

# *St Ayles Skiff*

A Brief Introduction



## Welcome

Thank you for showing an interest in the St Ayles skiff. Your life may be about to change, hopefully for the better, as you discover the joys of boat building and being on the water as part of a community.

**Those of us who were involved in 2009, at the start of what was then the “Scottish Coastal Rowing Project”, under the auspices of the Scottish Fisheries Museum, had a pretty good idea that building and rowing the newly designed St Ayles skiff would be a very rewarding and sociable experience.** We knew friends in our own community and some in neighbouring areas might well catch on and get an enthusiasm for the concept too. However, we have been somewhat taken aback by the speed at which the fever spread, not just around the Firth of Forth, which we might have expected, but initially along the coasts of Scotland, then down into some lovely parts of England, and then around the world.

Therefore, it is worthwhile trying to look at what is so special about this boat, and the way it brings communities together.

Perhaps most importantly, the St Ayles is not something you just buy off the shelf. It is supplied in a kit form, which means that the basic hull shape and dimensions will be the same for each boat. However, a great deal of work goes into **transforming sheets of precut plywood parts into the graceful shape of a St Ayles skiff. It's that work which is enormously rewarding,** and can be done by you, in your community, with your friends, some of whom you will know already and some of whom you have yet to meet, but all of whom you will have a special bond with. You and your community will be very proud of what you create, and it will have touches which make it unique.

Then you and others will start to row your community skiff. Many of the rowers will have lived beside the sea for years, but never looked at their community from seaward before. Just as you discovered the rewards of teamwork when building the boat, rowers will discover the joys of teamwork in making the boat sweep gracefully through the water, and making her ride purposefully over the waves. During the build some experienced woodworkers will have shared their knowledge with learners, a rewarding experience for both. Now on the water the same thing will happen, with experienced rowers and mariners will share their experience with newcomers. Some of those newcomers will be youngsters, some will be pensioners, but all are discovering that joy of working together with others to achieve a goal.

Coastal rowing is a very accessible sport. You do not need huge resources or specialist knowledge to become involved. All the rowers have a contribution to make to the forward movement of the boat, and all share the same rewards.

As I write this, I am greatly looking forward to welcoming St Ayles skiff rowers from Canada, USA, New Zealand, Australia, Netherlands, England and Scotland to the first St Ayles World Championships. This is a chance to bring together a world-wide community and I look forward to hearing all the stories of how these rowers became involved. I will, however, remember that the biggest rewards remain within each community, and that each skiff probably started with someone thinking **“That looks like a brilliant thing to be involved with,” and then making it happen locally.** If that someone is you, good luck! I look forward to seeing you on the water, I hope you really enjoy what you are about to embark on, and bring that enjoyment to others too!

Robbie Wightman

Convenor

Scottish Coastal Rowing Association

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For more information, please contact [secretary@scottishcoastalrowing.org](mailto:secretary@scottishcoastalrowing.org) or [kits@scottishcoastalrowing.org](mailto:kits@scottishcoastalrowing.org)

## Introduction

This short guide has been put together to accompany the BBC Countryfile programme. It aims to provide additional information, all in one place.

In it, we have:

1. A Short History of the St Ayles Skiff
2. An overview of the building process
3. A series of essays from people in some of the groups who have built and rowed St Ayles Skiffs

For the technically minded, the St Ayles Skiff is built from a kit using high quality marine plywood using the clinker ply method. It is 22ft (6.5m) long and has a beam of 5ft 8in (1.7m). There is some variation in the weight according to exactly how it is built, but most are being finished at around 350lb (160kg) - light enough to be lifted on and off trailers by its own crew—though more hands would be preferred.

The kit contains the plywood planking and frames, together with the moulds over which it is built. The moulds can be re-used several times; builders are encouraged to pass on their moulds and building frames to new clubs. The current cost of the full kit is £1451, Planking and Frame kits for subsequent builds are £1198. Shipping within the mainland UK is normally £180.

More items will be required to complete the skiffs, not least the timber for the keel, stems, seats and gunwales. Glue, paint, varnish, and the very small number of screws and nails are also required. At the time of writing, it should be possible to get a St Ayles on the water for around £3500, with additional costs for trailer, cover, and lifejackets etc.

