



**Sussex**  
Wildlife Trust

# Survey Manual for Otter Spotters



**Otter Spotters Pack**

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Otter cub © Bill Short

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## Equipment you may find useful for otter surveying

- Camera (one which can zoom and take macro shots). Useful for taking photos of things you aren't sure of, to email for verification or to use as evidence of actual sightings
- Binoculars – useful for checking signs on the opposite bank
- All weather clothing - waterproofs, wellies or walking boots, warm clothing, sun hat/cream
- Walking stick (to help pull you out of tricky places, check water & silt depth etc.)
- Small plastic pots or tin foil – To wrap and keep spraint & field signs if needed
- Whistle – to attract attention to yourself if you get into trouble
- Pencil, clipboard, plastic bag, (bag protects the clipboard if it rains)
- Antiseptic handwipes or clean water to wash hands in
- Backpack –you need both hands for writing & steadying yourself
- Small torch for looking in dark places such as on ledges under bridges
- Mobile Phone – for safety reasons
- Packed lunch and plenty to drink
- Throw line or rope , particularly if out with other people or volunteers
- GPS, phone or OS maps to record Grid References of sightings and for navigation
- Field guide to mammal signs



Sampling the unique aroma of otter spraint ! whilst  
out Otter Spotting with Sussex Wildlife Trust  
© F Southgate

## The Otter as a flagship for human and wetland health

Otters are at the top of their food chain. We know that if otters are healthy, then so is the whole of the rest of the river ecosystem. We use otters as a 'flagship' species to indicate the wider health of our environment.

Almost all life depends on fresh water, and if the water in our rivers and landscapes is not clean, then everything which comes into contact with it is at risk of ill health. If rivers and wetlands are polluted, then it will negatively affect the health of fish, insects, mammals, birds, crustaceans, amphibians etc. which rely on clean water.



If our wetlands and water sources are unhealthy, then so too are the people who live around them, work in them or eat the fish from them. Water companies are often having to spend huge amounts of money and effort to try and keep our drinking water supplies unpolluted.—a cost which is then passed on to us.

Sussex Wildlife Trust works hard to ensure that our water landscapes are healthy enough to support both people and wildlife. By helping us document the return of otters to the County, you are helping us to find out where our work is having a positive effect on our environment, and where we need to do more work.



## Why survey for Otters?

### The Decline of the Eurasian Otter In Europe

The Eurasian otter (*Lutra lutra*) was once common across Europe, with a range that extended from the Arctic to the Mediterranean and from Ireland to Asia. Over the course of the last Century, but particularly during the last four decades, otters have undergone a major decline. They were lost completely from several countries i.e. Switzerland and Italy, and disappeared from large areas of many others, including France, Britain, Germany and Spain (Macdonald & Mason, 1990). They are now recovering in some countries and have been re-introduced in others but are still scarce in South East England.

### The Decline of the Eurasian Otter in Britain

By the early 1960s, otter populations had started to crash. Organochlorine pesticides used in sheep dips and as seed dressings were the main cause of their decline. These pesticides become concentrated in food chains (particularly in eels, a preferred food of otters). Because otters are at the top of the aquatic food chain, they are highly susceptible to the bioaccumulation of fat soluble pesticides. The toxic affects of these pesticides reduced their ability to breed, their immune function, their general health and their eyesight.



Otter © Stephen Bray

By the late 1970s only 6% of national survey sites in the UK showed signs of otters, and otters had become largely extinct from the Midlands and Southern England. Compulsory bans on the use of organochlorine pesticides coupled with a ban on otter hunting in the 1970s and improvements in otter habitat have enabled otter populations to recover in some areas. In a few places such as East Anglia prior to the 1990's, otters were re-introduced. However, on the whole their recovery has been natural.

However, in many areas of England much of the riparian vegetation and bankside trees that otters once used for cover have been removed and many wetland areas have been drained or destroyed. This together with increased disturbance from human activity and dogs, and continued building and development along riversides and in floodplains has restricted the otter's recovery.



Until the 1970's, otters were still being hunted as 'pests' and for fur

The otter is recovering nationally with most Counties in the UK seeing some regular otter activity, although breeding activity is still low in many areas. Otter populations in the South are moving South Eastwards from the South West, and South from Thames and Kent regions.

## Otters in Sussex

Prior to the 1950's, East and West Sussex had low density but widespread otter populations. Most otter activity was found in the Arun, Adur and Western Rother catchments. The National Otter Surveys, carried out in 1977-79, 1984-86 and 1991-94, found no direct evidence of otters in Sussex and it is likely that otter populations were mostly extinct in Sussex during this period.

