

The Green Guide to Coastal Boating



A joint environmental programme

Brought to you by:



The Green Blue is an innovative environmental programme developed by British Marine and the Royal Yachting Association.

To help boaters think and act in a more environmentally conscious way, **The Green Blue** has designed this simple guide which is packed with advice and tips.

We hope it will inform the recreational boating community about their environmental impacts, emphasising how they can avoid or minimise these effects by taking a few simple steps.

The Green Blue is for everyone who enjoys getting out on the water, or whose livelihood depends on boats and watersports. By working towards an environmentally sustainable boating community, we can save money, avoid red tape and safeguard the waters and habitats we enjoy for the future.

Find out more at:

www.thegreenblue.org.uk

Making the environment second nature

How to...

use oil & fuels

What's the problem?

Only about 5% of oil and fuel pollution in the water is from catastrophic spills, the majority comes from every day sources such as refuelling, engine emissions and oil leaks. The legal limit for oil and fuel in water discharge is roughly one drop of oil in two litres of water (15mg/l). Any more and wildlife and habitats can suffer.

Did you know? One litre of oil can pollute one million litres of water.

What can I do?

- Check the bilge is free from oil before pumping.
- Install an in-line bilge filter to remove oil when pumping out bilge water.
- Use an absorbent sock to control oil and fuel in the bilge.
- Make sure you use a large enough funnel if you have to refuel onboard.
- Maintain fuel lines, connections and seals to avoid leaks.
- Transfer waste oil and fuel in proper containers.
- Remember that oily or fuel-soaked materials are considered hazardous waste so dispose of them in appropriate facilities.
- Avoid overfilling the tank and allow room for the fuel to expand.
- Never use detergent to deal with spills – it may disperse the fuel or oil and save you embarrassment, but it can do even more damage.
- On shore try not to use oil and fuel within ten metres of the water.
- Use a fuel collar to catch drips or blowback when refuelling.

Where can I find out more?

For your nearest disposal centre:

www.oilbankline.org.uk

Key facts and legislation:

<https://www.gov.uk/oil-storage-regulations-and-safety>

Report incidents in Northern Ireland. England, Wales and Scotland on the 24 hour pollution hotline: **0800 80 70 60**



clean your boat

What's the problem?

Most detergents contain phosphates which can cause algal blooms and oxygen depletion and can suffocate aquatic life. Products used on boat hulls and decks can also contain chlorine, ammonia, potassium hydroxide and solvents as well as other chemicals which can affect the way wildlife feeds, breathes and breeds.

What can I do?

- Choose environmentally friendly products for cleaning and maintaining your boat. Avoid chlorine, bleach products and phosphates in particular.
- Use non-toxic solutions wherever possible, water and elbow grease are great!
- Waxing your hull keeps you fuel efficient and reduces the need for cleaning products.
- If cleaning the hull of your boat, only scrub off the fouling and not the underlying paint – be careful not to let waste material enter the water or run into surface water drains.
- If you have a washing machine onboard use a detergent-free washball.
- It is good practice to regularly bring your boat ashore to clean and remove any fouling from your boat and equipment e.g. hull, rudder, propellers, fenders and ropes, to prevent the spread of aquatic Invasive Non-Native Species (INNS) around our coastal waters

Where can I find out more?

Where to buy environmentally friendly cleaning products for your boat: www.sailingnetworks.com/green

For more information on how to prevent the spread of INNS please refer to the 'How to avoid spreading Invasive Non-Native Species' section of this guide.



How to...

renew your anti-fouling

What's the problem?

Anti-fouling paints work largely by releasing biocides (pesticides) into the water. Most paints and used brushes, rollers and trays are now classified as hazardous waste. These toxins can build up in the food chain and cause wide ranging environmental problems.

What can I do?

