people's trust for endangered species

National Water Vole Monitoring Programme

Survey guidelines

Contents

02 **1. Visit your site and plan your survey route**
02 1.1 Complete the site information form
02 1.2 Plan where your survey route will start and end
03 1.3 Get permission from the landowner and give them the landowner questionnaire
03 **2. Carry out your survey**
03 2.1 Health and safety
04 2.2 Timing your survey
04 2.3 Equipment checklist
05 2.4 Doing your survey
06 **3. Completing your survey**
06 3.1 Ensure your recording forms are complete
06 3.2 Submit your records online
07 National Water Vole Monitoring Programme survey checklist
08 Landowner permission request letter
09 Example site maps with transects marked on them

Welcome to the National Water Vole Monitoring Programme (NWVMP) survey guidelines, thank you very much for participating. Each year we will ask you to survey your site(s) once between 15th April and 15th June and submit your findings online, whether or not you found water voles or their field signs.

Good luck with this year's survey!

Dedication

ROB STRACHAN
Rob was a fine naturalist with an infectious love of wildlife which he shared with so many people. He was the recognised expert on water voles and carried out nearly all the field work that formed the basis of what we know about the species across the UK, single-handedly. He was instrumental in setting up this programme, offering guidance and advice at the outset that helped to direct our work.

In recognition of this we would like to dedicate the National Water Vole Monitoring Programme to Rob's memory.

People's Trust for Endangered Species
3 Cloisters House, 8 Battersea Park Road, London SW8 4BG

www.ptes.org
enquiries@ptes.org
020 7498 4533

Registered charity no. 274206

1. Visit your site and plan your survey route

Before carrying out your survey we recommend you visit your site so you can:

1.1 Complete the site information form

1.2 Plan where your survey route will start and end

1.3 Get permission from any landowners and give them the landowner questionnaire

1.1 Complete the site information form

We would like you to record some basic information about your site to allow us to investigate any factors that may affect water vole presence/absence at a site level.

Habitat type at your site

Upland:

- These are typically habitats that are above the upper limits of agricultural enclosure, usually over 250 – 400m above sea level.
- Examples include: blanket bog, upland heathlands, rough grazing land, upland fens and upland calcareous grassland.

Lowland:

- These are some of the more well-known habitat types.
- Examples include: grasslands (both improved grasslands used for grazing livestock and semi-natural grasslands), arable farmland, fens, reed beds and lowland heathland.

Coastal:

- These are habitats found lining our coastline.
- Examples include: saltmarsh or coastal marsh, sand dunes, mudflats and coastal grasslands.

Waterway type you will be surveying along

Please tick the appropriate box for the description that best describes the waterway your transect runs along e.g. river/stream/lake.

1.2 Plan where your survey route will start and end

You will need to survey one bank of a 500m stretch of waterway (transect) at your site, recording any field signs within each 100m section, as this will allow for the best comparison with the historical data we have and also allow standardisation between all the sites being monitored.

Before visiting your site, take some time to study the location of your site using an Ordnance Survey map and Google Earth, so that you can identify access points such as roads, public footpaths and rights of way to roughly plan your survey route. As obvious as this sounds, using aerial photos and maps to plan a route prior to departure will save you both time and effort.

When you visit your site we recommend you also test walk your planned route to check it is suitable, measure out the distance (Box 1 page 3) and record the start and end grid references (Box 2 page 6). You will need to know these grid references when you carry out your survey.

You can also mark the location of your transect on a print out of your map (see examples on page 10) – this can then be scanned in and uploaded as a supporting document online (please save as a jpeg).

Please note we recommend that the start of your transect is at a memorable location e.g. by a gate/bridge/large tree, so that you can easily find it when conducting your survey and it can accurately be repeated in subsequent surveys.

You will only need to survey one 500m transect at your site. However, some sites that are already being monitored may include multiple transects of shorter lengths.