While the plans are included as part of the kit, there is considerable latitude allowed within the class rules, and any new group building a St Ayles should consult with existing groups on what has been developed over the past three years.

The time to build a skiff is variable depending on the skills and time available. The fastest build (by a professional boat-builder) was 6 weeks, but most take around 4-6 months.

The skiffs have been funded in many different ways. Money has been raised by raffles and ceilidhs, by a small group putting their hands in their pockets, or in some cases by grant applications. Local fundraising is recommended as it raises the profile of the project locally, and gets the community involved at an early stage.

When the skiff is built, most have been launched to great local fanfare, with crowds of over 300 coming to the celebration of some.

The current racing scene sees races of distances from a few hundred yards to 2 or 3 miles. Exceptionally, there are a few races of much greater length, such as the 14 mile Tyne Row and the 22 mile Great River Race held on the Thames during September each year. There are also an increasing number of Social Rows, where clubs will get together to explore and enjoy some touring in company.

In short, there is something for everyone.

More information is to be found on the SCRA website [www.scottishcoastalrowing.org](http://www.scottishcoastalrowing.org).

## A Brief History of St Ayles Skiff

The St Ayles Skiff story started in early 2009 when the Scottish Fisheries Museum approached boat kit manufacturer Alec Jordan to run a boat build in the museum's boatyard with students from Adam Smith College.

During the conversations regarding the project over the eventual use of the boat to be built, Jordan raised the possibility of trying to revive the coastal rowing regattas that had taken place in the mining villages in the East Fife coalfields until the early 1950s. **The miners built their boats themselves from timbers "liberated" from the collieries, then raced them on their Gala days.** With the kit built boats, the cost of a community building and racing their own boat is much reduced, and it would be realistic to expect communities to raise the £3500 or so that would be needed to buy the kit and complete the boat.

With this in mind, the Museum commissioned the internationally regarded boat designer Iain Oughtred to design a replica of **the Fair Isle Skiff to be built from a plywood kit that Jordan was to draw up from Oughtred's plans.**

Immediately that the plans were available, the first kit was designed and cut, and Jordan, assisted by Chris Perkins and various other volunteers, built the prototype in the space of seven weeks.

The prototype took to the water on Halloween 2009, in brilliant sunshine, with a large number of onlookers from Fife and **various locations along the south side of the Forth, largely thanks to Robbie Wightman's efforts in publicising the project** there. Over the next few months, Alec Jordan took the prototype to various places around Scotland for clubs and other groups to have a try – nearly all of them decided to build.

Within a few weeks, Jordan Boats had received orders for several boats, and the race was on to see who could get their skiffs launched first. The skiffs were built in a surprising array of locations, from leaky cowsheds to a leaky fishermen's hut to the relative warmth and space of a very large disused Hydroponicum (a glorified polytunnel).

Six skiffs made it to the first regatta at Anstruther in May 2010, and since then, there has been a constant stream of new skiffs being ordered and built at various rates. More regattas followed over the summer, and by the end of the first season, 33 skiff kits had been sold in Scotland and one in England.

The design was also picked up in the USA, with *WoodenBoat* magazine sponsoring the Building And Rowing Challenge which is designed to encourage schools to build and race the boats. Others in the USA followed, with the first all-women build taking place in Portland Oregon. The kits are cut under licence in the USA.

The scene switched to Australia (also cutting kits), where another women's build took place at Franklin Tasmania. Kits were also cut in the Netherlands; the international expansion continues with potential licencees in the Caribbean, Brazil, and South Africa.

Kits have also been sent to New Zealand and Spain, and there are an increasing number being built in England.

In July 2013, Ullapool in the North West Highlands is hosting the first Skiffie Worlds, with crews attending from the USA, Australia, New Zealand, Netherlands, and England. It promises to be a fantastic event, with the proceedings being opened by HRH the Princess Royal.

It is hard to say what anyone's real expectations of the St Ayles Skiff were in 2009 when the prototype was launched. It is certain though that what we have achieved in such a short space of time is well into the "Wild Dreams" end of the spectrum.

