

# PRIORITY HABITAT SURVEYING HANDBOOK

RRT CITIZEN SCIENCE HANDBOOK SERIES



Handbook Author Name:	Leanne Tough	
First published:	19/04/2022	

Revision number	Page number	Revision date	Date when revised handbook was sent to all volunteers	Revision description

# **Table of Contents**

1	Introduction	. 1
2	Risk Assessments and Health and Safety	. 2
	2.1 COVID-19	. 2
	2.2 Diseases and injury	. 2
	2.2.1 Leptospirosis (Weil's disease)	. 2
	2.2.2 Lyme disease	. 2
	2.2.3 Needlestick or sharps injury	. 2
	2.3 Risk assessments	. 3
	2.3.1 Generic risk assessment	. 3
	2.3.2 Dynamic risk assessment	. 3
	2.4 Water safety	. 3
	2.5 Insurance	. 4
3	Biosecurity	. 5
	3.1 Check, Clean, Dry	. 5
	3.2 Surveying more than one site	. 6
	3.3 Invasive Non-Native Species (INNS)	. 6
4	Survey Method	. 7
5	How to Submit and View Data	. 8
	5.1 With Cartographer	. 8
	5.1.1 River/Stream Naturalness Assessment	. 8
	5.1.2 Lake Naturalness Assessment	. 9
	5.2 With the app	10
	5.3 How to view data	11
6	Equipment Loans	12
7	Contacts	12
	7.1 Your citizen science coordinator	12
	7.2 Contacts higher up in RRT	12
	7.3 Citizen science forum	12
8	Useful Links	13
	8.1 Rivers and streams	13

8.2 Lakes	13
8.3 Other	14

# 1 Introduction

"Priority habitats form part of the UK's commitment to the International Convention on Biodiversity. Each country who signed up to the Convention is required to define a range of habitats (and individual species) where action is a priority to protect and restore biodiversity, and then to take the necessary action. The UK's list of priority habitats includes both river and lake habitats.

We know that the best way to conserve all the species associated with rivers, streams and lakes is to protect their habitat. The habitat should function as naturally as possible to conserve the full characteristic species complement, and support and connect with adjacent wetland and terrestrial habitats. Natural function generates a dynamic mosaic of high quality freshwater, wetland and terrestrial habitats within which each species has its niche, including rare and threatened species. Consequently, work on priority rivers, streams and lakes is designed to protect and restore natural function."

There are many freshwater habitats in this country that we know very little about. Therefore, to be able to achieve the above and restore natural function in our watercourses and lakes, more data are needed to be collected. A citizen science project was subsequently developed by the Freshwater Biological Association (FBA).

For ourselves at Ribble Rivers Trust (RRT), we believe this data is a fantastic way of directing our conservation work. For example, we can use the data collected to arrange litter picks, farm advice or invasive species control to areas that need it most. We will also work with the FBA to help deliver the larger goals they have for the data.

Bradford Road, Clitheroe, Lancashire, BB7 4QF

<sup>&</sup>lt;sup>1</sup> https://priorityhabitats.org/ [Accessed 25/03/2022]

# 2 Risk Assessments and Health and Safety

#### 2.1 COVID-19

All RRT volunteers must follow the latest regional and national COVID-19 advice and guidelines. RRT will inform volunteers as and when changes are needed to be taken.

# 2.2 Diseases and injury

#### 2.2.1 Leptospirosis (Weil's disease)

Leptospirosis is a bacterial disease that can enter the body through skin abrasions, the mouth or eyes. People who touch soil or freshwater are at risk. Symptoms include a temperature, headache, being nauseous, being sick, having diarrhoea, aching muscles and joints, red eyes, and loss of appetite. In serious cases, Leptospirosis can be fatal. Please refer to the NHS website for more information (https://www.nhs.uk/conditions/leptospirosis/).

Before surveying, cover abrasions and during surveying, do not rub your eyes, nose or mouth. Always wash your hands after surveying and especially before eating, drinking or smoking. It is recommend to wash your clothes too.

# 2.2.2 Lyme disease

Lyme disease can be contracted from ticks. Symptoms are a bullseye type rash and/or fever, headache, muscle and joint pain, and tiredness and loss of energy. If not treated, Lyme's disease can cause serious health problems. Please refer to the NHS website for more information (<a href="https://www.nhs.uk/conditions/lyme-disease/">https://www.nhs.uk/conditions/lyme-disease/</a>).

