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The Irish Canoe Union
Canoeing Ireland



Safety through Training

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Introduction

Canoeing is the collective term used to describe a wide-ranging sport that encompasses competitive and non competitive forms of canoeing and kayaking.

Non-competitive canoeing includes a number of kayaking and canoeing activities, based mainly on journeying and adventure. Powerful mountain rivers, tranquil lakes and spectacular coastlines all provide perfect environments for canoeists to enjoy their sport. Each environment demands a different set of skills and suits a slightly different type of craft.

Canoeists and kayakers interested in competition can take part in numerous specialised competitive canoeing disciplines such as Canoe Slalom, Marathon Racing, Flat Water Racing, Freestyle, and Canoe Polo.

Ireland is tailor made for canoeing and there is a wonderful variety of locations to choose from. There is a multitude of rivers, canals, and lakes offering everything from simple touring on placid water to challenging white water descents on flooded mountain rivers.

For canoeists Ireland's rugged coastline provides spectacular scenery interspersed with excellent surfing beaches. The coastline offers enormous potential for exploration, and for observing abundant sea wildlife.

Sea kayaking in all but enclosed sheltered sites demands knowledge and skill. You are strongly advised not to undertake any canoeing without adequate training.

One of the best ways to discover what canoeing has to offer is to join a local group or club. Alternatively, undertake one of the Irish Canoe Union's training courses – they're fun, safe and will help you master basic skills. Under expert guidance you will learn the fundamental techniques, and the simple safety rules that will help you enjoy a lifetime of water activities.

Photographs supplied by – Vincent Macnamara, Sean Pierce, Michael Feeney, Colin Irvine, James Van Den Broek. Map supplied by – Foxy

Kayaking

The modern kayak derives from the traditional Eskimo hunting craft. This was usually a decked single seater craft built using sealskins. The result was a light, fast and manoeuvrable craft which, once occupied, was almost watertight and could be self-righted using a paddle.

Kayaking as a recreational activity provides opportunities for adventure, relaxation, exploration, and competition. The challenge of descending a white-water river or gracefully meandering quiet lakes and canals are all part of canoeing's special appeal. Kayaks are frequently used for expeditions at sea and represent the ideal craft for close investigation of Ireland's spectacular coastlines.

Kayaking has long been recognised as a useful medium for outdoor education, and is of particular value in building confidence, self-reliance and co-operation.

Kayaks now come in many different forms but whatever its shape and appearance, the features that identify a craft as a kayak are that the occupant sits and uses a double bladed paddle.

Canoeing

Many indigenous peoples have developed "canoe" crafts. The modern "Canadian Canoe" derives from a canoe form evolved by the native North American Indians, who used native birch bark to fashion a light, versatile craft.

Modern "open canoes", now used mainly for recreational touring employ modern materials, but their shape remains virtually unchanged from the age-old designs of their ancestors.

The open canoe is a relatively stable and immensely versatile craft which is normally paddled by two people but can be handled solo. To learn to paddle a canoe as a doubles pair requires effective communication and the development of good teamwork between partners. It is perhaps these characteristics which represent part of its worth as an educational Medium. It is however the unique potential of the canoe as a "journeying craft" that is responsible for its rapidly heightening profile both in education and recreation.

Other forms of canoes have been developed, mainly for specialised use in competition; but regardless of shape, a craft is identified as a canoe if the occupant or occupants would normally kneel and use a single bladed paddle.



Freestyle at Sluice Weir, River Liffey, Dublin

Paddle Plus

"Paddle Plus" is the system of training and assessment of canoeing skills awards, and coach qualifications delivered by the ICU Training & Development Unit. The ICU Training & Development Unit is the collective name for the Canoe Union's countrywide network of qualified coaches.

One of the main objectives of Paddle Plus is to promote safety in canoeing through the widespread provision of training; and through the assessment of successive levels of personal competency skills. The other main element of Paddle Plus is the training and qualification of coaches.

Paddle Plus is broadly divided into 3 non competitive canoeing disciplines – River Kayaking, Sea Kayaking, and Canoeing.

There are 5 Skills Awards, and 5 Coach Qualifications in each discipline starting with Level 1 and progressing to Level 5.

