

Good seamanship in traditional utility boats

responsibility – competence – safety – training

The Coast Association's Captain's committee
(Forbundet Kystens Hovedmannsutvalg)

Foreword

Good seamanship used to be something one grew into by living everyday life on an exposed coast. At the same time, it was something one needed to strive to develop in play with a boat, weather and shipmates. Now there has been a break in the transmission of knowledge, procedures and abilities. Not everyone "knows what they are doing."

Mistakes and accidents tend to lead to a demand for close regulation of details and formalized training. Within the coastal culture movement, we rather believe in raising awareness of the captain's responsibility and of the competences and abilities that must be acquired through practice.

This is not a textbook on sailing utility boats, and neither is it a curriculum for captains-to-be. It is a *contribution* to the work being done with traditional utility boats. We want to invite those interested to participate in a discussion of what *good seamanship* in traditional utility boats means. We wish to contribute to a discussion of what competence it would be reasonable to require of a captain. We want to identify some of the basic procedures that in a concentrated form contain hundreds of years of experience with these boats. We want to present a blueprint for how one can conduct systematic training and development of knowledge and abilities related to the use of the boats.

The Coast Association's national conference in Kabelvåg, July/August 1998

Captain's committee (Hovedmannsutvalget)

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Knowledge in action

The tradition of utility boats is, like most folk knowledge, mostly an unwritten culture. People have learned to use the boat by growing up in the boat: playing with the old 4-oared boat on the shore, going fishing with father from the age of 5-6 years, rowing to school with sisters and brothers, rowing to go fishing first as a *skårunge* (beginner), then *midtromskar* (conductor of the center of the boat), *halskar* (conductor of the bow of the boat) and *hovedsmann* (captain).

But one must not think this means that people used to improvise their way to the art of sailing through individual trial and error. Established routines, procedures and norms condensed hundreds of years of experience and provided safety and efficiency. A very precise and detailed language expressed in words what the eye perceived and what thoughts needed to bring forth. One learned by and through living with the boat, together with older and more experienced boatmen. Changes and innovations happened in stages and were tried out and adapted to the prevailing customs and habits.

There are kinds of knowledge that can only be passed on from person to person through co-coordinated action in a real life situation. This is the knowledge that we now risk losing. Not only has society changed, but the technology is also new and the cultural patterns are altered. The view of *what knowledge is* has also changed in our century. Higher education has, thankfully, become available to all. But at the same time, the view of culture and knowledge that previously belonged to an elite few – those who didn't need to use their muscles! – has become more or less the only one. Book learning, theoretical insight and the abstract thinking have come to dominate and determine the progress of each person in his or her education and career to a large degree.

What we lose is not just a lot of traditional insight and abilities from our cultural heritage. We also risk abandoning many kinds of *human abilities* which are not theoretical, but directly tied to action: suspecting, feeling, sensing, detecting, imagining, understanding: abilities that make it possible to act in a holistic interplay with the world around us.

Perhaps it is because we need to use all of these abilities, that we are so captivated by this world of traditional boats. We can experience another era and way of living, which – despite a lot of exhaustion and misery – nevertheless contained some of the qualities we often lack in our era. By practicing part of the traditional coastal culture, we can get help to live out other important dimensions of ourselves.

The old utility boats are open and let us come near to the sea and wind. They are safe and secure, built to be handled with human labor and adapted to the elements. We can row and sail, fish with a line and put out nets. We have room for the equipment we need; we sit comfortably and safely and can have children with us on board. We can visit areas and out ports that boats with keels have to avoid. Instead of Dacron, fiberglass and chemical compounds, our senses experience tarred wood, tanned cotton canvas and hemp rope.

We gain a lot and lose little or nothing by choosing a traditional utility boat for outdoor life on the coast. Through outdoor life we can preserve the traditional utility boats, so that we can continue to find joy in them and in the life they were developed to serve. We can use the boats for trips and for fishing at the home port. In our everyday life we can perceive important dimensions of our cultural heritage in a concrete and meaningful way, and without losing ourselves entirely in escapism and nostalgia.

Making a "skårunge" course

We can think of the following framework: the target group is a group of youths with no special experience with outdoor life in traditional boats on the coast. We have a week or so at our disposal. We use a rather large boat with four sails: gaff sail, foresail, jib, and topsail. In addition we have one or more four-oared or six-oared boats with *spriseil* (mainsail with a diagonal pole) and foresail. On board the bigger boat we take turns training in groups. The participants can practice on their own in the smaller boats.

In the field of outdoor life we talk about *educational guidance* (veiledning) as a working method for communicating with a group about how to live in the outdoors. Educational guidance involves the participants building their own experience in "real" situations with a mentor, a "grandfather" who participates as one of the group and who can provide a model for behaviour, advice and help. On the coast we usually call the guide a *hovedsmann* (captain).

In school we have learned that theory is a higher form of knowledge than practice and that theory comes first, practice afterwards. In outdoor life we should reverse this. We learn the most in "authentic" situations. The point is, then, to engage in situations, from which we learn, in an order that allows one situation to build on the last in a good progression that ensures safety in our journey in nature. In this way we can avoid a one-sided focus on narrow thoughts, and rather create a situation in which each person builds experience using *all* of their senses and abilities. Learning to act through acting. A daily review afterwards sheds light on the various experiences, clarifies questions and places the activities in a theoretical context.

Day 1. We row and fish

The first day – we assume – we will be staying in the base camp where we have the boats. It's primarily about the participants starting to get used to the boats. A good way to get to know the boats is to put out to sea, row and use the rudder and nautical chart. We let the rig and sails stay back at camp.