To prevent tick bites, wear light-coloured, long-sleeved clothing that is tucked into socks. Keep checking the body for ticks, especially warm and moist areas.

During tick removal, you need to ensure the whole tick is removed, and no head parts and left in the skin. See the link above for instruction of how to remove one.

#### 2.2.3 Needlestick or sharps injury

Do not suck the blood if a wound occurs. Wash the wound thoroughly under running water and then take the cause of the injury, if safe and possible, to the nearest A&E within four hours.

When surveying, wear protective clothing and be careful when putting your hands into the water or on riverbanks. Before surveying, cover abrasions and during surveying, do not rub your eyes, nose or mouth. Always wash your hands after surveying and especially before eating, drinking or smoking.

#### 2.3 Risk assessments

Your health and safety is your responsibility, and you also have a responsibility for keeping others safe too. Please always take a first aid kit and be mindful of others around you. Please only survey if you feel fit and well enough. Unlike on normal volunteer sessions, we are unable to keep an eye on you and so you need to be particularly cautious. Please carry the below risk assessments on you when you survey. Contact RRT's Citizen Science Coordinator if you would like a hard copy of any of these posted to you.

#### 2.3.1 Generic risk assessment

You need to familiarise yourself with the following three risk assessments. Look particularly at the control measures.

RRT priority habitat surveying risk assessment: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/Risk-Assessment-Priority-Habitat-Surveys-2022.pdf">https://ribbletrust.org.uk/wp-content/uploads/2022/04/Risk-Assessment-Priority-Habitat-Surveys-2022.pdf</a>

FBA Discovering Priority River/Stream and Lake Habitat in England Health and Safety Briefing Sheet: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH">https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH</a> HSBriefingSheet.pdf

FBA Priority River/Stream and Lake Habitats (Natural England) Risk Assessment Form: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH\_FBARiskAssessment.pdf">https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH\_FBARiskAssessment.pdf</a>

#### 2.3.2 Dynamic risk assessment

Every sampling site is different and every day is different. Therefore, before you start surveying, you must always run through the dynamic risk assessment card. This will allow you to decide whether it is safe to proceed with your survey. Please repeat this process while you are surveying.

RRT dynamic risk assessment: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/RRT-Dynamic-Risk-Assessment.pdf">https://ribbletrust.org.uk/wp-content/uploads/2022/04/RRT-Dynamic-Risk-Assessment.pdf</a>

## 2.4 Water safety

Rivers can be unpredictable and dangerous places: always respect them.

Buddy system

It is recommended that you work in pairs when surveying. If this is not possible, tell someone where you are going (use a grid reference of what3words) and when you are expected to be back. If you do not get in contact after this time, they can contact other people in your friend and/or family network. If all else fails, the emergency services need to be called.

#### Risk assessments

Follow the risk assessments and all the advice given in section 2.1-2.3.

# 2.5 Insurance

RRT volunteers are covered by our insurance. Please contact the Trust if you would like to know more.

# 3 Biosecurity

# 3.1 Check, Clean, Dry

It is very easy to spread potentially harmful or undesirable organisms with your equipment and clothing.

Make sure you Check, Clean and Dry all equipment and clothing after each survey.



To clean equipment and footwear, it is recommended that they are left in hot water (at least 45°C) for 15 minutes.

To dry equipment and footwear, ideally do this in the sunlight.

For more information, I would highly recommend looking at this website: <a href="http://www.nonnativespecies.org/checkcleandry/">http://www.nonnativespecies.org/checkcleandry/</a>.

# 3.2 Surveying more than one site

If you survey more than one site and they are on different watercourses, ensure you carry out the steps laid out in section 3.1.

If you survey more than one site and they are on the same watercourse and so are within a few hundred metres of each other, always survey the upstream location first in the day.

# 3.3 Invasive Non-Native Species (INNS)

INNS such as water fern, Himalayan balsam, floating pennywort, Chinese mitten crab, Canadian pondweed, signal crayfish, zebra mussel and demon/killer shrimp should be reported to RRT's citizen science coordinator. These are good websites for identification of these species: <a href="https://canalrivertrust.org.uk/specialist-teams/maintaining-our-waterways/vegetation-management/invasive-species-control">https://canalrivertrust.org.uk/enjoy-the-waterways/canal-and-river-wildlife/the-rogues-gallery-of-invasive-species</a>.