# Building a St Ayles Skiff — the short manual

Chris Perkins

*Alec Jordan writes. Chris Perkins is a retired serial amateur boatbuilder who lives 200 miles away from me just outside Ullapool. Chris's involvement with the St Ayles began when he emailed me to ask if he could buy a St Ayles model kit. I had just started building the prototype skiff, and somewhat facetiously suggested to him that he could come and help me build a real one. His immediate reply was "I'm bored, yes, I'll be down tomorrow". And he was, and he kept coming back for 3 or 4 days for 4 weeks.*

*Chris has made a huge contribution to "Skiffiedom" through documenting builds, running websites, taking thousands of photographs of skiffs, and writing articles for the boating press.*

**Following delivery of the Kit, take time to identify the various components contained in the ply sheets. Don't start separating the various parts straight away. From the keyed guide supplied with the Kit paperwork mark up the plank and frame components and orientation. Cut the tabs holding the parts to the sheets to release the individual components starting with the building frame components. Assemble the building frame from good straight beams, taking particular care to get everything square and level. Assemble the four frames from the 18mm ply parts.**

While the glue on the frames is curing assemble the moulds and stem supports on the building frame. Cover the side of the frame touching the mould with parcel tape and screw them to the correct side of the mould. Construct a laminating jig for the bow and stern inner and outer stems using the supplied template as a guide for the curve (Fig 1). Glue the stem laminates and clamp to the former, it helps to have quite a number of hands available while persuading the wood to the designed curve (Fig 1). Secure the inner stems to the support on the building frame with temporary screws or clamps ensuring good alignment. Mark the trim line for the stem /keelson joint and cut to fit. Fit the Keelson to the building frame, it should drop snugly into the space provided on the moulds/frames.

Glue, assemble and clamp the Keelson to the inner stems, once cured use fairing battens to put the correct bevel on the Keelson, Inner stems and the four frames so that the planking stock will have a good faying surface to be glued to (Fig 3). It is acceptable to bevel the stems as the planking proceeds and the Ullapool Group developed a simple bearding line gauge to help. Once satisfied the bevels are all correct it is time to start planking.

The 9mm plywood planks come in three sections to make up the full length plank. To assemble them they need to be prepared for gluing with scarf joints (Fig 5). This is easier if a scarfing jig is built and a router used to cut them (Fig 4). The scarfed planks need to be assembled on a flat surface long enough to properly support and clamp the completed plank. The Jordan Boats pin and string alignment system is of great assistance in alignment. Glue and clamp the planks in mirror pairs using strips of polythene between planks and surfaces to avoid inadvertent gluing. Once cured clean up surplus glue from the plank surfaces.



Fig 1



Fig 2



Fig 3



Fig 5



Fig 4

Carry out a trial fitting of one of the garboard planks against the keelson/stem assembly on the building frame( Fig 6) . When satisfied, epoxy glue the first garboard in place. Bevel the edge of the garboard to allow the next plank to have a flat surface to be glued to, this gets easier as practice is gained so the most visible planks on the finished boat are usually the best fitted. Continue fitting planks 2 to 6, use the plywood finger clamps supplied in the kit to hold the planks in place while the glue cures (Fig 7). **Don't clamp too tightly and use enough glue to get a bit of squeeze out.** Once all the planking is completed and the planking at stems and keelson have been cleaned flush prepare the Keel and Outer stems for attachment, (Fig 8) carefully adjust the fit of the outer stems and form the bevel on the side faces. Glue the outer stems in place, offer up the keel and mark the join line along the outer stems and trim to fit (Fig 9). Glue the Keel in place securing with suitable screws.



Fig 6



Fig 8



Fig 9



Fig 7



Fig 10

Clean all the surplus glue on the outside, sand lightly to leave a good. Many builders paint the outside of the hull at this stage. Once satisfied with the outer hull it's time for the turn-over party – bribe enough muscle from the community with promises of refreshment. Remove the moulds and stem supports and ease the hull from the build, lift and turn her over (Fig 10). Stand back and enjoy the first sight of your skiff the right way up and mark the milestone in appropriate fashion.