- Prevent anti-fouling from unnecessarily entering the water. Catch scrapings and drips by skirting the hull and using a tarpaulin. Don't leave a coloured patch under your boat!
- Check your drains - avoid applying and removing antifoul near rainwater drains where paint and scrapings can directly enter the local environment.
- Only scrub off the fouling and not the paint especially when using scrubbing piles. Be careful not to let the debris enter the water.
- Encourage your marina, club or boatyard to collect and properly dispose of wash down residues.
- Select the right antifoul for you, choosing the lowest levels of biocides and copper suitable for your needs. Contact your paint supplier for more information on the best type of antifoul for your boat and level of usage
- Use low VOC (Volatile Organic Compounds) where possible.
- Look into more environmentally friendly, non toxic, foul release technologies such as Vinyl or Silicone.

Where can I find out more?

Recommendations and regulations:

<https://thegreenblue.org.uk/antifoulandinvasivespecies>

www.rya.org.uk/go/antifouling

Antifouling your boat safely:

www.safeantifouling.com



How to...

watch your waste

What's the problem?

Marine litter consists of a wide range of materials, including plastic, metal, wood, rubber, glass and paper, however it is dominated by plastic which accounts for 80% of the items found on beaches in the North-East Atlantic.

It is estimated that more than a million birds and thousands of marine mammals and turtles die every year from entanglement, or ingestion of plastics alone.

What can I do?

- Don't throw anything over the side, including food.
- If you smoke, keep a butt tin in your pocket for cigarette ends.
- Use starch-based rubbish bags which can be composted.
- Prevent loose items from blowing overboard.
- Prevent chemicals entering our oceans by using products which contain natural ingredients.
- Avoid products that may contain micro-plastics e.g. some face/body scrubs, toothpastes, cosmetics and other cleaning products. One ingredient to look out for is 'polyethylene'.
- Remove excess packaging and recycle it at home.
- Recycle more - most marinas, clubs and harbours now have recycling facilities for you to use. Alternatively recycle items at home or take them to your local refuse centre.
- Reduce waste, avoid using single use plastics where possible, e.g. refill re-usable bottles instead.
- Don't contaminate general waste by throwing hazardous items in the wrong container e.g. paint tins, oily rags and old electronic instruments.

Where can I find out more?

Find local recycling facilities:

www.recycle-more.co.uk

Waste management information:

www.rya.org.uk/go/waste



How to...

use resources sustainably

What's the problem?

Global warming is now accepted fact by the world's scientists, so sea level rise and more extreme weather conditions will have a significant effect on the recreational boating community. Increased flood risk may mean the loss of some water side facilities, damage to existing facilities and increase in insurance prices.

What can I do?

- Everyone has a responsibility to cut their emissions. Consider the alternatives available – from electric and biodiesel engines to water lubricated stern glands.
- Change to low energy electrics and use solar or wind energy where you can.
- Think about emissions and ability to recycle when buying kit or craft. Ask about the environmental policies of businesses and manufacturers before you buy.
- Try to only use FSC certified wood from responsibly managed forests.
- Avoid using single use plastics where possible. Refill reusable bottles for example.
- Keep your hull clean, engine running efficiently and trim the engine to minimise fuel consumption. Set off earlier so you can sail all the way!
- Buy local produce as much as possible to reduce food mileage.

Where can I find out more?

Makes sense of climate change:

<http://www.mccip.org.uk/adaptation-action/uk-marine-leisure-industry>

Reduce your carbon footprint:

www.carbontrust.co.uk

www.energysavingtrust.co.uk

Fill up on biodiesel:

www.biodieselfillingstations.co.uk



How to...

discharge sewage

What's the problem?

Untreated sewage from boats can spread gastroenteritis, contaminate shellfish beds and mussel ropes and use up vital oxygen in the water. Human waste also contains phosphorous and nitrogen which increase levels of algae and reduce water clarity. Chemicals such as chlorine, formaldehyde, ammonium and zinc compounds used to disinfect, breakdown and deodorise waste are toxic to marine life.

What can I do?

- Only use sea toilets in the open sea where waste will be quickly diluted and dispersed.
- Always use pump-out facilities where available. If you have to empty your tanks only do so more than 3 miles offshore.
- Take extra care in areas of poor tidal flushing, such as marinas, or where there are shellfish beds. Use shoreside facilities where possible.
- Chemical toilets must be emptied ashore into the regular sewage system. Plan ahead – they can be difficult to carry and few pump out facilities will accept chemical toilet waste.
- Consider fitting a holding tank to your boat, it is law in some European countries.
- Always give consideration to the environmental sensitivity of the area before using your sea toilet.