Paddle Plus provides scope for improving and increasing a canoeist's range of skills and techniques in response to increasingly more difficult water environments and conditions.

The different levels are colour coded – yellow, green, blue, red, and black – to assist identification.



Sea Kayaking

Skills Awards

Kayaking

Level 1 Kayaking Skills

This is your basic introduction to kayaking. The training course for this award contains elementary strokes and techniques and takes place under very controlled conditions.

Level 2 Kayaking Skills

This level provides you with the first structured training that enables you to undertake simple trips as part of a supervised group on flat or Grade I water.

Level 3 Kayaking Skills

This is an important level to aim for – its intermediate level skills allow you participate fully in club trips on rivers up to Grade II+.

Level 4 Kayaking Skills

At this level a kayaker has the skills and techniques required to competently undertake trips on white water during the winter months.

Level 5 Kayaking Skills

Level 5 kayakers have highly developed advanced white water skills and can also undertake rescues in extreme conditions.

Skills Awards

Sea Kayaking

Level 1 Sea Kayaking Skills

The strokes and techniques learned at this level are the same as the Level 1 Kayaking Skills Award and again take place under very controlled conditions.

Level 2 Sea Kayaking Skills

This award is similar to the Level 2 Kayaking Skills Award and focuses on the skills required to journey in very sheltered sea areas as part of a supervised group.

Level 3 Sea Kayaking Skills

This level introduces you to the skills required to journey in accessible coastal areas in light or moderate wind conditions as part of a supervised group.

Level 4 Sea Kayaking Skills

At this level a sea kayaker has the skills and techniques required to take part in sea journeys accompanied by more experienced sea kayakers.

Level 5 Sea Kayaking Skills

This award is for those who journey into open sea and includes route planning, rescue and leading skills for advanced sea and weather conditions.

Skills Awards

Open Canoeing

Level 1 Canoeing Skills

This award is your introduction to open canoeing and contains elementary canoeing skills and techniques.

Level 2 Canoeing Skills

This award is for those who have mastered the skills and techniques required to handle a canoe on flat water.

Level 3 Canoeing Skills

This award is for those who have mastered the skills and techniques required to handle a canoe on Grade II water.

Level 4 Canoeing Skills

At this level a canoeist has the skills, techniques, and competency required to journey with groups of similar ability on rivers of Grade II+.

Level 5 Canoeing Skills

This award is for those who have mastered the skills required to handle a canoe in difficult water conditions and who are competent in the many different facets of canoeing and rescue.

Coach Qualifications

Kayaking

Level 1 Kayaking Coach

Level 1 Kayaking Coaches are qualified to instruct kayaking on flat water. They are specifically not qualified to journey.

Level 2 Kayaking Coach

Level 2 Kayaking Coaches are competent to instruct and journey on flat water.

Level 3 Kayaking Coach

Level 3 Kayaking Coaches are qualified to instruct and lead on Grade II rivers. They have an important developmental role in the provision of training and assessment in clubs and outdoor centres.

Level 4 Kayaking Coach

Level 4 Kayaking Coaches are qualified to instruct and lead on advanced white water. They have an important developmental role in training and assessing for more advanced awards.

Level 5 Kayaking Coach

Level 5 Kayaking Coaches have considerable river kayaking experience. They are actively involved in programme design; and the training and assessing of all levels of instructor qualifications.

Coach Qualifications

Sea Kayaking

Level 1 Sea Kayaking Coach

The Level 1 Sea Kayaking Coach Qualification is the same as the Level 1 Kayak Coach. On the sea the Level 1 Sea Kayaking Coaches are confined to instructing within harbours.

Level 2 Sea Kayaking Coach

Level 2 Sea Kayaking Coaches are qualified to lead groups in non-tidal areas and sheltered coastlines. They cannot lead groups in winds above Force 3.

Level 3 Sea Kayaking Coach

Level 3 Sea Kayaking Coaches are qualified to instruct and lead groups close to accessible coastlines that do not involve tidal races or overfalls.

Level 4 Sea Kayaking Coach

Level 4 Sea Kayaking Coaches are qualified to instruct and lead groups on open sea crossings and areas where there are tidal races or overfalls.

