- Maps – topographic series 1:50,000 for Phillip Edward Island (Killarney Park Map will do) and a Marine Chart for the same area.
- Sleeping Bag
- Trip log of past paddling
- Snacks and **drinks** for the cabin
- Reference: material

This list is for all weather. Clothes can be modified as required. Use your judgment.