If your site doesn't contain a 500m stretch of waterway, it is possible to survey a shorter transect (any denomination of 100m) though please do notify PTES by emailing watervoles@ptes.org along with a brief explanation.

Box 1. Accurately measuring out your 500m transect

The best way to do this is to pace it out:

- Walk along your waterway, pacing out the 500m distance.
- Most people take around 110/120 paces per 100m.
- Record on the site information form the grid references of the start and end of your transect (see Box 2 on page 6 on how to get these).
- You can also make a note of the location of the 100m intervals along your route on the site form, as during your survey you will need to record any field signs you see in each 100m section within your transect.

1.3 Get permission from the landowner and give them the landowner questionnaire

You will be able to check the map of your site to see if any footpaths or rights of way run along the waterway or if the site is accessible to the public. However, even if you are able to do your survey by walking along the right of way/footpath, it is still advisable, polite and in some cases a legal requirement to contact the landowner or landowning organisation before carrying out your survey on their land. This is to check they are happy for you to continue and to explain what you will be doing and when you will be doing it.

If your waterway runs through private or restricted land then you MUST get permission from the landowner to enter and conduct your survey.

Often the easiest way to find the landowner is to knock on the door of the nearest house and enquire. We recommend you take someone with you if you are doing this.

We have included a landowner permission letter at the end of the survey guidelines for you to print out and take with you which identifies you to landowners and explains what you are doing.

When you ask the landowner for permission, please also give them a copy of the Land Owner Questionnaire Pack and ask them to complete it and return it PTES using the freepost address at the bottom of the second page.

If you are asked any questions about the monitoring programme please refer them to the Water Vole Officer who can be emailed on **watervoles@ptes.org** or called on 020 7498 4533.

Once you have completed these steps, you are all set to carry out your survey.

2. Carry out your survey

To carry out your survey you will need to:

2.1 Read the health and safety guidance

2.2 Time your survey correctly

2.2 Ensure you take the right equipment

2.3 Walk your transect recording any water vole, otter and mink field signs

2.1 Health and safety

Essential health and safety points to remember when conducting your survey:

- Always work in pairs if possible.
- Ensure you wear appropriate clothing (i.e. warm and waterproof) and suitable footwear.
- Always tell someone of your expected return time with a maximum over-run of 30 minutes.
- If working on a reserve, always tell site staff when and where you are working on the site and inform them when you leave the site.
- Always carry a charged mobile phone.

- Never work in extreme weather conditions.
- Be careful of slippery river banks, don't get too close to the edge or over stretch when identifying field signs.
- Cover all cuts and broken skin with a waterproof plaster or liquid skin to prevent the transmission of leptospirosis/Weil's disease.

Leptospirosis/Weils disease
Please make sure you consult the Health and Safety Executive website before surveying **www.hse.gov.uk/pubns/indg84.pdf**

Weil's disease is caused by a bacterial organism carried in the kidneys of rodents which is passed into water by their urine. The main routes of infections are through cuts and grazes, and the nose, eyes and mouth. Early symptoms can be confused with flu i.e. pains in joints and muscles, elevated temperature, headache. Later symptoms include bruising of the skin, sore eyes, nose bleeds and jaundice. If you suspect Weil's disease show a copy of the HSE Leptospirosis card to your doctor immediately. The disease can be fatal.

A comprehensive version of People's Trust for Endangered Species Health and Safety guidelines, including a Risk Assessment form, can be found at **www.ptes.org/healthandsafety/** - please ensure you read through them before carrying out your survey.

In particular please take the time to look at the potential risks for survey volunteers document and fill in a Risk assessment record form for your site. Please note that the list of potential risks is not intended to be completely exhaustive and is for guidance on the most common hazards only. It is important that you assess each site individually as each site is unique.