Level 5 Sea Kayaking Coach

Level 5 Sea Kayaking Coaches have in-depth experience of sea kayaking and are actively involved in its development.

Coach Qualifications

Canoeing

Level 1 Canoeing Coach

Level 1 Canoeing Coaches are qualified to instruct canoeing under very controlled conditions.

Level 2 Canoeing Coach

Level 2 Canoeing Coaches are competent to instruct and lead on slow moving water or designated lake areas.

Level 3 Canoeing Coach

Level 3 Canoeing Coaches are qualified to instruct and lead on moving water up to Grade II and lakes.

Level 4 Canoeing Coach

Level 4 Canoeing Coaches are qualified to instruct and lead on advanced white water journeys and inland waters. They have an important role in developing open canoeing.

Level 5 Canoeing Coach

Level 5 Canoeing Coaches have in-depth experience of open canoeing and are actively involved in its development

Coach Qualifications

Competition

Level 1 Competition Coach

This qualification equates to a club coach who assists a Level 2 Competition Coach introduce and prepare participants for low level competition canoeing.

Level 2 Competition Coach

This qualification is a discipline specific coach and has an important developmental role.

Level 3 Competition Coach

This qualification indicates that the holder has sufficient knowledge to prepare teams for domestic and national competitions.

Level 4 Competition Coach

The holder of this qualification has sufficient knowledge to prepare teams for international competition.

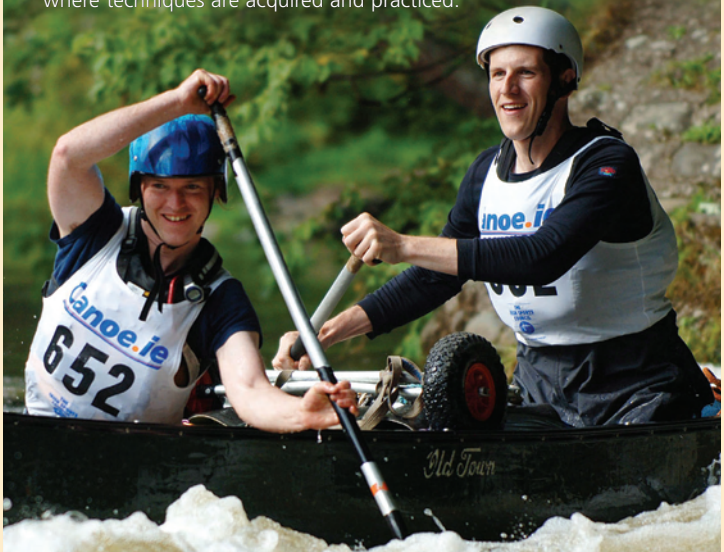
Level 5 Competition Coach

This holder of this qualification has sufficient knowledge to prepare teams for the highest level of International and Olympic level competition.

Safety

As a water-based activity, canoeing has an inescapable element of inherent risk.

The solution to managing this risk lies in a combination of training, based on accepted codes of technique and safety; and experience, where techniques are acquired and practiced.



There are 3 Golden Safety Rules of Canoeing:

- **Be able to swim**
- **Always wear a buoyancy aid**
- **Never paddle alone**

Safety Guidelines

The following guidelines are intended equally for the novice and as a reminder to the more experienced paddler:

1. You do not need to be able to swim vast distances but the ability to remain confident in the water is vital. All canoeists should normally be able to swim 50 metres.
2. Always wear an approved buoyancy aid (PFD – personal floatation device) when on or near water, check its floatation, make sure it is in good condition and the correct fit. Buoyancy is measured in newtons – 10 newtons equal 1kg of floatation. There are 4 European standards for buoyancy aids and lifejackets (50, 100, 150 & 275) which must all carry the CE mark. It is highly recommended that buoyancy aids are fitted with a whistle and retro reflective strips.
3. Never kayak or canoe alone. "Fewer than 3 there should never be" is a long established fundamental rule of canoeing.
4. Continually seek further training. Know the limits of your capability and stay within these limits. Seek to develop your knowledge and skills incrementally. The Level 3 Skills Awards in each of the 3 non-competitive disciplines are recommended as a minimum standard to be achieved. Training courses, run by qualified ICU instructors / coaches, are available through many canoeing clubs or direct from the Canoe Union.
5. Ensure your equipment is appropriate for the level and environment in which you are paddling and that it complies with safety regulations.
6. Wear a helmet when on or near the river. Ensure it fits correctly and protects the temples and back of head.
7. Wear and / or carry suitable footwear and sufficient warm protective clothing.
8. Carry equipment for unexpected emergencies.
9. Check the safety of your kayak / canoe. Check usability, security, and strength of grab-loops. It is highly recommended that kayaks / canoes have retro reflective strips.

