



Leave no Trace Afloat!

May on the water resources

These resources are produced by the **Programme Team (Sea Scouting and Water Activities)** to encourage everyone to learn about and get on the water this Summer!

This resource is for all Scout Groups which take to the water, not just Sea Scouts!





This resource attempts to show how *Leave No Trace* has as much application to our seas, rivers, canals and lakes as to our mountains and forests.

- More and more of people are engaging in a wider range of water activities such as inshore and coastal sailing, canoeing, windsurfing, angling, power boating, surfing jet skiing, cruising...
- Therefore our collective mark on the environment is increasing.
- Even the most thoughtful visitors “leave a trace” and unintentionally impact on the resource.



Examples of impacts by recreational activities on the water include:

- Erosion of banks and shores;
- Trampled vegetation;
- Polluted waters (fuel spills, waste water and waste food);
- Decreasing recreation experience of others by noise, inappropriate activities, disturbing others with wakes of craft;
- Slipways blocked with equipment or vehicles;
- Littering; and
- Impacts on wildlife – including displacement of species or spread of invasive species.



Leave No Trace is a set of guidelines which works on an ethical approach – doing the right thing because its right!

Policing is not an option for most outdoor recreation activities including water sports so we must all have a mutual understanding of how we should act.

Leave No Trace is about taking ***personal responsibility*** and has 7 principles:

1. Plan ahead and prepare
2. Be Considerate of Other Users
3. Respect Wildlife
4. Travel (and Camp) in appropriate areas
5. Leave What You Find
6. Minimise the Effects of Fire
7. Dispose of Waste Properly



Principle 1: Plan ahead and prepare

- Are you competent to undertake the trip?
- Check weather and tides– will it allow you to make the voyage safely without unnecessary risk to you or to others (ie rescue services)?
- Plan your route - Have you the correct chart, have you informed someone of the route and the ETAs? Will anything about it have an environmental impact or an impact on the enjoyment of others?
- Check your boat and safety equipment – ensure your boat is seaworthy. You have flares, PFDs and extra clothing?
- Is there access to the water – have you permission to access the water and/or its shores?
- Is all your food packed in sealable containers?
- Have you made adequate provision for waste disposal, waste water, personal hygiene and sanitation?



Activity:

Make a “LNT plan ahead” checklist for waterborne activities to be used by your section.

It should be possible to use your checklist then for any activity in the future. It might include some of the items mentioned above along with your own ideas of important things to consider in advance of taking to the water.



Principle 2: Be Considerate of Other Users

- Respect other water users;
 E.g. Swimmers and anglers when close to shore
- Stay in designated areas;
- Mind your speed;
- Power craft users should avoid creating a wake which disturbs other users;
- Know and follow the “Rules of the Road” at all times;
- Stow your launching trolley safely - avoid blocking slipways for other users;
- Keep the noise down - Noise travels easily across water;
- Leave fishing equipment and navigation marks alone – these support those that work at sea.



Activity: It's Not Just You!

Objective: To identify the number of different users of recreational waters and the considerations we must make to all work together.

Materials: Flipchart/whiteboard.

This is a simple discussion, beginning with, each person saying the different activities they like to do outdoors and on the water, as each new activity comes up write it on a board. Now once everyone is finished, ask have we left any users out? Again go around allowing people to suggest other users, such as fishermen, farmers, ecologists, rangers, researchers, occasional recreational users, rescue service members etc. Now put to your group, some discussion ideas:

- Do our activities impact on any of the other users, and how?
- How can we be more aware and considerate of other users?
- What is the difference between recreation and livelihood?
- Does one have more of a right to the water than the other?
- How would they feel if their work could be impacted by the general public?



Principle 3: Respect Wildlife

- Stay a safe distance from breeding sites of seals, sea birds and other marine animals;
- Remove all fishing lines, bait etc when leaving. These can harm sea birds and other sea animals;
- Keep speed limits and avoid disturbing wildlife;
- Wildlife will nest and forage at the water's edge – speed limits are designed to minimise the impact;
- Be aware of wildlife at the water's edge especially at sensitive times such as breeding season;
- Ensure you take all provisions against fuel leakages and minimise the need to refuel while on the water;
- Ensure food and water waste are not introduced to the ecosystem.