As many sites are remote you should consider how the emergency services might reach you if there is an accident. Make sure you know the nearest postcode to your site and the OS grid reference, and note the closest hospital with A&E. Remember this information should be available to all, as accidents can happen to anybody. If in doubt about any aspect of health and safety relating to a site, always seek further advice from us before proceeding with the visit. Please remember that as a volunteer you are under no obligation to take part in this scheme and you should not put yourself or any others in danger.

2.2 Timing your survey

- You must survey your site between 15th April and 15th June. This will allow us to compare data gathered from all the different sites.
- Surveys can be conducted on any day between 15th April and 15th June and at any time of the day. Your survey should take about 45 mins – 1 hour to complete.
- Surveys should not be conducted during times of flooding or heavy rain. Please wait at least two days after the water levels have subsided to allow field signs to accumulate and be visible.
- Optional: You may repeat the survey during September (post-breeding) or more frequently if you wish, visiting your site once a month between April and September to record any field signs.

2.3 Equipment checklist

Please take with you:

- A map of your survey site with your transect, including the 100m sections, marked on it
- The survey pack (consisting of the following three documents):
  - These survey guidelines
  - Your guide to looking for signs of water voles and other riverbank species
  - The NWVMP recording forms
- A pen/pencil
- A spare landowner permission letter in case you are asked about the survey
- A fully charged mobile phone

The following equipment may also be useful:

- A stout pair of gloves e.g. gardening gloves
- A walking pole or stout stick may be useful for looking through dense vegetation
- Binoculars can also be useful for checking signs in places that are difficult to access
- A ruler to measure lengths of field signs and to use to show scale in any photos you take
- Camera/ phone to take pictures of signs

2.4 Doing your survey

1. Before starting your survey, ensure that you record on your survey form:

- the site number
- the transect number (if you are surveying more than one transect at your site)
- the bank you will be surveying
- the start and end grid references
- the date

2. Locate the start of your transect.

3. Start walking along your transect

- Walk as close to the water's edge as possible (while remaining safe). Carry out a continuous search for field signs (latrines, feeding signs, burrows/nest and sightings (please see Your guide to looking for signs of water voles and other riverbank species document) along your 500m transect.
- If the bankside vegetation is particularly dense and a continuous metre by metre search is not possible then "scallop" the bank – go to the water's edge at 2m intervals and sample up to 0.5m each side of the sampling point. (If this method is used make sure that it is noted on the data sheet).
- In each 100m section of your transect keep a tally of feeding signs (each pile of chopped vegetation counts as one), latrines (trampled and untrampled), burrows/nests and sightings on your survey form. If you are able to take photographs of the field signs to submit with your data, please do so.
- The grid reference/GPS position of the first and last latrine in each 100m section must be recorded as a minimum (see Box 2 below for more details).

4. Mink and otter signs

- If you see signs of otter (spraint/sightings) or mink (scats/sightings) and are certain of your identification, please record them in the mink and otter signs section of the recording form.
- Please try to take a photo of the field sign, ideally with a ruler beside it for scale and upload these when you submit your data so that they can be verified.

Grid references for field signs
As a minimum you must record the grid reference/GPS position of the first and last latrine in each 100m section along your transect if water voles are present. This will allow us to determine the length of waterway occupied by water voles and as we know the approximate length of waterway a water vole will use as its territory we can estimate abundance of water voles as well as presence.

Box 2: Working out grid references/GPS locations

You will sometimes need to grab 6-figure or 8-figure grid references. The best way to do that is as follows:

1. Go to **www.britishnationalgrid.uk** and zoom in on your site and then click on the location.
2. Use a hand-held GPS device or most smart phones will have an app you can download that will give you the GPS coordinates of your location.

Optional
If you would like to also record the position of all the field signs in each 100m length then this will give an even better indication of abundance of water voles on your transect.

If you would like to do this, you will need to fill in the 'Field signs recording form', making a note of what type of field sign it was, its position, which 100m length of transect it was in and any comments about the field sign.