We can preferably start out with the boats on land, put yards down to the tidal zone, learn to take a good grip with straight arms and use our leg and thigh muscles. We learn to pull and lift up a bit at the same time – not jerk – and to all pull together. We lift larger boats by turning our backs to the boat and taking hold of the board. A chant helps us to coordinate our work – here is one of many:

*Mann dokk attåt kara
Ta samse tak
Lik mang på kvar se si
Så tar vi i
Å herre vi, å hå – åååååååååå (we carry or pull the boat)
Så setter vi, å hå – og sett! (we put down the boat and rest).*

(Approximate translation!: Get ready and take hold of the boat boys, all together, same number on both sides, then here we go, lordie, oooooo , then we set it down and sit)

Then on board – we step in the middle of the boat, not on the sideboards. The first session is to take a rowing trip. The problem is that most people think that rowing is something they know how to do. Few people are receptive to the idea of starting with a demonstration. So let the group row themselves a bit tired at whatever tempo spontaneously develops. When the participants have heavy arms and are tired of getting thumped in the back, then they are more motivated to learn to row (if they aren't totally exhausted, that is...). A few points about what we are trying to achieve:

- The oars go in and out of their *keiper* (oarlocks) in an efficient and safe way. Practice several times.
- Pull the oars in from their out position (if the boat is standing still), the *hamleband* (string) on the inside. Tight *hamleband*.
- Feet in a good pushing position on the floorboards or the crosswood (*innved*) – not up on the sideboards. Use the muscles in the feet, legs, thighs and back.
- Straight arms. Resting position with oar in the lap, so that the muscles can relax for a moment before the return stroke moving the oar back over the water.
- Don't use full force before boat has started to gain momentum – unless you want to make a new oar.
- Nice long strokes: bend well forward (pull in the small of the back), put the oar softly in the water, and draw the oar stroke all the way through.
- A good exercise is to fasten a rope in the oars and in a sling around the neck and back. Just *hold* the oars with the hands and learn to *pull* them using the muscles in the legs and back.

Many people have problems avoiding hitting the rower in front of them in the back. This is a question of training. Sit at different distances from the side of the boat, have a straight back and coordinate the movements. The person sitting furthest astern on the starboard side sets the rowing tempo.

If the boat is fully manned you can row "*mann i år*" (two athwart). We can put the rudder in from the start, even in a small boat, so that the participants can familiarize themselves with the rudder under conditions that aren't demanding. We make it a strict rule that the person at the rudder must always keep track of the position on the nautical chart, or be sure that somebody else ensures that the boat is in navigable waters. We also change places – carefully – so that everyone gets to row, use the rudder, and navigate.

Then there is the issue of lifevests. Most people spontaneously put on life vests before they get into a boat. After a while they start to sweat while rowing with the vest on and the question arises whether it's all right to take them off. This leads to a discussion of safety – which we save for the evening. For now we can say that if we can swim, we don't need the vest while rowing in still waters, but we use them consistently when we are sailing, in the dark, in cold weather and in a fresh breeze. Those who can't swim have to keep their vests on.

We row out to a nearby shallows and fish with a line. Then we can practice lining up points for navigation as we row. We change places fishing and keep on a straight course, holding the boat on its course with light, even oar strokes. We practice bring in and putting out the oars quickly and efficiently.

On the way home we take off the rudder and practice holding the boat on course using the oars. The helmsman practices giving orders to those at the oars to *strike* (keeping them down in the water slowing the speed), *hamle* (rowing backwards) and *row*. We may also have a little wind from one side. We notice the way the boat wants to turn in relation to the wind, and with discuss and try out how we can compensate for this by adjusting the weight in the boat.

When safely back in port we unload the boat, put the yards in place and pull the boat up on land. Of course we also take care of the fish we have caught.

Review of the day's experiences

We ask ourselves why we started out with the boats on land. The coast of Norway has hard weather and at times a wide tidal zone. The boats of west- and northern Norway are made so that they can be pulled up on land (and into the boathouse, *naust*) by the boat's own crew. The boats are made for all-around use – rowing, fishing, and sailing – and to be as simple as possible in use. It is possible to make a better sailing boat than the utility boats, but then we lose the simplicity and versatility. By having put out the boats from land, rowed with them and fished from them, we have gotten in touch with other qualities of the boat than if we had started with sailing.

With this background, we can now take a close look at the boat and give the various parts of the boat their names. We also use this opportunity to discuss why the boats look the way they do.

- Keel – the keel isn't deep, as the boat should be easy to row, turn and pull up on land. In heavy seas or strong wind from the side the boat will swerve (let water pass under the keel, slide to the side) instead of tipping over. There is a plank under the keel to take the wear when the boat is pulled up on land, and to reduce the drift while sailing.
- *Stevn/stamn* (bow and stern) – to a line or other mooring with a clove hitch. Everyone should try.
- Boards – broad and narrow with few seams – making a pliable boat that forms to the waves. Shaking test.

- *Su* – the space between two boards, packed with *si* – hair or yarn with tar. Riveted and caravel siding.
- Oarlocks. *Hamleband*. *Åreskaut*. The parts of the oar.
- Innved (crosswood). *Band*, *rong*, *beter*. Wooden nails. We practice fastening the anchor line with a bowline (*pålestikk*) to the aft *rong*.
- Floorboards to walk on. Don't step on the boards on the sides.
- The *rooms* in the boat. Whole- and half room. Forward and aft holds.
- The parts of the oar. Give and pliability in the oar. It should be a joy, not exhausting, to row.