10. Check that your kayak / canoe has floatation adequate to ensure it will float when full of water, possibly supplement it with air bags. Check that all screws and bolts are tight.
11. Let someone know what you are planning and when you are expected to return.
12. Be proficient in self rescue, including the skills of white-water swimming techniques and a reliable Eskimo roll when paddling Grade III water or harder.
13. Be proficient in river rescue techniques appropriate for a trip being undertaken and practice these techniques regularly. Learn to recognise river hazards. Paddlers are generally good at practicing and improving their canoeing skills, but not at practicing and improving their rescue skills. You can improve your safety on the water by attending an accredited rescue training course.
14. Be aware that conditions change and new hazards can occur between trips. Be continually aware of the hazards associated with the environment in which you are paddling.
15. Think carefully about the suitability of your kayak / canoe for the particular conditions you are paddling. Know the design strengths and limitations of your kayak / canoe.
16. Check river flows and weather forecasts and be prepared to change plans.
17. Avoid injury by stretching, warming up, staying fit and developing good paddling techniques.
18. River estuaries often look placid but may be subject to strong rip currents extending considerable distance out to sea. Local knowledge should be sought and caution exercised against hazards caused by rapid "drying out" of mud flats which may cause difficulties.
19. White water rivers are generally graded at medium levels. By their very nature, such grading systems are to some extent subjective and may change suddenly with fluctuating river levels.
20. Careful consideration should be given to the dangers associated with polluted or contaminated water and be aware of the dangers of Blue / Green Algae and the causes and early symptoms of Weil's Disease.

Environmental Considerations

Special consideration should be given to the impact of canoeing on the natural environment and other water users.

1. Minimise your impact on the natural environment at all times particularly make efforts to reduce river banks erosion at access and egress points.
2. Be sensitive when parking, changing, entering and exiting the water.
3. Observe wildlife from a distance. Do not follow or approach. Avoid wildlife during sensitive times: mating, nesting, raising young, or winter.
4. Maintain positive, co-operative relationships with other river users and riparian landowners as this is important for the future of canoeing and the future of canoeing environments themselves.
5. At entry and egress points behave in a friendly, positive manner towards others. Be mindful of the time that you are spending occupying the launch or take-out area so that you do not unfairly restrict opportunities for others.
6. Always provide assistance to others who are in trouble or who are injured. Provide whatever assistance you are qualified to give or help them in obtaining assistance.



Definitions

for canoeing on rivers and lakes

Very Sheltered Water

This describes canals with bank side access and which have a minimum of commercial traffic, small lakes with easy landing areas, and specified sites on slow moving rivers. The equipment necessary to work in these conditions is in accordance with the requirements of the Level 1 Kayaking Instructor.

Sheltered Water

This describes flat slow moving rivers without weirs or rapids. Discretion and common sense must apply when considering the use of lakes. This definition includes a perimeter of no more than 250 metres from shore on a large lake. To paddle in offshore breezes on large lakes requires the same degree of caution as for the sea. The equipment necessary to work in these conditions is in accordance with the requirements of the Level 2 Kayaking Instructor.

Moderate Rivers and Lakes

This describes Grade II rivers and equivalent weirs. This definition includes lakes up to two miles in diameter. Caution should be exercised while paddling on lakes and this definition excludes conditions where there are offshore wind conditions of above force four. The equipment necessary to work in these conditions is in accordance with the ICU Level 3 Kayaking Skills Award, while the instructor responsible must be equipped in accordance with the requirements of the Level 3 Kayaking Instructor syllabus. While paddling on moving water, kayaks and canoes must be equipped with additional buoyancy.