Where can I find out more?

Regulated under Annex IV of MARPOL:

www.imo.org

Sewage and waste management information:

<https://thegreenblue.org.uk/sewageandwaste>

Directory of pump-out facilities:

www.thegreenblue.org.uk

The Green Blue's holding tank installation guide:

<https://thegreenblue.org.uk/holdingtankinstallation>

Details on rules for holding tanks abroad:

<http://www.rya.org.uk/go/boatingabroad>



How to...

cut noise & exhaust fumes

What's the problem?

Noise and exhaust fumes are unpleasant and can spoil our enjoyment of a peaceful day on the water. What's more, noise can have a detrimental effect on the wildlife that lives and breeds along our waterways, and exhaust fumes contribute to poor air quality.

What can I do about it?

- Regularly service your engine to lower fuel costs and emissions.
- Use CE marked outboard engines manufactured after 2005 or electric engines to increase fuel efficiency, reduce noise and decrease emissions.
- Fitting sound insulation around the engine can cut noise by 85%.
- Vibration absorbers can also reduce structural noise by 85%.
- Consider an electric powered craft. They have low emissions and are very quiet.
- Try switching to biodegradable hydraulic and lubricating oils.

Where can I find out more?

Electric boats:

www.electric-boat-association.org.uk

Go shopping at the Green Directory:

www.sailingnetworks.com/green

The Green Blue's 'Green Guide to Outboard Efficiency':

<https://thegreenblue.org.uk/outboardefficiencyguide>



How to...

avoid spreading invasive non-native species

What's the problem?

A non-native species is any wild species that is not normally resident and not a regular visitor to Great Britain. Some non-native species are completely harmless but others, known as invasive species, have the ability to cause damage to the environment, the economy, our health and the way we live.

Aquatic invasive species can block up waterways, harm the environment and can damage boat engines and props. They can be spread in a number of different ways including by hitching a ride on boat hulls, anchors and propellers or being carried in ballast and bilge water. Once established, they can become extremely difficult and expensive to eradicate.

What can I do?

- For boats regularly removed from the water, remember to Check, Clean, Dry. Remove all visible plant and animal material and put in the bin. Use freshwater to wash down all parts of the boat (including outboard, trailer and trolley/vehicle tyres). Drain all water from the boat, including bilges and flush the engine with clean fresh water before leaving, allowing the water to drain completely from the engine.
- Wash and then dry all equipment, clothing and footwear for as long as possible.
- If the boat is on the water but not in use for a period of time, if possible, raise propellers out of the water to minimize the risk of species entering the engine.
- Use your boat regularly to prevent biofouling of the hull and engine - consider pulling the boat out if you don't need it for a while.
- Lift your boat from the water, scrub and antifoul annually to prevent the spread of non-native species and also improves fuel efficiency.
- Avoid sailing or motoring through plants and weed if possible. This can chop them up and spread them further. If caught up on the hull or propeller, invasive alien species can be transferred to another area.
- If an anchor has been used, wash off both the anchor and chain before stowing.

Where can I find out more?

Report sightings in Great Britain:
www.nonnativespecies.org/alerts

Download leaflets, posters and guidances:
www.rya.org.uk/go/alienspecies
www.nonnativespecies.org/checkcleandry



How to spot...

invasive non-native species

Carpet Sea Squirt

Didemnum vexillum

Pale orange, cream or off-white colonies forming extensive, thin sheets. Firm, leathery texture and veined or marbled appearance. Recorded in marinas and adjacent shallow artificial submerged structures. Can also occur on natural cobble or gravel seabed to 80m depth, in tide pools on shore, in seagrass beds and in aquaculture installations.

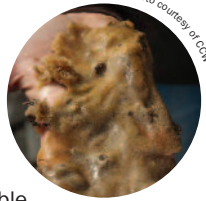


Photo courtesy of CCW

Killer Shrimp

Dikergammarus villosus

A highly invasive shrimp, larger than native freshwater shrimp species, growing up to 30mm in length. Often has a striped appearance.