There is a temptation to assume that having completed the hull that the skiff is almost finished – truth is that the build is about halfway. Now she is right way up it is time for all the internal joinery. The fastibands (beams supporting the seats) are the next bits to be fitted (Fig 11). Thwarts (seats) are cut from solid wood planks of appropriate size. Provision will also need to be made for something for the Cox to perch on. Internal and external gunwales come next, there is scope for a variety of styles. Scuppered gunwales have slots let in to them which gives great strength with lightness as well as convenient handles when carrying the skiff (Fig 12). The gunwales support the kabe or pin arrangements that connect the oars to the boat and the scupper layout needs to allow for this.

A Rudder will be needed, most easily made from ply – there should be enough 18mm spare from the frame sheets to make one – again different groups are experimenting with the shape but the one shown on the plans is a good starting point. Control of the rudder may be by cranked tiller or via a yoke and lines. Once all the joinery is completed a final clean up of surplus epoxy and gentle sand ready for the painting and varnishing. Sounds easy but is probably the most tedious part of the whole build but essential for a good-looking Skiff. Paint – for extra hard wearing finish two part polyurethane paints are good but more difficult for the amateur to apply. For most situations, oil based marine enamel is perfectly satisfactory allowing for easy maintenance and refurbishment (Fig 14). Oars are a subject in their own right – best to start with a simple set based on the plans and watch what others have done differently and how their rowing style compares. Try out as many as you can at Regattas and other Skiffie gatherings. The best advice in Skiff building is to use the existing Skiff community for information, mostly they are very free with their hard won experience. A Skiff is not completed until she has been properly launched with appropriate ceremony. When you do, let the appropriate Coastal Rowing Association know all about the achievement. (Fig 15).



Fig 11



Fig 12



Fig 13



Fig 14



Fig 15

## Coastal Rowing. Why do it?

Lesley Muir, Coigach Community Rowing

**If you're a sociable, active person, what's not to like about any of the following: an activity which brings together a wide variety of good folk; an activity which sees the normally socially-separate demographics of teenagers, 20-somethings, 30-somethings and on up to 50-somethings - and beyond - all hanging out together sharing training, laughs, and working together; an activity which will see you learning new skills and becoming fitter, more painlessly than you would believe - and then add in some fun, inexpensive weekends travelling to coastal communities and making loads of new friends at the St Ayles coastal rowing racing regattas. Sounds good? Then I'd say coastal rowing's the thing for you.**

Your group might be embedded in a very small coastal community, like mine, where rowing heavy wooden cobs out into the bay to harvest wild salmon from bag-nets is a not-altogether-forgotten part of the local history of the place, or perhaps a club in a coastal neighbourhood in a large city, or in a small, once busy fishing port. Whatever and wherever, to take part in the fast-growing sport of coastal rowing – which is so much more than just a sport - you have to get folk together and co-operating effectively to actually hand-build a beautiful St Ayles skiff. And that is what makes it really special! Young and old alike; they have fun doing it or just watching it progress, supporting from the sidelines. Commitment grows, skills are passed, new friendships forged – you see a different side of people you thought you knew, including yourself!

There is undeniably something magic about building a boat, must be in our island genes. Oh, the pride **when you and the local community see 'your' boat painted up so bonny, named and launched! Then you and your crewmates have to learn to row together, and develop teamwork together, win together and lose together...and have a few beers together at the end of a training session.**

# Ayle of Quinte

Chris Ireland, Picton Ontario, Canada

**“Let's build a boat” was all it took for twelve of us from the Bay of Quinte region in eastern Ontario to get involved in building a St. Ayles skiff. With the prospect of another long cold Canadian winter ahead, the idea of spending time in the workshop with friends was very appealing. Most of us knew our way around a woodworking shop and a few had prior experience building boats. We were very fortunate to not only have the skills but also a large heated workshop, large enough to build both the boat and a trailer.**

We soon realised what an amazing project we were getting involved in. No sooner had we placed the order for the kit than the Scottish Coastal Rowing website announced to the world that a group from Picton, Ontario would be building Canada's first St. Ayles skiff, and a phone call to invite us to the Skiffie Worlds in Ullapool.