Advanced Rivers and Lakes

This describes Grade III / III+ rivers and very large lakes. The equipment necessary to work in these conditions is in accordance with the Level 4 Kayaking Skills Award. For paddling on advanced white water kayaks and canoes must be fitted with additional buoyancy.

These definitions imply weather conditions, which are not in themselves likely to cause a problem. Care must be exercised when water temperatures are low.

These definitions are used to define different sea conditions for the purposes of instructor qualification, participant ability and instructor / participant ratio.

Sheltered Tidal Water

In all cases the wind and weather conditions must be favourable. Enclosed harbours where there is minimal possibility of being blown offshore. Harbours are defined as harbours with minimum of commercial traffic which are enclosed on three sides and there is a minimum possibility of being blown offshore. Small enclosed bays where there is minimal possibility of being blown offshore. Defined beaches (a short section of beach with easy landing throughout, no tide races or overfalls) – winds not above Force 3 (Force 2 if offshore when the greatest caution must be exercised). The upper reaches of some suitable slow moving estuaries.

Moderate

A stretch of coastline or estuary in close proximity to the shore, with easy landing, not involving fast tidal streams, tidal races, or overfalls. Winds not above Force 3 (Force 2 if offshore, when the greatest of caution must be exercised). Open crossings of over 2 miles are specifically excluded. The upper reaches of some estuaries.

Advanced Sea

Any journey on the sea where tidal races or overfalls may be encountered which cannot be avoided. Sections of coastline where difficult landings may be encountered or where landings may not be possible. Difficult sea states and/or stronger winds (Force 5 or above).






River Grading

River Grading is not an exact system; rivers do not always fit easily into one category. Regional or individual interpretations have and may cause misunderstandings.

It is important to know that graded difficulty is not the only factor that affects grading, and grading should not be the only factor you rely on when deciding whether a river or a rapid is for you.

Water Conditions on rivers in Ireland are graded as follows:

Grade I – Flat Water
This is either flat, open water with minimal current or water with a very slight current. There are no obstructions.

Grade II – Moderately Difficult
Rivers that have a choice of clearly evident routes. Occasional manoeuvring may be required, but rocks and medium-sized waves are easily missed by moderately trained paddlers.

Grade III – Difficult
Route is easily recognisable from the water. There are moderate, irregular waves which may be difficult to avoid. Complex manoeuvres required in fast currents. Good boat control required. Stoppers and small eddies exist. Obstructions can be numerous.

Grade IV – Very Difficult
Route is not always clear, inspection advisable. Rapids are continuous and breakouts few and small. Continual manoeuvring with precise control. Sharp decision – making required.

Grade V – Extremely Difficult
Inspection often essential and protection from the river bank possibly required. Serious dangers exist. Very complex continuous technical difficulties.

Grade VI
Almost never attempted and often exemplifying the extremes of difficulty, unpredictability, and danger. The consequences of errors are very severe and rescue may be impossible. For teams of experts only, at favourable water levels, after close inspection and taking all precautions.



Irish Slalom Paddler: Eoin Rheinisch on Sydney Olympic Course

River Safety & Rescue

River Safety & Rescue 1 (RSR 1)

Introduction

The RSR is a one-day course designed for canoeists of all levels who wish to undertake relevant training in Safety & Rescue Techniques appropriate for water of Grade II. This is an ideal stepping stone for those canoeists who are interested in taking more in-depth advanced rescue and safety training.

General Aims of the RSR

The RSR aims to enable candidates to:

1. Develop an understanding of rescue / safety protocols;
2. To apply the appropriate method and equipment for particular situations;
3. Execute self rescue;
4. Rescue others in Grade II water;
5. Rescue of equipment in Grade II water.

Requirements to Attend a Course

This course is open to any canoeist who wishes to improve river safety skills.



River Safety & Rescue

River Safety & Rescue 2 (RSR 2)

Introduction

The RSR 2 is a two-day course designed for intermediate and advance level canoeists who wish to undertake relevant training in River Safety & Rescue techniques appropriate to water of Grade III and above difficulty. This is a follow on from RSR 1 introducing more advanced rescue and safety training and techniques.