A voracious predator, killing invertebrates and small fish. They require hard banks, slow flowing water and are salt tolerant so can also colonise brackish coastal habitats.

Photo courtesy of EA



Wireweed

Sargassum muticum

A large olive brown seaweed with fronds over 1m long. A main axis bears alternating secondary branches giving it a washing line appearance out of water. Grows on hard surfaces in rock pools and in shallow water.

Wireweed competes with native seaweeds and seagrasses through rapid-growth, shading and abrasion. It is a nuisance in harbours and shallow waters where it is a hazard to boating (entanglement of propellers).

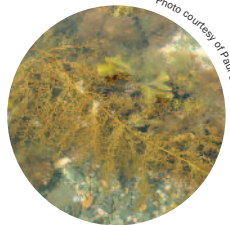


Photo courtesy of Paul Bazler, CCW

Chinese Mitten Crab

Eriocheir sinensis

A large crab with a maximum body length of 56 mm. The body is quite square in outline. Olive green colour with paler legs, which are twice the length of the body. The most obvious distinguishing feature is the dense mat of hair on the claws. Juveniles occur in lower estuaries and marine habitats. As they develop, young crabs migrate upstream, into freshwater and brackish systems.

Photo courtesy of Stephan Gollasch



How to...

appreciate wildlife

What's the problem?

The world's oceans support an estimated 10 million species but less than 3% have been identified. Our waters are also home to the world's second largest fish, the Basking Shark. Annually the UK hosts almost 6 million migratory waterbirds, which is almost 50% of the EU's population! However numbers are falling most likely because of climate change and pressure from development and disturbance.

What can I do about it?

- Think speed, and be steady, predictable, quiet and cautious around marine wildlife. This is the rule of thumb whether you spot something in the distance, whether something pops up on the port side, whether you use a smaller craft that can reach shallower depths or whether your passage takes you by seals hauled out on rocks or colonies of roosting birds on the cliff edge.
- Don't outstay your welcome if you take a moment to enjoy the experience, don't chase or follow to get a better view, and think about what might be above, alongside and underneath your boat.
- Disturbance can be caused by noise, proximity, wake and erratic movement and most marine species are protected by legislation which makes deliberate disturbance an offence.
- Remember to look out for local advice and marine codes wherever you choose to go boating as they can offer a wealth of information on what species you might see, any special characteristics and any local protections you need to be aware of.

Where can I find out more?

The Green Wildlife Guide for Boaters:

<https://thegreenblue.org.uk/wildlifeguide>

Protected marine species and legislation:

<https://www.gov.uk/government/publications/protected-marine-species>

<http://www.snh.gov.uk/protectingscotlandsnature/protected-species/>

Protected features and areas:

www.magic.gov.uk



How to spot... **wildlife**

Common or harbour seal

Phoca vitulina

Adult grows to between 1.2 to 1.9m. Muzzle short and concave. Face has a dog-like appearance. Coat has mottled pattern of spots, varies in colour from light grey to dark brown. Nostrils joined at base in a 'V' shape. Frequents sandbanks in estuaries and rocky coasts.



Leatherback turtle

Dermochelys coriacea

Largest turtle in world, grows up to 3m. Distinctive soft shell with longitudinal ridges. Black with white spots.



Common dolphin

Delphinus delphis

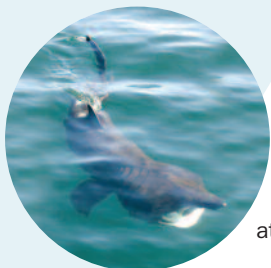
1.6 to 2.6m in length
Slender, torpedo shape and hourglass pattern. Often has pale grey centre. Cream or yellow patches on sides near head. Very active and agile, often jumping and somersaulting. Sometimes travels in large groups.



Basking shark

Cetorhinus maximus

Second largest fish in the world. Grows up to 11m in length. Large, angular dorsal fin. Cavernous mouth, white inside. Swims slowly at surface feeding. Seen most often in summer.



Find out more at:

www.thegreenblue.org.uk

Making the environment **second nature**



RYA **BRITISH MARINE** 
A joint environmental programme

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