We practice and repeat these terms in various ways. We need to know the terms: in a boat one needs to co-operate quickly, in a coordinated fashion and without doubt. Here everybody is crew; nobody is a passenger.

We try to find an opportunity to adjust the *hamleband* (strings), to plane the *åreskaut* (wooden wear- and tear lists), to rivet leaking seams, maybe replace a wooden nail, etc. We discover that one of the qualities of a utility boat is that we can maintain and repair it ourselves with simple tools. We have the materials in our toolbox or we find them in the forest. If something breaks in a modern family boat one usually has to buy an expensive replacement in a specialty store or order it from the factory.

Then take a look at the nautical chart. We go through the most important aspects. Primarily shallows and skerries, floating stakes and seamarks. We do calculations with nautical miles and knots. We have taken the time for our rowing trip and can calculate how many knots the boat makes under oars.

Terms about safety

The evening is a good time for a discussion about safety, brought on by the issue of life vests. *Falling overboard* is usually not a relevant issue in an open, uncovered boat. But of course the boat may turn over. The propaganda for life vests has saved many lives, but we should learn to judge realistically what actually gives improved safety. In our era "safety" is generally understood to mean acquiring special "safety equipment" such as rockets, flares, emergency equipment for taking bearings, survival suits...

Of course we have to have some of this along – and learn to use it (in addition to the usual equipment on a boat, nautical chart and compass, tools, anchor, etc.). But it is more important to do a simple thing like being dressed such that you can fall into the water without freezing to death. Chilling is what most often takes lives. This is especially important in the spring and early summer, when it is warm in the air but still winter in the water. If we are sailing then, sailor suits or survival suits are clearly a better alternative than life vests.

Furthermore, it is important have one or more solid buckets on board so that we can empty a boat filled with water. Then we need to be able to get rid of the mast and rig, to get the boat to float upright. We also remind the participants that the drowning statistics

show that many accidents happen in small boats, under the influence of alcohol, and with the pant zipper open...

The traditional utility boats are very safe when used correctly. Even rather small boats were used in winter sailing trips along the exposed coast up to Lofoten and Finnmark. But we don't have the same skills and everyday routines as the old sailors. Therefore we need have a much larger margin of safety in our planning than in the last century, when the midwife had to be fetched on a night in February... or when you risked losing the farm, which you had bought on credit with a cotter's cabin as security.

Of course we must be allowed to explore the limits – but under secure conditions. There is a difference between doing what is difficult *because* it is difficult, and doing it because we have the abilities that make it natural to do what is difficult. We do the coastal culture a disservice, if we let ourselves be tempted to develop utility boat sailing into a risk sport. The training must at least involve all of the participants in a realistic evaluation of the requirements and necessary conditions, but in addition actually practice the norms for safe boating. One can't always take this for granted any more. In some circles in outdoor life, "risk-taking" is idealized.

In other words, it is essential that we plan the journey according to our abilities, so that wind and weather don't catch us by surprise.

Having said this, we will want to predict the weather for the next day. We should learn to differentiate between winds (and clouds) due to solar convection, and weather that signals the passage of a frontal system, so that we can be aware of developments. In addition we listen to the weather report or maritime report on the radio and learn to compare our own observations with the information from the radio.

Second day:
We begin to sail

This day as well we plan to return to the base camp in the evening.

We bring out the rig and give the parts their names as we put them in place:

Mast, mast thwart, mast foot, diagonal pole/gaff: peak (pigg) and claw.

Standing rig: Bow rope (forstag), shroud (vant), shroudholders, dedeyes (jomfruer), tackle etc.

Running rig: Main fall (clow fall/peak fall), foresail fall, sheets, throats etc.

Sails: various corners, lacing, mast rings etc.

We repeat the names. We should put the rig up and down several times to practice the routines. In a small boat we usually take down the rig when we are going to row or fish, and put it up again to sail. This means it has to happen systematically. Part of the routine is to put away the mast and rig in an orderly way (running rig in the claws, standing rig in a few halfhitches outside the running rig).

When we mount the rig we should learn the appropriate knots. We learn that we can make do with only a few, but that we should be able to tie them quickly and in various ways. And we need to know where we should use which knot. This is why we need to be sure that we teach the knots in their correct places, in “correct” situations and with the right ropes.

Sailor's knot: Joins two ropes of equal thickness. Fastens the sail to the gaff knot) etc.

Double sheet bend (skjøtestikk/skautstikk), can join two ropes with different thickness. Fastens the sheet to the foresail.

Bowline (pålestikk) gives a loop that won't slip. Fastens the anchorline to the crosswood, the peak fall to the peak, the foresail to the fall, etc.

Fisherman's knot (fiskerknute) joins two ropes securely. For example when belaying to a dock etc.

Double halfhitch is frequently used for mooring, especially small boats (can get locked tight under strong forces). We need to be able to tie this knot various ways: around a tree, over a piling or a stern top, through a ring (“double half hitch *on itself”).

The rigging knot (vanteknut) is used to set the shrouds and is among the basic skills needed in small boats.

Slipping knot (slippestikk) is an important method for fastening running rigs.

We demonstrate how we should belay a clamp – *not* with a halfhitch that can make the rope difficult to untie - and coil up the loose ends (in the direction with the sun).

It is important that the sail comes up – and down! – in a quick and efficient manner. We can practice several times before leaving.