Activity: Role Reversal

Objective: To help participants understand ways in which they may be disrespectful to wildlife.

Materials: N/A.

First, ask all to imagine that they had a guest in their house who ate all the food, left litter on the floor and dirty dishes in the sink, walked on the carpet with dirty shoes, etc. Explain that, when we take to the water, we have a responsibility to treat animals' homes with respect. Next, have Scouts pick their favourite animal or sea creature. Give them each a minute or two to describe how they would feel if it were shown disrespect by humans. Have them verbalize what that animal would say if it could speak its mind. Examples, an otter that had its home destroyed. Then ask each person how humans could have behaved in a way that would have shown respect to them. Check with local authorities to learn how wildlife in your area is shown disrespect and be sure to discuss this with your participants.



Activity: Animal lives (I)

Objective: To look at the inadvertent impacts humans can have on wildlife.

Materials: A set of cards printed with the scenarios on them (see below).

The basic premise for the game is that there are 2 scenarios - there are two cards for each one told from a human perspective and an animal perspective. The aim of the game is to read your card and figure out; first, are you a human or an animal and then talk to the other people to find out what's happening in their scenario and see if it matches yours. As each animal has a human partner. It is useful to put a picture in the corner of each scenario card to give a clue to who their partner is. Eg. give the Venture Scout a picture of an otter and the otter a picture of a Venture Scout with some Beaver Scouts.

Humans:

1. Children throw sticks at a pregnant otter

You take a group of 10 Beaver Scouts out for a walk in autumn to a riverbank. You know all the really interesting spots to bring them. They stop by an otter holt (den), they are fascinated by it and start shouting "hello" into it and they give 'presents' by throwing sticks and stones at the holt

2. A photographer tries to photograph sea birds on an offshore island

A photographer comes across a flock of sea birds on an offshore island from his boat. He tries to get close to get a picture but they scatter and he is unsuccessful. He reckons that they haven't gone far. So he waits until they return, but the same thing happens and still no photo. He tries for a bit longer, but eventually he gives up after a few hours as light is fading.



Activity: Animal lives (2)

Animals:

1. A pregnant otter attacked with sticks and stones

Today I was sitting minding my own business in my home when all of a sudden I could hear a thudding sound it was people walking by and by the sound of their voices they were young. I started to get nervous as I am heavily pregnant; my pups are due any day. I have to clean out my holt again because they threw loads of stone and twigs down here, some of which actually hit me.

2. Sea birds being pestered by a photographer

I'm telling you guys I can smell something. What is it? Oh look over there! It's another one and it's got one of those things they put in front of their face. Ah here look its trying to get closer. I can't eat with it staring at me. I'm going just over the next hill so it can't see us. Yea we're coming too. For crying out loud its back again, are we ever going to get to eat in peace today? 3hrs later - well thank god for that, it's gone at last, I am weak from hunger. Let's get some food into us.



Principle 4: Travel (and Camp) in appropriate areas

- Use designated launch sites to access water.
- Stay in designated areas for windsurfing, jet skiing, swimming etc.
- Avoid fairways (corridors for large vessels to enter ports)
- Know what vessels you are likely to encounter and what the relevant rules are for giving way
- Pay attention to other users and take early, substantial and safe avoiding action if you are the vessel giving way
- Avoid sensitive areas such as sand dunes, fragile river banks for launching or recovering boats.
- Use designated campsites or camp on durable surfaces when camping on beaches, river banks or islands.
- Research the areas you are travelling to, and observe conventions. For example, Ireland's Eye is a popular rock climbing location but climbing does not take place during the seabird nesting season of April to July.



Activity: Campsite Selection

Objective: To discuss issues to be aware of when choosing a campsite.

Materials: None.