3. Completing your survey

3.1 Ensure your recording forms are complete

Please ensure all relevant sections of the paper recording forms are completed when you finish walking your transect and make a note of any signs you took photos of (To see an example of a completed recording form, please see the 'NWVMP recording forms' document).

If there is only one transect at your site then you have finished your survey.

If you are surveying more than one transect please proceed by a safe route to the next transect at the site and begin again.

3.2 Submit your records online

Your records MUST be entered online. You will need to log in at **www.ptes.org/watervoles** and click through to your site's profile and then select '**Complete survey data**'.

Please submit all your records by the 31st October each year. Even if you didn't find any signs of animals during your surveys we would still like you to submit your negative records.

Once you have submitted your data you will be able to export a .csv copy (which can be opened in Microsoft Excel) of all the data from your site from the 'previous site data' tab on your site's profile page.

Please be aware that once you have submitted your data you will not be able to edit it – if you notice anything that is incorrect, please contact the Water Vole Officer at watervoles@ptes.org with details about the error and they can change your records.

What will happen to my data?

The data collected for the NWVMP will be submitted to the relevant statutory agencies and the National Water Vole Database and Mapping Project (held by Hampshire and Isle of Wight Wildlife Trust). The data will also be uploaded annually to the National Biodiversity Network (NBN) and made accessible to all Local Records Centres. This information will NEVER include your contact details.

Once all the data has been submitted for the year it will be analysed by our statistician using a variety of techniques to identify any trends. We will produce a report each year outlining the findings from that year's survey which you will be sent a copy of and will also be available to view on the website.

Thank you very much for your time in helping People's Trust for Endangered Species and water voles. The National Water Vole Monitoring Programme relies on data gathered by volunteers and would not be possible without your help, so thank you for contributing to the conservation of this much loved species!

National Water Vole Monitoring Programme survey checklist

1. Visit your site and plan your survey route		Done
1.1	Complete the site information form	
1.2	Measure out your transect, recording the location of each 100m section Make a note of the start and end grid references of your transect	
1.3	Get permission from the landowner to carry out your survey if necessary and give them a copy of the landowner questionnaire to complete	
2. Carry out your survey		
2.1	Read the health and safety guidance	
2.2	Survey your site between 15th April and 15th June, avoiding periods of flooding or heavy rain	
2.3	Ensure you take everything on the equipment checklist with you	
2.4	Do your survey ● Locate the start of your transect ● Fill in the information at the top of the recording form ● Walk your transect recording all water vole field signs in each 100m section ● Record any otter and/or mink signs you see	
3	Completing your survey	
3.1	Ensure your recording forms are complete	
3.2	Submit your records online at **www.ptes.org/watervoles** by the 31st October each year	

Thank you, you have now completed your survey!

Landowner permission request letter

DATE:

TO:

Dear Sir / Madam

I am writing to ask for your permission to gain access to your land in order to carry out a survey once a year looking for water voles as part of the National Water Vole Monitoring Programme across England, Scotland and Wales.

Water vole numbers have plummeted by around 95% since the 1990s making it one of the most rapid and serious declines of any British wild mammal. The aim of this monitoring programme is to gather information on the distribution and relative abundance of water voles across the country at the current time, so we can detect any changes that may have happened since the last National Water Vole Surveys in the 1990s and continue to monitor these sites so we can also detect any future changes.

We have selected more than 800 grid squares across England, Scotland and Wales that were surveyed during the last National Surveys that we would like volunteers to re-survey and continue to monitor each year. At each site volunteers will walk a continuous 500m length of waterway bank looking for any water vole field signs. We will also be asking volunteers to record any field signs of mink and otter they encounter along their survey route. This survey should take between 45 mins and 1 hour.

We would be very grateful if you could help support our monitoring programme by granting access to your land.

We would also like to find out some more information about the habitat and management of the site. We'd appreciate it if you could take the time to fill in the short landowner questionnaire and return it to us using the freepost address at the bottom of the second page.