We use the day to practice sailing in protected waters. We bring along ballast: preferably round stones. We row out and raise sail. The routines should be clear: the foresail should normally be raised first, so that we have enough speed to steer and can sail at about half-wind (from the side). Then the mainsail. On the gaff rig the claw fall has to be all the way up before the peak is stretched. Be sure there is order in the boat. Loose ends are coiled up. All running rigs should lie *over* the oars and cargo.

The division of labour in a boat varies, of course, with the type of boat and its size. In a four-oared boat there are usually two crew members: the captain and the *halskar*. The *høvedsmann* is responsible for the rudder, mainsail sheets and any tackle, and navigation. The *halskar* takes the masts, raises the sails, sheets and is backing the foresail – and keeps a lookout.

With increasing boat size and number of crew, these tasks are divided among a greater number of crew: the cap gets help with the mainsail sheets and tackle from a *bakromskar/skautkar* and a *navigator* can take over the nautical chart. The *halskar* gets help from one or more crew in mid-boat, *midtromskar*, who takes care of the foresail sheets and raises the topsail. We define the roles in the boat and divide up the tasks.

By the wind (*bidevind*)

We begin by sailing against the wind, in by the wind or forward wind as it's called in western and northern Norway. This gives us skills that can also be applied in other winds, and it's also easy for us to sail home when it's time to go back (assuming that the wind direction stays the same). We shift places in the boat so that everyone can try holding the rudder, to sheet the foresail and sheet the mainsail. The people coming into a new position get help from those who are familiar with it, so that we learn from each other. One of us has at all times responsibility for ensuring that the boat sails in safe waters.

Everybody should be allowed to try and to learn from experience. But the role of the guide is to get all of the participants to *discover* the following:

- The *wind threads*: the front part of the mainsail should be parallel to the wind threads
- It's best to hold as high as possible position against the wind, but the sails must not begin to shiver (leve), or else the boat will lose speed. A common error is to keep too high sail. We learn to increase gradually and quickly drop off if we get so high that the speed falls off. After a while we can see that the rudder gives less and less effect: we go up a bit in the gusts of wind to increase height, and down again to gain speed when the gust dies down.
- The sails need to be tended in relation to each other. If the foresail is altogether too taut, it will give a backlash for the mainsail.
- The main rule when sailing by the wind is to hold sail as high as possible, and compensate for changes in wind direction using the rudder, not the sheets. The harder the wind, the tauter the sheets and the higher we can sail against the wind.
- If a strong wind gust comes we let the boat rise up against the wind, or – if the rudderman is slow – we let out the sheets to get the wind out of the sails, so that the boat doesn't lie over too much.

These are just small hints about what we can *think* about while we are sailing. It is more important to develop a *feeling* for when the ship is sailing well and when something is not as it should be. This is why the guide should ensure that the ship is well-trimmed. *The participants' experience should be that the ship sails well as the "normal" situation, and that one reacts when things are not in harmony.*

There is a lot we need to know before we can sail. The participants can easily become confused if we take it all at once. Take one topic at a time and let the crew concentrate on that.

When we are going to *tack* (stagvende/baute), we do it so early that there is time to try again if the first try fails. Boat calls: "Ready to tack/about!" (rudderman) "Ready!" (the others). The rudderman can slack off a bit to gain speed. "We're going about", "row in the lee" "we're tacking" "We're turning" "We're going over." The rudderman puts the rudder over. We may need to let out of the foresail a bit when we enter the eye of the wind.

In a good and practical boat we will let all of the sails pull. The mainsail goes over by itself. The foresail and jib are pulled over when they want to go themselves. The rudderman slacks off a bit to get more speed, but luffs as soon as the boat gains speed again. If we have tackle we need to be quick about loosening and tightening these.

A slow boat will often stop in the eye of the wind. Then we need to *bakke* (catch the wind from the foreside of the sail) the foresail. If this doesn't help, the boat will slide backwards. Then we turn over the rudder to get the foresail to cut into the wind.

An inexperienced crew will often use an oar to help when tacking. It's no disgrace to have an oar ready on the lee side just in case. This is why a pair of oars should lie in the boat with the blades facing *forward*, so that it's easy to put the oars in the water in front of the mast.

When we practice tacking we make sure that the manoeuvre is as fast and elegant as possible. Each person does what needs to be done, in harmony, but normally without commandeering or "noise" beyond the "procedure-orders" mentioned above. Waiting for orders for each individual operation takes time and makes each crew member more passive. It is when the boat doesn't have speed, but all the sails are full of wind, that there is a risk that the boat may lay over and take in water over the edge. Speed carries the boat and makes it stable against lying over.

Halvvind (Side wind/half wind/running before the wind)

Slør (half wind)

Lens (wind from the aft)

We learn the names and use of expressions in the relevant situations. If the wind is coming directly from the side we are sailing in *half wind*. If it is coming from behind at an angle we are *sailing in a *side wind* (*slører*). We sheet the sails *in relation to the wind*, as when we were sailing by the wind, or maybe with a little looser sheets. common error is to tighten the sails too hard. People often think that the tighter sheets, the more power in the sail – but it only leads to more tipping, drift and the boat acts "dead." The *høvedsmann* gets the group to note the speed, drift and pressure on the rudder when the sails are too taut – and the difference when we let the sails well out, until just before they begin to flap.