This activity needs to be delivered outdoors, in an area with a range of different surfaces and possible campsites if possible. Split your group into teams; ask half the teams to look for a great campsite that has a low impact. Ask the other half of the teams to look for the worst impact areas they can find. You can arrange a time to meet back or signal for the groups to return. Go to each site that the different groups chose. Use the campsites as the basis for a discussion:

- Why did they choose these places?
- How would they structure their camp here?
- Are they far enough away from water?
- Why is it a good or bad campsite?
- What are the key considerations for island or riverbank or lakeside camping?



Principle 5: Leave what you find

- Avoid spreading invasive species (zebra mussel or aquatic weed) by washing boats and equipment when moving to different water body. Invasive and non-native species are estimated to be costing €261 million annually to Ireland and Northern Ireland, due to biodiversity loss and impact on economic activity and human health. See the case studies overleaf. There are currently 13 high-risk invasive species in Ireland;
- Leave fishing buoys, navigation buoys and marks alone. They keep other people safe or they can be crucial to someone else's livelihood;
- Load your camera, not your boats. Avoid taking items from our shoreline which belong there. Remember that other users should be able to enjoy the natural environment.



Case Study: Zebra Mussel

Zebra mussels attach to most substrates including sand, silt, and harder substrates. Other mussel species frequently represent the most stable objects in silty substrates, and zebra mussels attach to, and often kill these mussels.

In Ireland, zebra mussels eliminated the two freshwater mussels from several waterways, including some lakes along the River Shannon in 1997.

In 2012 the National University of Ireland, Galway, said

*"The discovery of zebra mussels (*Dreissena polymorpha*) in Lough Derg and the lower Shannon region in 1997 (McCarthy et al 1997, a & b) has led to considerable concern about the potential ecological and economic damage that this highly invasive aquatic nuisance species can cause."*





An example of Zebra Mussel activity



A close up of a Zebra Mussel



Case Study: Japanese Sea Squirt

Didemnum vexillum, commonly known as Japanese Sea Squirt or “marine vomit”, is believed to have been carried from Japanese waters on ships’ hulls or in ballast water. It was first recorded in Ireland in 2005 in Malahide marina, Dublin, by aquatic invasive species specialist Dr Dan Minchin. He and colleagues have since traced it to Carlingford Lough, Co Louth; Strangford Lough, Co Down; Clew Bay, Co Mayo, and to Galway Bay.

One of the worst cases is on the George’s Bank between Canada and the US in the north-west Atlantic, where it covers an estimated area of around 200 sq km. That gravel area had been traditionally fished for scallops, and is now carpeted with the acidic “compound tunicate”, as the species is known, which kills off the scallop larvae.





Activity: Treasure or rubbish?

Objective: To increase participant's awareness of personal, social and cultural values and how these are reflected in the landscape around us.

Materials: A bag with various objects: Leaf, twig, rock, shell (natural objects), fossil, pottery (historical object), bottle top, bottle, old tent peg (modern rubbish), coin, watch (valuable items).

Get everybody in a circle, stand in a place where your voice can clearly be heard. Ask participants to look around them, taking note of the things that they think are “man-made” and the things that they think are ‘natural’. Point out an object, such as a wall, that is obviously man made - how they would class this? Point out an object, such as a field, that seems natural and ask them what they think about this - if they say its natural point out that the field/forest is a product of man's land management. Opening statement: “These days, very little of the natural environment is untouched by man - this exercise is going to explore people's perception of nature and the countryside and how this can influence our actions”. Place the that you've brought on the ground. Ask for a volunteer, ask them to arrange the objects into 2 piles - one for ‘treasure’ or items they find interesting and another for ‘rubbish’ - put all the items back as they were. Pick another volunteer, ask them to do the same, have they put the same things in the same place? Open it up to the rest of the group – do they agree?

Time, location, perception and even weather can have a bearing on how we value the objects that we find. We often have to rely on our own judgment when we decide what we should pick up and what we should leave behind.



Activity: I Wish I Had One

Objective: To explore how participants feel when they are deprived the experience of finding a natural or cultural object in the countryside.

Materials: Note cards with descriptions or photographs of natural and historic objects.

