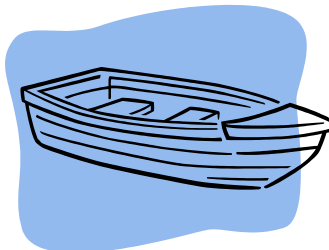
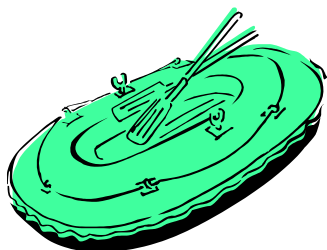


BIO guidelines for fieldwork on lakes in *small boats*



These instructions apply to staff, students, interns, guests etc. at the Department of Biology (BIO).

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1. General rules

These instructions are prepared for working in the temperate zone, e.g. Denmark. In the event of sailing in Arctic regions, extra precautions must be taken that are not described in these instructions. Please refer to special instructions for [fieldwork in the Arctic](#).

Read and follow these instructions and keep in mind that the Working Environment Act and related executive orders apply to all work, except for work carried out in connection with the sailing, here the Merchant Shipping Act applies.

The Merchant Shipping Act: www.sofartsstyrelsen.dk

Workplace assessment for fieldwork from a boat: A risk assessment must be made prior to commencing work, unless a previous workplace assessment can be used, as these risk assessments are largely generic.

Fieldwork that is considered to pose a safety risk must, as a rule, never be carried out by one person alone (e.g. sailing, diving and electro-fishing). If the boat can only carry one person, another person must be informed that you are in the field, so that they can take action in the event that you do not return or check in.

In many accidents, cold is a major factor. Cooling reduces our capability of reacting and contributes to accidents taking place more easily. In case you fall into cold water, your strength is quickly reduced, and many people who are officially listed as having died from drowning have actually died from cooling.

Avoid smoking near flammable liquids, e.g. petrol.

2. Information on legislation:

In Danish waters, you are allowed to sail vessels weighing less than 20 gross registered tonnes commercially without obtaining permission from any authority or passing a test. This liberty of sailing leads many to believe that there are no rules and regulations for navigation; but there are. Rules and regulations of the sea are equivalent to the rules that we are subject to on land. They cover liability, damages, traffic, regard for others and much more. Those who sail are obligated to help those in distress at sea.

All boaters should know that any boat must have a master, and that this person is responsible for safe navigation and for the safety on board. If an injury or accident should occur, the owner or operator of a boat involved may be liable for the accident, and the operator may be penalized for violating provisions that have not been complied with. Merely exhibiting poor seamanship may be a criminal offence. So it is important to establish who is the responsible master of a boat.

3. BIO guidelines for fieldwork on lakes in boats

A responsible boat master must either be trained in professional sailing or have completed minimum training in traffic on the lakes. For further information, please contact Jens Peder Hounisen in Kalø or Ivan Nielsen in Silkeborg.

- Assess the weather YET AGAIN. Use DMI's website (www.dmi.dk). The boatman is responsible for making the decision as to whether it is safe to be on the water that day.
- On any boat, there must be a responsible boat master who must be trained in navigation
- There must be a float/life jackets for all occupants. When sailing between the months of October and May, the boat master should consider whether all occupants should wear a flotation suit or diving suit. These must be worn if the boat boatman deems it necessary.
- In case the weather turns bad, go ashore.
- Stay near the boat if it capsizes or fills with water. This does not apply if you can safely reach in the shore without assistance.
- There should not be more people and equipment on board than the boat is intended for or can carry safely. Distribute people and gear evenly in a small boat.
- In as far as possible, do not stand up in a small boat.
- Do not change places all at once in a small boat.
- Adjust speed according to the boat's condition and load, weather conditions, fishing gear, local conditions, etc.
- It is recommended to hold "man overboard drills" approximately once a year.

4. Bring safety equipment

1. two oars + oarlocks (or paddles, if it that is enough)
2. a bailer (can be a bucket)
3. anchor
4. compass
5. necessary spare parts
6. reserve fuel for motor boats
7. charged mobile phone w. extra battery or VHF where there is no mobile coverage
8. a change of clothes
9. possibly PLB, if this is available

5. Diving

When working under water, a distinction is made between snorkelling and diving. The term diving usually involves scuba diving. This means diving with apparatus and a tank.

Diving in connection with work for BIO must follow the rules for performing the work and for diving equipment, as laid down in relevant laws and regulations. For further information, contact Michael Bo Rasmussen in Silkeborg or Karsten Dahl in Roskilde.

6. Electro fishing

Electro fishing may only be carried out by persons holding a permit. The permit is personal and must be brought with you every time electro fishing is performed. In addition, the holder must be able to document with appropriate ID that he is acting in an official capacity.

For safety reasons, electro fishing must always be performed by at least two persons. All participants must be familiar with the dangers of handling electrical voltage.

Course and permit can be obtained from [DTU Aqua](#) at Tel. + 45 35 88 33 00.