More recently, evidence of occasional otter activity in catchments in East and West Sussex has been found. An otter road kill on the Hampshire/Sussex border in early 2001 confirmed that otters were crossing through the Western Rother into Sussex from Hampshire where there are known breeding populations. The National Otter Survey 2001 also found signs of otters on the Wallers Haven in Pevensey and at Rye Harbour although there has been little activity there since. In early 2002 an otter corpse was found on the beach at Rustington, in 2005 an otter was run over on the Medway in Sussex, and in 2007 a otter was found near Emsworth. Our most recent visitor was an otter crossing the border from Hampshire on the Western Rother. One or two other otters have also been found but these are known to be escapees from wildlife centres. Other than the camera trapped otter, all these otters were found dead, either the subject of Road Traffic Accidents or electrocution on railway lines.

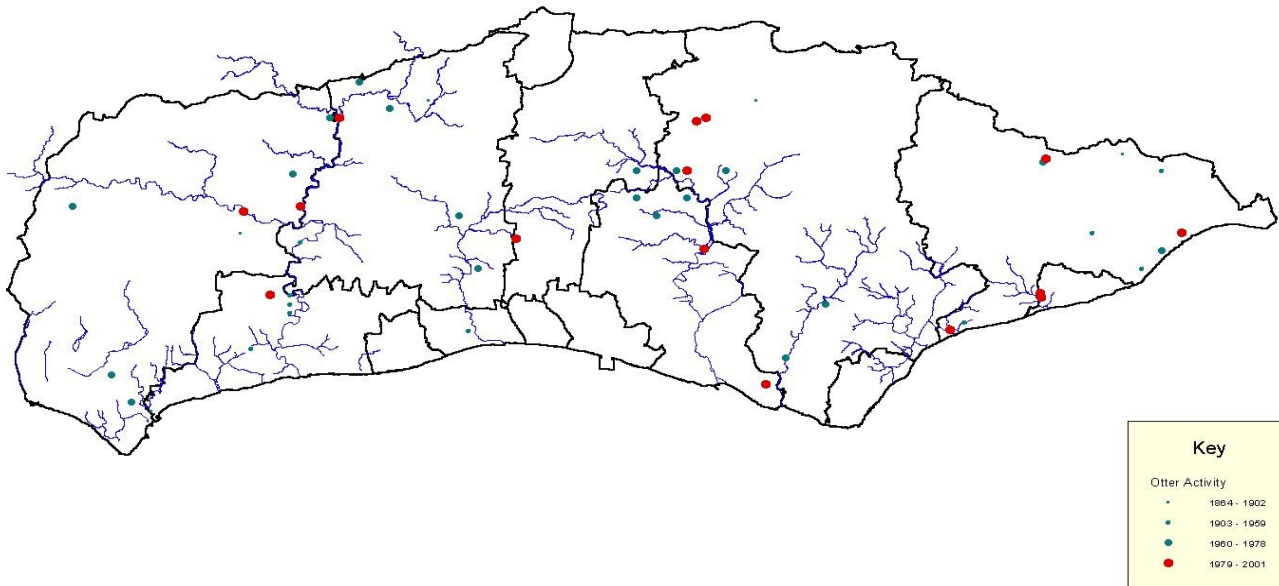
Clusters of sightings are slowly becoming more frequent in Sussex, and there appears to be occasional activity on the Arun, and the Eastern Rother. However, there are still no known resident or breeding otters in the County, and we believe that the majority of otters which come through are transient males looking for new territory. We estimate that it will still be around 20 years before otters will be able to recover to their former population levels.



**An otter found dead on the railway at Rowlands Castle, West Sussex in 2007. Although dead, the general size and health of the otter indicate that our rivers are recovering and that fish and wildlife populations are becoming increasingly healthy**  
© Environment Agency

### Sussex Biodiversity Record Centre

Map showing the distribution of Otter Activity from 1864- 2001.  
 Fran Southgate - Sussex Otters and Rivers Project Officer ESD/02/058 18/02/02