Even before we got started building, we joined the world of blogging, setting up a website to document our build. We followed the blogs of other groups around the world, watching their building progress, their launchings and their activities on the water. None of this would have been possible ten years ago. The internet has certainly played a part in the phenomenal success of the St. Ayles skiff.

There were so many boats that we could have chosen to build, but one look at the lines of the St. Ayles skiff was all the convincing we needed. Drawn by probably the best small wooden boat designer in the world, Iain Oughtred, the skiff is a floating work of art. The concept of the kit-build ensures the lines stay true to the designer's original plans, and also saves a lot of time that would have been required in building the moulds and cutting the planks. We were extremely impressed with thought that had gone into the engineering of the kit, especially the method to line up the plank sections.

With our launch this past weekend, family and friends had a chance to share in the excitement. We hope that our enthusiasm will spread to other communities who will build and take as much pleasure from the experience as we did. The following is a comment from one of the builders which pretty much sums up how we all felt about being involved in the ‘St. Ayles Movement’.

*“I enjoyed immensely the camaraderie of working with a team of like-minded friends to see a project of this magnitude through to completion. Learning a new woodworking skill was an incredibly rewarding experience for me personally. In addition I gained an appreciation for all that has been involved in making this craft seaworthy and competition ready.”*

[www.ayleofquinte.wordpress.com](http://www.ayleofquinte.wordpress.com)



# North Berwick Rowing Club

Isabel Anderson

*It was about 9am, on the 29th May 2010 and I was attending the Safety Briefing at the start of the inaugural Scottish Coastal Rowing Regatta in Anstruther. Six new coastal rowing clubs were gathering for the event.*

*As I listened with care to the speakers, I commented to the person sitting next to me that the only problem I had was that our boat had not arrived yet. Just at that moment the familiar rattle of a boat arriving on a road trailer could be heard. I looked out the window and there was St Baldred, North Berwick Rowing Club's (NBRC) first skiff. Some of the build crew had worked through the night to complete her in time for her first regatta. Minutes later the ladies crew hopped aboard and rowed in the first race. Not only did she float, but she looked stunning and performed well in windy conditions, finishing first in the heat.*

Towards the end of 2009, I had heard talk in my home town of North Berwick that a group of people had got together to build a coastal rowing boat. Having messed about in boats since I was 7 years old and having sculled 14 foot clinker built rowing boats since I was 8 or 9 years old, I was interested. I eventually located the boat and the build crew and joined them once a week. There were only two ladies involved in the first build. NBRC is now well advanced with its third boat and many of our female members have been involved in repairs, maintenance, construction and the building of oars.

Right from the off participation in Scottish Coastal Rowing has been great fun. Over the last three years or so I have travelled all over Scotland to attend racing regattas, making lots of new friends doing so. While the races are going on the



crews are focused and serious. Before and after the racing, the crews are serious about socialising and having a good time, with visiting crews from many different clubs usually staying at the same campsite.

Last year NBRC attracted over 80 members from all walks of life, with ages ranging from under 18 to over 60. Almost half the membership is female. Some members have a long boating history and many have never been in a small boat until they started rowing. All are welcome and training is provided. The enthusiasm for the sport is infectious. Weather permitting, our boats are on the water most days.



Social rowing and social events for rowers have also proved to be very popular. Many a happy hour has been spent cruising along in one of our skiffs getting a very different perspective on our beautiful coastline and respectfully enjoying the local wind life too. New friendships have been forged, new skills acquired and fitness improved in the process. Organised social rowing with other clubs has also been very popular.

NBRC provides regular taster sessions, which have been well attended and allow anyone over 16 years of age to have a go. If you have not already done so, I recommend that you do. Chances are you will love it too.



## Troon Coastal Rowing

Rebecca Fanning

Who would have guessed that an activity such as skiff building would attract such a varied group of people from all ages and backgrounds? With the aid of many eager volunteers, who willingly gave up their free time, Troon Coastal Rowing have built **two skiffs now, the 'Marr Voyager' and 'Ailsa Lass'**. **I personally took part in the making of 'Ailsa Lass'**. I was initially intrigued when I heard that it was an authorised activity for my Silver Duke of Edinburgh Awards (DofE) skill section. I was interested that I could contribute towards something that people from Troon, and beyond could benefit from it. It was challenging, consequently served more purpose to my DofE Award than submitting that I was an adequate baker, could sew or even play an instrument. It was something different, more daring and in itself quite rare opportunity to have within your local community. I believed that being part of such a project would create lasting memories, not only from partaking in the project, but from the future rowing competitions and regattas.