Before the activity, count out the number of participants that you have do not bring enough cards for everyone. Gather the group in a circle. Walk around the circle and have each person take a card from you and tell the group what is on the card. When you get towards the end of the group there will not be enough for everyone. Ask the group who did not get a card to share how it made them feel. Use this to start a discussion about 'Leave What You Find'.



Activity: The Dolmen Debate

Objective: To use debate to explore the different points involved in an unclear argument.

Materials: None.

There is a lot of controversy about the actions of tourists and how they are affecting the landscape in Ireland. The landscape of the Burren has been altered many times, currently tourists and visitors are leaving their mark by creating small mini dolmens. The question of whether this is right or wrong, there is no answer, following the Principles of Leave No Trace means investigating this issue and following what you feel is best for you and the land. Note: These motions can be easily changed to apply to local problems or issues. Elect two teams, (a debating team is usually made up of three people). Assign each side either the proposition (for the motion) or the opposition (against the motion).

Some sample motions:

- It is acceptable to make small or “mini” dolmens in the Burren National Park.
- Humans have always altered and changed the landscape, this interaction is natural and tourists’ making small dolmens is part of this.
- People are causing much bigger problems in the world than moving a few stones.
- The creation of small dolmens, ruins the aesthetic beauty, disturbs vital habitat, increases erosion and alters a rare and protected landscape.

Give each team time to work on their key argument points, or speech. Either set up a formal debate situation or keep it simple and allow a relaxed discussion to evolve from the motion.



Principle 6: Minimise the effect of fire

- Use a stove or established fire rings if picnicking;
- Use portable BBQ for beach parties and remove after use.
- If using underground backwoods techniques, do not leave food buried underground. This is vitally important in order not to encourage vermin;
- Ensure you have permission to light a fire if necessary;
- If boiling up on a lakeside activity use a volcano kettle or stove instead of fire;
- Ensure all fires are out;
- Keep fires small.



Activity: Quick Fire Quiz

Question 1 You decide to have a barbecue while on an overnight at a lake. To minimise the effects of the fire do you:

- Place your disposable barbecue on some rocks you find near the lake? On the grass? On the specially designed barbecue stands?

Answer: (c)

Question 2. You are camping in woodland where campfires are allowed. It is your job to gather the wood for the campfire. Do you?

- Bring a small skill saw in with you and attempt to cut down an entire tree? Snap off some small branches from the surrounding trees? Gather small sticks you found on the ground that can be easily broken by hand?

Answer: (c)

Question 3. It's after dinner at your campsite and you are cleaning up. You have some empty plastic pots left over from dinner. Do you?

- Pack the empty pots back into your rucksack to bring home with you? Just leave them on the ground around the campsite, there is lots of rubbish around anyway. Or just put them on the fire, they should burn down to nothing and it will save you from having to carry them out.

Answer: (a)

Question 4. It's the morning and your campfire is still glowing. Do you?

- Leave it, it's fine, it wouldn't be long till it goes out by itself anyway. Put it out with water and spread the ash around the campsite. Or put it out using soil, and spread the ashes around the campsite.

Answer: (b)

Question 5. Building a campfire is an important skill, but can you name another way of cooking food in the outdoors that leaves no trace?

Answer: A stove



Principle 7: Dispose of Waste properly

- ‘Pack it in, pack it out’ Bring your rubbish home;
- Think before using the heads or throwing waste water over board – Store and pump out at designated station;
- Take care with fuel – fuel your boat before you set out;
- Keep all rubbish on board – cigarettes, plastic bottles, wrappers – especially in enclosed waters – bring them home;
- Avoid leaving fishing line and bait where they can harm wildlife.



Leave no Trace Afloat summary

Water is our most valuable resource and key to our enjoyment of the outdoors.

Oceans makes up 71% of the surface of the earth, and water quality on our inland waterways and the coast remain under threat

Leave No Trace afloat can be just as powerful a message as on land!

“If you are thinking a year ahead, sow a seed. If you are thinking 10 years ahead, plant a tree. If you are thinking a hundred years ahead, educate the people.”

Chinese proverb

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