We call half wind, side wind, and *lens* "open winds". Then we don't compensate changes in wind direction with the rudder, as we did when sailing into the wind. We hold a steady course and adjust the angle to the wind using the sheets. The *høvedsmann* makes it clear

that those who are attending the sheets have to be alert and pay attention to the wind the whole time. The person holding the sheets acts alone, but it is the rudderman who follows the trim of the boat at the rudder. Thus he may need to give a message such as "let out the foresail" "pull in the mainsail".

In running before the wind ("lensing"), the sails should be as perpendicular to the wind as possible and be flat. The foresail and mainsail stand on their respective sides. In uneven wind and in waves it may be difficult to fill the foresail. Spreading the foresail with an oar or a boat shake is of course one possibility, but then the sail is fixed in place. That can be dangerous if we should happen to get a sudden gust at an angle. Steering will be easier, and we will keep the foresail from flapping, if we instead tighten the foresail in the middle of the boat with both sheets.

We recall the risk of an uncontrolled jib while sailing before the wind (*lensing*). It is tempting to lace the mainsail with an oar, especially if the wind is strong and gusty, but it is both safer and faster to sail on the side wind and tack with the wind.

We distinguish between a controlled and uncontrolled jib. In an uncontrolled jib the sails swing and hit broadly from one side to the other. This wears on the rigging and one risks losing rigging overboard.

In a controlled jib we make sure the sheets are tight, so that the sail can only swing over a short path. We luff and tighten the sheets and tackle, take good hold of the sheets, then turn the boat's course and control the jerk. Then we quickly let out the sails and the tackle on the leeward side. When jibbing in a strong wind we should drop the peak or take down the diagonal pole to reduce the area of sail. If the wind is hard we put about (tack) even though we are sailing with the wind.

The calls/procedures are also what you would expect here: "Get ready for jib" "Ready" "We're going under" (going under the wind).

Coming into harbour

We should also get into good habits when it comes to returning to our home port. In the harbour we often have an audience – maybe older fishermen who know how to judge our seamanship...

If possible we go from by the wind into the eye of the wind, and glide with a billowing sail toward the goal. In a half wind we can let out the sails, so that the speed drops and we glide in with ruffling sails. If we have an aft wind, we first sail up into the eye of the wind and furl the mainsail, continuing on in with a loose foresail, which we hold and are ready to furl. In small boats it is also entirely correct to sail up into the wind, furl the sails and then row in.

The call for taking down the sails is "Furl the sail". Normally we take down the mainsail first and then the foresail, but if we have a topsail and jib we take these first, in advance. The *halskar* loosens the falls and the person in the middle gathers up the sails in the boat.

We normally draw a small boat up onto land, high enough not to be taken by a high tide. Floorboards can prop up the sides. We are sure to empty the boat while it is on land. Fresh water and rain water, especially, tend to promote fungus growth.

Summary: sailing theory in practical terms

The day has given us a lot of experience. Based on the various questions by the participants, we will try to systematize this business of sailing. Now a bit of sailing theory might be appropriate. These explanatory points can give a basis for understanding:

We have positive pressure on the wind side and negative pressure on the “back side” of the sail (exception: when we sail ahead of the wind). It is primarily the low pressure that provides forward movement. In other words, it is not so much a matter of wind *pushing* the boat forward, as it is the boat being *pulled* forward by the low pressure, especially when sailing by the wind. This is one of the reasons the boat can sail at an angle against the wind. The form of the sail, the bus (blow), is critical for the way the wind moves past the sail, and therefore for the forces and effectiveness.

We get a column of air between the foresails and the mainsail, which increases the speed of the wind on the back side of the sail, thereby creating an even lower pressure and increasing the suctional forces.

The underwater shape of the hull, and the speed of the boat through the water, counteracts tendencies of the boat to slide sideways.

The trim and set of the boat are important. If we load the boat so that it is front heavy, then it will turn toward the wind. We say that the boat is *logjerrig* - it seeks the wind. This is simply due to the balance between the parts of the boat that are over water (the sails) and the part under water. The mainsail makes the aft end blow away from the wind, while the bow lies deep in the water and can't move so easily. If we have a lot of sail in front instead, and load the boat heavily in the aft, it will be *avfeldig* - it turns away from the wind.

By letting up on the foresail (reducing the wind pressure in front) and/or increasing the weight in the front (making the bow sit deeper, so that it doesn't glide to the side as easily) the boat will ride higher up against the wind. This gives an opportunity to trim the boat.

By tightening and loosening the sails we can, in other words, steer the boat. If we are to make a sharp turn *with* the wind, we let out of the mainsail and tighten the foresails. If we are making a sharp turn against the wind we tighten the mainsail and let up on the foresail. We train these kinds of manoeuvres through a “man overboard” exercise, which should be the next step in the progression.

In the evening we also repeat the words, expressions and terms. We talk about wind directions in *relation to the boat* and how the *boat sails in relation to the wind* (the Nordic languages has to sets of terms, making the language precise).

We repeat also basic terms for the manoeuvres and the calls. *Who* does *what* and *when*?

"*Kvar med sitt*" (Every person at their post) – division of work in the boat.

"*Luffe*" /rise: "ride up into the wind" "ride higher in the wind"

"*Falle*": "ride down into the wind" "ride lower in the wind"

"*Ta inn på seilene*" (Bring the sail home). "*Gi ut på seilene*" (Let out the sail "Let the sail give a bit")

Slå/stagvende. (Tack, go about.)

Jibbe/gå under. (Jib.)

"*Ta ihop!*" (Furl.)

Maybe we will have time to put out a net for the night, before forecasting the weather for the next day.