Starting this project I was unaware of the friendships I would make with the fellow volunteers, especially with those who were much older than me. Our friendships blossomed over these few months when they taught me lots of new things. They taught me to more confident around everyone so that **I knew I wasn't being judged for my lack of skills**. My confidence had reached new levels around these people, I became more relaxed when they told me that it is alright to feel nervous and self-conscious in this new environment. I underestimated the impact which building a skiff would have on our small town of Troon, it brought so many of us together, so many people wanted to get involved. Even now, after both the boats had been completed, there are locals who join the crew on a Sunday morning at the local marina **to 'give it a go' even just for an hour's row**. **I am delighted to say I was involved in this project**; we created a beautiful skiff, a skiff in which Troon can be proud of. I hope that there will be more opportunities like this in the foreseeable future for people my age, in not just Troon, but in other local towns.

[www.trooncoastalrowing.org.uk](http://www.trooncoastalrowing.org.uk)

## “Women On Water”, Franklin, Tasmania

Jennifer Johnson

Friday 20th April 2012 marked a very special occasion for the “Women on Water” group in Franklin. After receiving grant funds to construct a wooden boat that the Huon Valley communities could use, the Ian Oughtred-designed St Ayles Skiff kit was unveiled at the Living Boat Trust shed next to the Huon River in Franklin Tasmania.

The unveiling of the kit marked the start of many firsts – the first St Ayles Skiff to be built in Australia, by a group of women.



With a website and newsletters to keep everyone updated on progress, the milder autumn weather saw the enthusiastic group enjoying learning boatbuilding skills in the allotted two days per week. **“WOW! We are really moving along with the building of the mighty skiff. All sorts of folk wander into the shed at different times to gaze at her progress. All of us are learning so much and having so much fun.”**

The boatbuilding language also made an impression. After 8 sessions one of the ladies enthused *“The planing of the hog is going apace and it will hopefully be ready to accept the garboards. There have been workers at a number of stations busy with spoke shaves bevelling frames and stems and we have begun scarphing and gluing the planks – the first, the garboard strake, fits - much to everyone’s delight. We are truing up the building jig, once all twelve planks are positioned she will look like a boat and be 1/3 finished!”*



As the Tasmanian wintry weather led to ‘shed-wear’ of beanies, scarves and triple layers, the group shared the novelty of steaming and laminating, while becoming accustomed to the time-honoured skills of hand planing, shaving, rebating, chiselling and clamping. The boat turnover in late June was another special occasion, with important lunchbreak discussions moving on to oars, paint colours, launch date, and a major event – rowing the St Ayles Skiff on ‘Tawe Nunnugah’ (an Aboriginal term for ‘going by canoe’). This 200km trip, fondly known as ‘The Raid’, sets off from Recherche Bay, the southernmost point of Australia, and concludes eight days later at the biennial International Wooden Boat Festival in Hobart. This was a goal for the ladies group and the ultimate test for the St Ayles Skiff.

Inwales, gunwales, thwarts, kabes, fetlings, floorboards all followed in rapid succession. Forty sessions later, after hours of thorough sanding and preparing, the painting of the Skiff enhanced her sleek beauty. The ladies were demonstrably proud of their work, obvious throughout the construction phase and in the careful finetuning of the finishing touches. The name chosen was ‘Imagine’ which summed up the aspirations of the group.

The completion of ‘Tawe Nunnugah’ in February 2013 was an unforgettable achievement. The Skiff had seen the crews through strong river currents, calm ocean, wild winds, turbulent waters and unbelievable scenery.

The St Ayles Skiff project has brought communities together, encouraged groups to venture out, invited individuals to socialise and challenge themselves while being a part of something that will continue to grow.

[www.womenonwaterfranklin.org](http://www.womenonwaterfranklin.org)