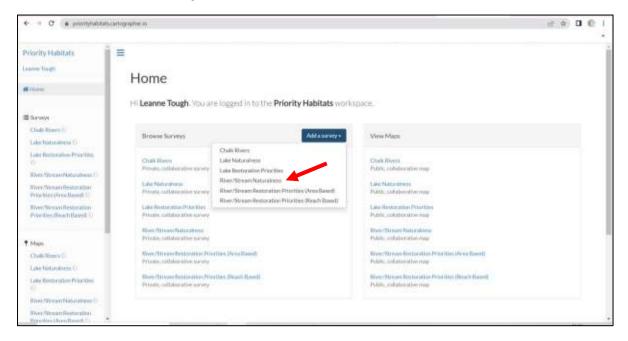
# **4 Survey Method**

- Run through the generic and dynamic risk assessment before surveying and during surveying.
- Walk or view a stretch of watercourse or lake edge from a safe and legal position.
- Do not enter private land unless you have expressly been given permission to do so.
- Make sure you adhere to the Countryside Code.
- Fill out the survey sheet and input the data into Cartographer.
- Information about the naturalness scoring can be found in the packs given to you or in section 8.

# 5 How to Submit and View Data

# **5.1 With Cartographer**

- 5.1.1 River/Stream Naturalness Assessment
  - 1. Log in to Cartographer: <a href="https://login.cartographer.io">https://login.cartographer.io</a>
  - 2. Select 'Add a survey' and then 'River/Stream Naturalness'.



3. Fill in the time and date of survey.

## Survey/Watercourse Location

- 4. Zoom in on the map and select the watercourse you surveyed. Click 'Update from map' under 'Watercourse ID'. The reach will be highlighted with a thicker blue line.
- 5. Fill in the watercourse name if there isn't one.
- 6. Fill out all the other boxes in the section.
  - a. Take particular care with the 'Is the site representative of the watercourse as defined by the map layer' question. Could you see the entire length of the bold blue line? I.e. the reach?

#### Naturalness Information

7. Fill out the physical, hydrological, chemical and biological naturalness classes, the forms of assessments used and the confidence class.

#### Notes

8. Write as many notes about the site as you feel fit.

#### Intermittent Flow

9. State whether the section has intermittent flow, or leave blank if not.

# Photographs and Other Files

10. Upload photos taken.

#### **Habitat Features**

11. Tick any of the habitat features you saw. Put any others in the notes.

#### Species of Interest

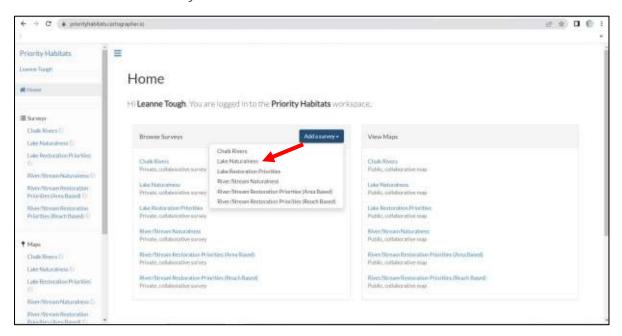
12. Tick any species of interest seen. Put any others in the notes.

## Save Changes

13. Save the survey. There shouldn't be any warning messages below.

#### 5.1.2 Lake Naturalness Assessment

- 1. Log in to Cartographer: <a href="https://login.cartographer.io">https://login.cartographer.io</a>
- 2. Select 'Add a survey' and then 'Lake Naturalness'.



3. Fill in the time and date of survey.

## Survey/Lake Location

- 4. Zoom in on the map and select the lake you surveyed. Click 'Update from map' under 'Name of Lake'. The total lake area will be highlighted with a thicker blue line.
- 5. Fill in the lake name if there isn't one.
- 6. Fill out all the other boxes in the section.

#### WORKING TO IMPROVE, PROTECT AND PROMOTE THE RIBBLE AND ITS CATCHMENT FOR WILDLIFE AND PEOPLE.

a. Take particular care with the 'Is the site representative of the whole lake' question. Could you see the entire area covered by the bold blue line?