Third and fourth day:

Man overboard and day trip

How did the weather turn out? What kind of fish did we get in the net?

We use the morning for a session where we practice specifically using the sails actively to make sharp turns. We practice this through man overboard-manoevres. This is how we can learn to pick up a cap that has blown overboard, or a mate, if that should become necessary. But above all we get to practice calculating a tack, turning and steering the boat with the sails and getting the wind out of the sails in order to bring the boat to a stop.

First we pick up a life vest – later a half-full, rather large can of water. One of the participants gets the job of holding an eye on the "man overboard". Our task will be to pick the thing up within a few minutes. It should be picked up in the *lee* of the wind, and when the boat has *no speed*.

When things have to happen quickly and in a co-ordinated manner, we discover again how important it is to practice set patterns and habits. One could say that *the safety lies in the procedure*. This means that one tries to do things the same every time as much as possible; that we stick to a clear division of work and tasks in the boat; that the motions be practiced the same way every time; and that we keep to our assigned places in the boat. Thus, the work in the boat becomes part of a secure and effortless rhythm.

Now we begin to get the hang of sailing, but there is a lot to repeat and practice before everyone actually masters it. We use the rest of the day to take a day trip, and in this context we ensure that we have food and clothes along, so that we can manage an unplanned overnight stay somewhere other than our home port.

- We take out the navigation chart and plan the sailing trip. We try to take up these points:
- We explain relevant symbols on the chart
- We draw the various courses on the chart, compute and note the compass bearings, draw a ring around relevant sea markers, etc.
- We be sure to fine alternative paths and ports in case the weather changes
- Distances, speed and wind strength – How long time do we calculate that we will need?
- Local wind effects and creation of waves based on the map (“funnel effect” in sounds, corner effects around points and heads, change of wind direction at a steep mountainside. Change of wind before and after a shower, solar convection winds, etc.).

While planning, we try to recall experiences the group has had before in situations like these.

We try to put the heaviest items in the middle of the boat, mostly under the thwarts. We pack in duffle bags or backpacks without frames – frame backpacks have an uncomfortable tendency to get caught in the rigging. We put only light items in the forward bulkhead, or else the boat will stamp in the waves and it will be difficult to sail and row. We put food, binoculars and cameras in a little sea chest.

We can use our experience with the man-overboard exercise to trim the boat. If we load the boat so that it rides equally deep in the stern end as in the bow, it will be a bit *logjerrig*: it will tend to seek towards the wind, if the wind comes from the side. We can explain this as follows: the bow sits steady, digs itself into the water, while eddies are formed around the stern making it sit more loosely and blow to the side. In sailing against the wind it is an advantage for the boat to be a bit *logjerrig* and turn out of the wind. But too much, and the boat will be hard to steer with the rudder. Then we can put more of the load backwards, or trim the mast/rig more toward the front. When sailing away from the wind, especially in bit high seas, it is an advantage for the boat to be loaded a bit heavy in the aft. Then it is easier to hold the boat on the correct course.

Then we depart. Up to now, the guide/captain has been the one giving commands in the boat. Now we need to establish a good division of work and roles in the boat. Everyone is acting independently, but co-ordinated with clear and short messages or commands, primarily from the rudderman who has the best overview and feels the way the boat is handling at the rudder. The guide should therefore go to the rudderman when he or she feels that something should be done.

We are not afraid to row. Even though we can of course practice tacking in a light wind, the tradition is to “row up” until we get a “standing wind” (“*stående vind*”). Utility boats sail lower in the wind and more slowly in light wind than modern sailboats. As soon as it would be faster to row, one rows. When it would be faster to sail, or when it is blowing so hard that rowing doesn’t provide any power, then we sail. And the utility boats are rigged such that we can continue to sail when the wind gets up. We note in particular that it is possible to sail safely ahead of even very strong wind with just the foresails and a bit aft-heavy boat.

We should make it clear that when we are sailing, we *are sailing*. Even very experienced sailors – especially those! – are normally silent and concentrated in the boat. Practice is required to be aware that the wind and waves are constantly changing and that this requires our full attention if we are to sail as well as possible. Important messages must not drown in “social noise”. “*Kvar med sitt!*” “Man your stations!”

We should motivate by telling why we put so much emphasis on the sailing skills. A boat should sail as well as possible for at least two reasons. The first is safety. A boat that sails well is sailing safely. Speed is a safety factor; it increases stability and carries the boat. If the boat isn’t sailing as well as possible we are out of balance.

The second reason is the feeling. If we are sailing well, we are in harmony with the boat, wind and waves. We feel that we are free together with the boat, not hampered by it.

Sailing races and rowing races don’t just belong to the field of modern sports competition. In the old fishing society it was about being the first one to get to the best fishing spots and the first one back in port to get a good price for the catch. Competitions and individual feats (*karstykker*) was a way of fine-tuning abilities and judgment. It was about proving yourself as a daring *and* safe sailor.

If several boats are sailing together, of course we use the opportunity to race. Trim the boat, stretch the lines, shift the weight and the attachment points for the rigging. We learn and follow the rules of right-of-way at sea: every time we meet a boat, we ask which of us is required to give the other right-of-way, regardless of whether there is a danger of colliding or not. But of course we stick together. A faster boat can practice *standing by/biding by* (waiting) – the simplest way is to sail up into the wind eye and wait with a billowing sail. It is more efficient to sail by the wind, set the foresail windward, and set the rudder as if turning against the wind. The boat glides slowly, back and forth. But the methods for biding by the wind may vary in each case, and is something the *hovedsmann* has to have tried out for the given boat.