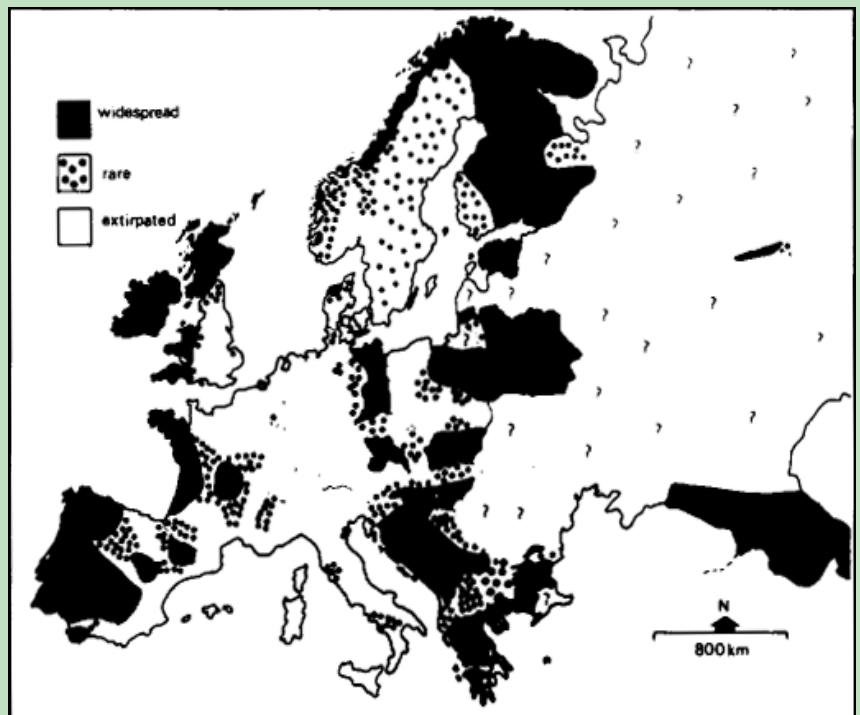


Historic Otter Sightings in Sussex from the last 50 years

### Legal Status

Otters are fully protected under the Wildlife and Countryside Act 1981 (as amended), and by the EC Habitats Directive. Under the EC Habitats Regulations, as a European protected species, otters are given the highest level of protection.

The deliberate or unintentional capturing, disturbing, injuring or killing of an otter is prohibited, as is damaging or destroying a breeding site or resting place (e.g. an otter holt). It is not the intention of the law to prevent all activity in areas used by otters. However, due consideration should be made and adequate mitigation implemented.



Distribution of Otters in Europe 1970's

## Appearance



Otters are generally solitary animals but will come together to mate, or as families with young © S Bray

- European otters are members of the Mustelid family (as are badgers and weasels)
- Otters are one of Britain's largest, and only native semi-aquatic mammals. Males can be up to 1.2 metres long and weigh up to 10 kilos (about the size of a small dog).
- Males are usually slightly larger than females (which tend to be no more than 1 m long).
- Otters have a brown coat, with a large cream patch along the chin and underbelly
- They are well adapted to life in and around the water and have a long streamlined body with a warm underfur and a longer waterproof overfur, webbed feet, a long rudder like tail, and special ear and nose flaps which allow them to swim underwater (for up to 4 minutes).
- Otters are generally nocturnal, and the best time to see them is at dawn or dusk. However, in areas of good habitat such as the Scottish Isles, they can be seen during the day.
- There is only one species of otter in Britain, the Eurasian otter, a freshwater otter. However, in Scotland this species is often found spending large amounts of time on the coast and in the sea.



## A Case Of Mistaken Identity!

People often confuse the introduced American mink (*Neovison vison*) with otters, but there are various ways you can distinguish between the two.



- Otters are nocturnal and shy creatures. They will rarely be seen during the day. Mink are more gregarious and can often be seen during the day.
- Mink have much smaller home ranges than otters (rarely up to 5km, compared to an otter which can often have up to 40km).
- Family groups consisting of female mink and their young may be seen in late summer; but otters are rarely seen in groups.
- Mink are around half the size of the otter, generally darker colour with a fluffier tail, and they don't have the obvious, large creamy patch running from their chin to their belly




## The effect of mink on otters

Mink were once thought to have contributed to the decline of the otter. Although in some cases they may compete for prey, the difference in the size of an otter, and in the size of its territory means that this is on the whole unlikely. There are some concerns that mink may pass Aleutians and other diseases on to otters, but as yet there is minimal evidence to support this.

There is now direct evidence that where otter activity increases, mink numbers decline by around 50%. It is therefore thought that as otters recover, mink numbers will decline naturally.