#### **Naturalness**

- 7. Fill out the physical, hydrological, chemical and biological naturalness classes and the confidence class.
- 8. The sub-categories are optional.

#### Notes

9. Write as many notes about the site as you feel fit.

Photographs and Other Files

10. Upload photos taken.

Plant Functional Groups

11. Tick any of the plants you saw. Put any others in the notes.

Species of Interest

12. Tick any species of interest seen. Put any others in the notes.

**Habitat Features** 

13. Fill out the drop down boxes for habitat features.

Save Changes

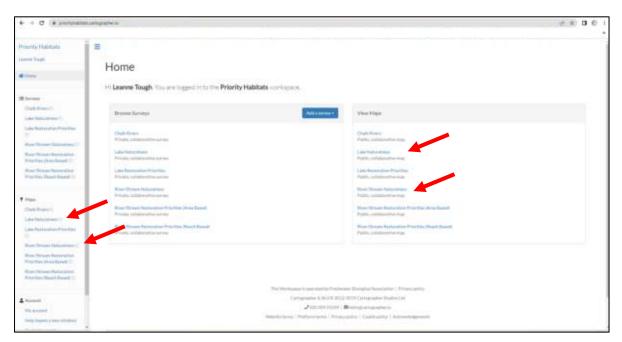
14. Save the survey. There shouldn't be any warning messages below.

# 5.2 With the app

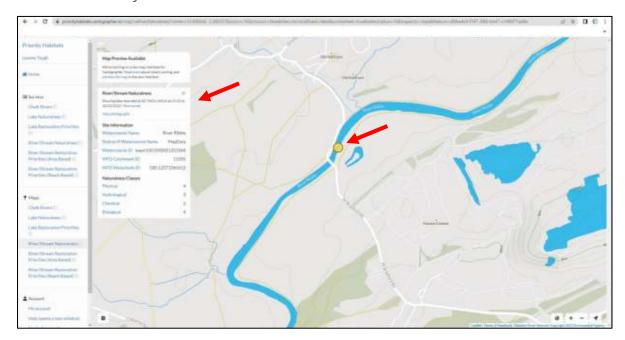
Information to be updated when available.

## 5.3 How to view data

- 1. Log in to Cartographer: <a href="https://login.cartographer.io">https://login.cartographer.io</a>
- 2. Select either 'Lake Naturalness' or 'River/Stream Naturalness' from the menu.



3. Click on a yellow dot to view the data.



# **6 Equipment Loans**

There are no equipment loans for this citizen project.

# 7 Contacts

## 7.1 Your citizen science coordinator

Leanne Tough is the RRT's Projects and Citizen Science Officer.

You can reach her at <u>leanne@ribbletrust.com</u> or 07494 751178.



# 7.2 Contacts higher up in RRT

If you would like to talk to anyone else at RRT about otter surveying and/or volunteering for the Trust, you can contact Rob Cooper (<a href="mailto:robert@ribbletrust.com">robert@ribbletrust.com</a>, Volunteer Supervisor) or Harvey Hamilton-Thorpe (<a href="mailto:harvey@ribbletrust.com">harvey@ribbletrust.com</a>, Deputy Chief Executive and Head of People & Learning).

#### 7.3 Citizen science forum

Information to be updated when available.

# 8 Useful Links

#### 8.1 Rivers and streams

- River and stream naturalness assessment guidance document:
   <u>http://priorityhabitats.org/wp-content/uploads/River-and-stream-naturalness-assessment-guidance-document-March-2021.pdf</u>
- Annex I Printable river naturalness survey form to use in field: <a href="http://priorityhabitats.org/wp-content/uploads/Rivers-print-out-naturalness-form-1.pdf">http://priorityhabitats.org/wp-content/uploads/Rivers-print-out-naturalness-form-1.pdf</a>
- Annex II Examples of classifying stream naturalness: <a href="http://priorityhab.wpengine.com/wp-content/uploads/Annex-II-Examples-of-classifying-stream-naturalness.pdf">http://priorityhab.wpengine.com/wp-content/uploads/Annex-II-Examples-of-classifying-stream-naturalness.pdf</a>
- Annex III Photo-library of key habitat features: <a href="http://priorityhab.wpengine.com/wp-content/uploads/Annex-III-Photo-library-of-key-habitat-features.pdf">http://priorityhab.wpengine.com/wp-content/uploads/Annex-III-Photo-library-of-key-habitat-features.pdf</a>
- Annex IV List of species of high priority for recording: <a href="http://priorityhabitats.org/wp-content/uploads/Annex-IV-List-of-species-of-high-priority-for-recording-Dec-2019-1.pdf">http://priorityhabitats.org/wp-content/uploads/Annex-IV-List-of-species-of-high-priority-for-recording-Dec-2019-1.pdf</a>