We will also practice various ways of reducing the amount of sail. What happens to the balance of the boat if we furl the foresail or fell the peak? We practice furling the sails and discuss what we have to do if we should run aground.

In the evening we have time to go through the points we have touched on. We also have a session on the tackling, splicing, and repair of seams in the sails and a repetition of the knots.

Fifth and sixth day:

Long trip with sailing at night

By this time we should be ready for a longer sailing trip, where we can use all of the experiences we have gained so far. Up to now we have had a large crew on board, and we have pressed them so that everyone has had a task. Maybe we should divide up the group now, if the boat and the crew are large enough for that, in two shifts, so that the rudderman is responsible for the navigation chart as well as the rudder and the mainsail, the *halskar* takes care of all the foresails, etc.

We plan the journey so that we will sail back in darkness – if the site and season allow. Generally speaking, we need to develop the ability to judge where we can sail, so that we can get back safely within a reasonable time frame. If we expect the wind direction to stay the same, we often sail against the wind out so that we can sail with the wind home again.

We set out and sail, then, and repeat the things we have already touched on, or as they come up. We emphasize navigation especially.

Those who have read handbooks and instruction books have probably found navigation to be very complicated. In this field the theoretical/analytical culture really has been allowed to blossom. In our context, there is little point in *starting* with theoretical navigation and exercises with calculations, current triangulations, deviations, etc. These things seldom have very much to do with *finding your way* in the archipelago.

We learn that the knowledge that was borne by tradition was the ability to *recognize where you were*, to recognize the place. Along our coast, the *Norveien*, the place-name researchers tell us, the names are *individual*: each place is a specific sailing marker, with its own (often descriptive) name. Later, these sailing-markers and navigation courses were improved with beacons, painted spots, stakes and other sea markers. It is only in recent times that the marking has been intended for use by sailors unfamiliar with the waters as well.

There is no need to start by making navigation in the archipelago more complicated than it actually is. In daylight it is enough to following along on the navigation chart, identifying the sea markers. It is a good habit to *read the chart aloud*, section by section, as we usually do when orienting ourselves. It helps to orient the chart north-south, divide the journey into sections and mark the main orientation points with a pencil. We let the compass controls our choice of route and direction.

When we are sailing, we *notice* that the boat is drifting – the difference between *hold* (course) and *høgde* (direction), as the traditional terminology goes. We notice that

currents and tides are realities, and we learn to predict the conditions when we, for example, make judgements about whether we can sail through narrow sounds. Anyone who wants to can entertain themselves by quantifying these factors.

(A captain needs to take navigation more seriously. Especially on longer sailing trips crossing a sea, one must be able to correct the course for inaccuracies, drifting and currents, as well as deviation if this is an issue. One must be able to judge the speed of the boat by various methods, and read a correct course with a protector. Navigation in the archipelago is relatively uncomplicated – but anyone who wants to practice and develop their abilities for a longer sail should use all sailing trips to become more confident of their own navigation ability).

After a long day of sailing, it is time to look for a safe port. If we have previously pulled the boat up onto land, it would be a good time now to have a session on moorings, if we are in a larger boat. We practice searching on the map for a port that really gives shelter, not just from the wind but also from waves. It should have enough depth when compared to the tides.

The guide should be aware that many inexperienced sailors have a strange belief that an anchor will give the safest mooring. It is better to try mooring the boat with all the mooring ropes on land, if possible, and with the boat parallel to the wind direction. It is practical to try sailing up to a small headland, unloading the boat and then pulling it to the side. We need to remember to have long enough ropes, so that sinking tides don't break the moorings.

It is especially important to moor the boat parallel to the wind if we need to moor the boat using the anchor. We basically try to put the anchor in lee of the wind, and the land moorings in windward direction. If we must have the anchor against the wind, we put out a long anchor line, ensure ourselves that the bottom is good and that the anchor is really set. We recall that in crowded harbours with a lot of boats in the vacation period, long anchor lines are often not left alone by other boats, not to mention those little "babysitter dinghies".

In many harbours we have to moor the boat on bare rock. One or preferably several ropes (*spring*) to land from the bow to the side, and the anchor out to the other side, also from the bow. Then the boat itself can be parallel to the wind.

Then we plan our sailing trip in darkness. Here we need to recall that it is actually tradition to sail during the day and stay still at night in the dark part of the year. By sailing in the dark we are dependent on following a course with lights, and we need to take other traffic into account.

It may suit us best not to sail the whole night, but preferably to leave in at dusk toward a harbour that we know is safe.

The weather means a lot, of course. Do we expect even winds, still winds, or has the weather been unstable? In general one can say that a warm front advances faster if the weather before has been shifting. A gradually building high pressure area signals a stable period.

If, on the other hand, there is quite a lot of wind, possibly the passage of a front, we should preferably start at dawn and row or sail toward daylight. If convectional wind is part of the picture we will normally have the calmest wind conditions just before the sun has risen a bit into the sky.

We use the day to rest and plan our journey. We draw in the route on the map, plan the journey section by section, note the kinds of lighthouses, etc. Based on previous experience we try to predict what kinds of wind and wave conditions we could encounter. If several boats are sailing together, we should *stay close together*. If not, we need to agree on meeting places that are well sheltered underway. It is surprising how easy it is to lose contact in the dark. Therefore we should agree on what to do if we should find that we don't meet at the meeting places.