You can find out more information about the National Water Vole Monitoring Programme at **www.ptes.org/watervoles**

If you have any further queries about the survey, please contact the NWVMP coordinator on the telephone number or email address below.

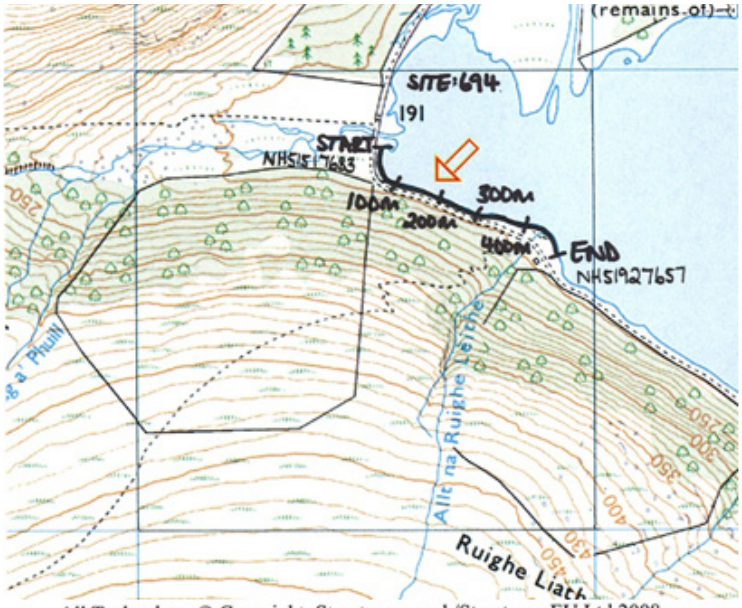
Yours faithfully,

Volunteer name:

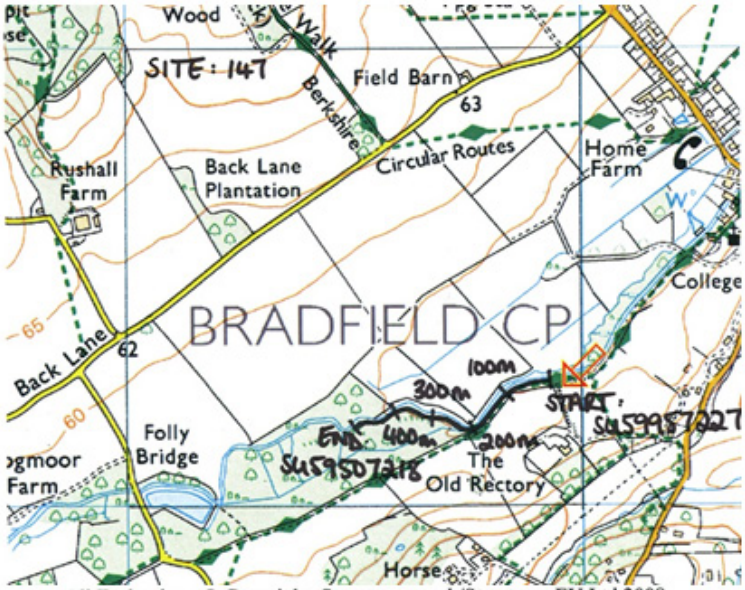
Volunteer contact details:

Water Vole Officer, People's Trust for Endangered Species (PTES)
Contact: watervoles@ptes.org
Tel: 020 7498 4533

Example site maps with transects marked on them



All Technology © Copyright: Streetmap.co.uk/Streetmap EU Ltd 2008
This site includes mapping data licenced from Open Street Map, Ordnance Survey & Bartholomew.



All Technology © Copyright: Streetmap.co.uk/Streetmap EU Ltd 2008
This site includes mapping data licenced from Open Street Map, Ordnance Survey & Bartholomew.