#### 8.2 Lakes

- Lake naturalness assessment guidance document: <a href="http://priorityhabitats.org/wp-content/uploads/Lake-Naturalness-Assessment-Guidance-3.pdf">http://priorityhabitats.org/wp-content/uploads/Lake-Naturalness-Assessment-Guidance-3.pdf</a>
- Annex I Printable lake naturalness survey form to use in field: <a href="http://priorityhabitats.org/wp-content/uploads/Lakes-print-out-naturalness-form-2.pdf">http://priorityhabitats.org/wp-content/uploads/Lakes-print-out-naturalness-form-2.pdf</a>
- Annex II Physical naturalness photographs:
   <a href="http://priorityhab.wpengine.com/wp-content/uploads/Annex-II-Physical-Naturalness-Photographs.pdf">http://priorityhab.wpengine.com/wp-content/uploads/Annex-II-Physical-Naturalness-Photographs.pdf</a>
- Annex III Hydrological naturalness photographs: <a href="http://priorityhab.wpengine.com/wp-content/uploads/Annex-III-Hydrological-naturalness-photographs.pdf">http://priorityhab.wpengine.com/wp-content/uploads/Annex-III-Hydrological-naturalness-photographs.pdf</a>
- Annex IV Chemical naturalness photographs: <a href="http://priorityhab.wpengine.com/wp-content/uploads/Annex-IV-Chemical-Naturalness.pdf">http://priorityhab.wpengine.com/wp-content/uploads/Annex-IV-Chemical-Naturalness.pdf</a>
- Annex V Plant functional group photographs:
   <a href="http://priorityhab.wpengine.com/wp-content/uploads/Annex-V-Plant-Functional-Group-pictures.pdf">http://priorityhab.wpengine.com/wp-content/uploads/Annex-V-Plant-Functional-Group-pictures.pdf</a>
- Annex VI Further species recording: <a href="http://priorityhabitats.org/wp-content/uploads/Annex-VI-Further-Species-Recording-1.pdf">http://priorityhabitats.org/wp-content/uploads/Annex-VI-Further-Species-Recording-1.pdf</a>

#### 8.3 Other

- Car notice: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/Car-notice-PH.pdf">https://ribbletrust.org.uk/wp-content/uploads/2022/04/Car-notice-PH.pdf</a>
- FBA Priority Habitats website: <a href="https://priorityhabitats.org/">https://priorityhabitats.org/</a>
- Cartographer: <a href="https://login.cartographer.io">https://login.cartographer.io</a>
- Priority river habitat in England mapping and targeting measures:
   <a href="http://priorityhab.wpengine.com/wp-content/uploads/IP006">http://priorityhab.wpengine.com/wp-content/uploads/IP006</a> edition 1-1.pdf
- Priority Habitats Field Guide: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH-Field-Training-Material-V5-June21.pdf">https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH-Field-Training-Material-V5-June21.pdf</a>
- RRT priority habitat surveying risk assessment: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/Risk-Assessment-Priority-Habitat-Surveys-2022.pdf">https://ribbletrust.org.uk/wp-content/uploads/2022/04/Risk-Assessment-Priority-Habitat-Surveys-2022.pdf</a>
- FBA Discovering Priority River/Stream and Lake Habitat in England Health and Safety Briefing Sheet: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH\_HSBriefingSheet.pdf">https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH\_HSBriefingSheet.pdf</a>
- FBA Priority River/Stream and Lake Habitats (Natural England) Risk Assessment Form: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH">https://ribbletrust.org.uk/wp-content/uploads/2022/04/PH</a> FBARiskAssessment.pdf
- RRT dynamic risk assessment: <a href="https://ribbletrust.org.uk/wp-content/uploads/2022/04/RRT-Dynamic-Risk-Assessment.pdf">https://ribbletrust.org.uk/wp-content/uploads/2022/04/RRT-Dynamic-Risk-Assessment.pdf</a>