In the dark we need lanterns, or in a smaller boat we at least need to be able to cast white light around us. It is most effective to cast light on the sail. If we don't have lanterns we must keep away from other traffic. And at night we have to assume that other traffic is commercial traffic, which we need to be very aware of under all circumstances.

We make sure that there is good order in the boat and that we have warm clothes, food packets and drinks.

Review of the whole trip

After the trip there is more practical work to be done. Sails need to be dried, equipment and boats put in the boathouse, etc. The trip isn't over until this is done. Simple repairs and regular maintenance are also tasks that are part of the trip.

A review of the trip should give everyone an opportunity to put into words their experiences and feelings. We can divide this into three points:

- What have we learned? (skills, nature, culture, etc.)
- What have we experienced? (values, qualities, special situations, impressions)
- How have we learned and experienced? (by doing, through progression, awareness-raising, summing up)

In this way we can confirm and discuss what we have learned, how we have felt throughout and how we have learned. We end up with a summary and evaluation of the programme, and of course we allow ourselves to emphasize the best aspects of what we have experienced together.

The participants, then, often get us to say something about what we feel they have learned – or not. They – and we – tend to assume that it is the formal training that gives competence.

We remind them that there is of course no shortcut to solid practical competence when it comes to utility boats. Each individual person needs to get more individual experience, time sailing and using the coast under varying conditions.

But – to really learn, it isn't enough to just let things pass by. We need to actively *use* our own senses and experiences, become aware of what is happening, systematize and reflect on what we experience – as we have tried to outline in this programme. This approach of learning more consciously and systematically from our own experiences is something very few have learned in school.

Here it is appropriate to recall again some of the thoughts in the introduction to this article. Knowledge in action – like sailing a boat – can help us to develop characteristics that normally are lying dormant. We open our senses, become sensitive to what is happening around us and with us. We learn not only to understand, but to act, in concert with a boat, wind and waves. We feel freer. These are abilities that enrich us as people, and which we can use in everyday life.

Hovedsmennene (captains) discuss their experiences

In a guiding programme like this we are usually several captains who are responsible for their respective boats. Some of the captains are also often “in training.” We use our relevant experiences to discuss issues about the learning programme, content and requirements for and qualifications of the captains.

It is confirmed time and again that the most important element for the learning outcomes for the participants – including pure knowledge part – is the *social climate* that we can create together in the group. Each individual needs to be met as a valuable participant – not just as a more or less able “pupil” all the time. We learn the most in situations where we experience that we are *good at something*. The programme should also have space for someone who isn't used to boating to make his or her contribution to the group life. For example by *asking questions*, so that the whole group can become more aware of what is happening.

The co-operation and assignment of roles in a boat can provide a metaphor for the co-operation in any kind of group. In a boat we have to “interplay” together, improvise together. A structure needs to be found for this interplay, and we see that the captain and rudderman have a co-ordinating role. If this role is not filled, the interplay will function poorly. Then we are not sailing in the same boat.

In the same way, each group has to have a manageable and clear structure, where everyone can be a participant and have responsibility, if good co-operation is to have a chance to develop. The person responsible for creating this structure in the programme –

the guide – must fill this role in a good way, with self-confidence, flexibility, clarity and openness.

Good leadership is to a large degree a matter of acquiring some simple techniques. But behind these is something that is not technique. Such as *a feeling of responsibility, caring for others, the sense that things in fact matter.*

This is the essential foundation. A person who develops these attitudes in themselves, can also develop abilities and techniques that allow the caring for others to be expressed in practice. Among these are:

- Trying to get an *overview* of a situation. Seeing the totality. How do we feel, both individually and as a group with participants? Where are we with regard to the goals of the programme?
- Thinking *ahead* in time. What do we need to think about now, soon, in the course of the day, in order to do what we want to. The ability to organise. The ability to use time, without either “stress” or “dead time.”
- Asking themselves: what can *I* do now, to make the total situation as good as possible? The ability to take initiative. The ability to cut through and act on their own and by taking responsibility when safety and/or important human values are at stake.
- The ability to *call the group together* to clarify an issue by engaging the participants in it and letting various viewpoints be expressed. To sketch various alternatives and get the group to agree on a solution. Give clear orders when needed. To create a good tone, and let others have the floor.
- The ability to ask oneself what is more or less important, and to make judgments and set priorities based on this. An intuitive understanding of the situation.

Pedagogically, we have tried in this article to outline a progression and some important points in the progression. But each and every leader must develop their own style on the basis of their personality and personal experience. We should be aware of that one might often copy without thinking more about it the learning formats one has experienced in school. For example, giving long theoretical explanations *before* the group has had the experience needed to follow along.

Pedagogically speaking, it is critical that the guide/hovedsmannen *knows the subject matter*. In all education we are role models – positive and negative. We make an impact not only by the way we “teach” but by our whole selves.

An important task for a guide is therefore to develop his or her own competence to a high level, but also to develop their own attitude toward sailing and the coastal culture. And

not least, attitudes toward human interaction: letting the best sides of a person come to the fore. This issue of working with other people is therefore a kind of self-education, in which we always have opportunities to improve.

Safety is one thing, the *feeling of being secure* is partly something else. The latter is also important. A person who isn't used to seas and wind in a little boat may – even though the situation is objectively speaking safe – feel insecure and afraid. We should keep in mind that our task is not just to convey abilities, but also to provide good experiences in the outdoor life on the coast. We are supposed to help develop friendship with the coast. The coastal nature and the coastal culture need *friends*.

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