General Aims of the RSR

The RSR aims to enable candidates to:

1. To further enhance the understanding of rescue / safety protocols;
2. To apply the correct method and equipment for a given situation;
3. Execute self-rescue;
4. The rescues of others in Grade III / III + water;
5. The recovery of equipment from Grade III/III+ water.

Requirements to Attend a Course

This course is open to all who have completed RSR1 and wish to build on their river safety skills.



Some Canoeing Terms

Blade
The widened end of the paddle that does the work in the water.

Bow
The forward extremity of a canoe or kayak.

Broach
A dangerous situation in which a canoe / kayak is caught against an obstruction and turned sideways by the current. Alternatively when a boat is turned side on to wind and waves by the action of the waves.

Canadian Canoe
An often used but incorrect term for an open canoe propelled with a single-bladed paddle.

Canoe
Derived from the birch bark canoes of North America, the term "Canoe" refers in broad terms to any paddle-propelled craft with two pointed ends, including kayaks.

Often used to mean an open canoe (occasionally incorrectly called a Canadian Canoe).

A canoe (as opposed to a kayak) is a boat propelled with a single blade paddle, from a kneeling position in Flat Water and Wild Water Racing competition or from a sitting position in Marathon Racing and Touring events.

Touring, Flat Water Racing and most Marathon Racing canoes are undecked (open) many Wild Water Racing canoes are decked, and may appear like kayaks.

Cockpit
The place occupied by the paddler. There is normally a seat, and in some kayaks and canoes, the cockpit will be sealed with a spray cover around the paddler's waist and attached by shock cord to the cockpit rim.

Deck
An enclosed area over the bow and / or stern of a canoe, which keeps water out and increases the craft's strength.

Edging
Putting the boat on its edge to increase its manoeuvrability.

Eskimo Roll
A method of using the paddle against the water to right a boat that has tipped or rolled over. The roll relies on body movement for success, not the sweep of the paddle. There are many variations.

Grip
The area of the paddle that the canoeist holds.

Hull
The main body of any water-going vessel, including canoes and kayaks.

Hatch
An opening through the deck into a compartment, and closed by a hatch cover. Normally seen on sea kayaks.

Helmet
A canoeing helmet should be worn while paddling white water, surfing, paddling among rocks or in sea caves, and during rescue practice they are optional for other canoeing activities. The helmet should be securely fixed whenever it is worn.

Hypothermia
The loss of core body temperature through exposure to cold and wet, and especially wind. Potentially fatal. Prevention is much better than cure: dress warmly and eat well.

Kayak
Kayaks are derived from the frame and sealskin hunting boats of the Arctic. In broad terms "kayak" refers to any paddle-propelled craft with two pointed ends, including canoes. A boat propelled with a double bladed paddle. Competitors will sit in their boats for all disciplines. Kayaks are fully decked craft.

Leader
A person giving direction to a group, this includes Instructors, Coaches, trip leaders, peer leaders, scout leaders, group leaders, etc.

Paddle
The implement used for propelling a canoe. Canoeists use a single bladed paddle. Kayakers use a double-bladed paddle that's held in the middle.

River Left
The left side of a river from the paddler's point of view when looking down stream.

River Right
The right side of a river from the paddler's point of view when looking down stream.

Shaft
The narrow part of the paddle, above the blade, encompassing the grip.

Stern
The rear end of a canoe.

Spray deck
Attaches around the paddlers waist, then fitted around the cockpit to waterproof the cockpit.

Stopper
The wave formed immediately downstream of an obstacle over which water is flowing.

Irish Canoe Union Training Centre

Strawberry Beds
Chapelizod, Co. Dublin

Situated on the banks of the River Liffey in the peaceful rural setting of the Strawberry Beds between Chapelizod and Lucan the Irish Canoe Union Training Centre.

The Training Centre offers a range of Kayaking and Canoeing courses for the complete beginner through to intermediate and advanced levels.





Training Courses & Assessments
Level 1 Proficiency
Level 2 Kayak Proficiency
Level 3 Kayak Proficiency
Level 4 Kayak Proficiency

Courses for Young People

Coach Training Courses

River Safety & Rescue Courses

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