## Differences between Otters and American Mink

### Otter and mink identification

Feature	Otter (adult)	Mink (adult)
Coat colour (dry)	Milk chocolate brown	Plain chocolate brown
Coat colour (wet)	Dark brown	Black
Tail	Long, tapering and sleek	Round and fluffy
Size (including tail)	4 feet (1.2 metres)	2 feet (half metre)
		
Weight	Up to 25 lbs (10 kilos)	2.5 lbs (1 kilo) <i>upto 2 kilos</i>
Face	Broad muzzle	Pointed muzzle
Behaviour	Nocturnal and shy	Nocturnal/diurnal : bold
Swimming	Low in water	High in water
Footprint size	3 inches (75mm) across 	1 inch (25mm) across 
Other features	Pale cream chin and chest	White chin only

## Feeding

Otters are carnivores, and feed mainly on slower moving fish (roach, perch, and eels) which can form up to 80% of their diet)

Otters tend to eat food seasonally where it is most abundant and most easily caught

Otters also eat small mammals and birds (including rabbits and water voles!), crustaceans (i.e. crayfish), molluscs, dragonflies, slugs and amphibians (i.e. frogs)

In dark or murky conditions they use their sensitive whiskers to help catch prey.



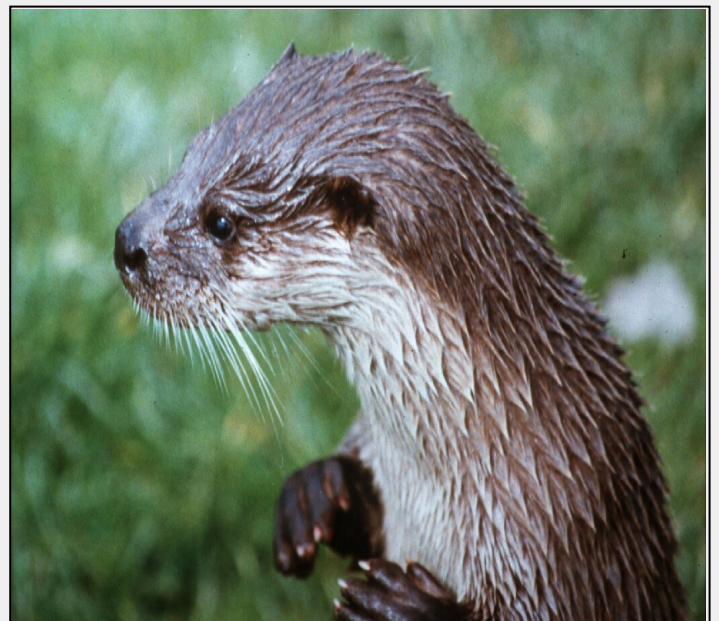
An eel



The diet of an Otter © Wildlife Trust

## Breeding and life cycle

- Otters can breed at any time of year in the UK
- Litters range from 1–4 offspring (average 2)
- Young leave their mothers after around 1 year
- Females breed at most, once a year
- Females reach breeding age at 2 years old
- In captivity otters have lived for up to 15 years. In the wild they rarely live past four years old.
- Otters generally only come together only to breed. Family groups tend to be females with cubs.



## Habitat and Home Range

- Eurasian otters are semi-aquatic and live near fresh water.
- There are no exclusively marine otters living in Britain. Even otters which live on the coast need freshwater to keep their fur waterproof.
- Otters can live on and in many types of waterway and wetland including rivers, wet woodland, reedbeds, lakes, fens and rocky coastlines.
- Otters need to live where there is a plentiful food supply. Especially if they are breeding, they can need up to 1kg of food per day.
- Otters need good bankside cover to 'lie up' (rest) in during the day and for breeding. Trees, log piles, small riparian caves, dense blackthorn and bramble all provide cover. Daytime resting places include reedbeds and the crook of pollarded trees.
- Each otter holds a territory with as many as 30-40 resting places. These are called holts and hovers.
- Each otter can have a large home range, the actual size of which can vary depending on the quality of habitat, availability of food, and competition from neighbouring otters.
- Male (dog) otters have been known to hold territories of 1km up to 40 km of river catchment. Male territories often overlap the smaller territories of 2-3 females.

### Good Wetland Habitats For Otters



## Facts About Otters



Image © Darin Smith

- Otters are nocturnal – they are active at night
- They can see better underwater than on land
- They have around 6 000 hairs per square inch on their bodies – a fluffy short under fur to keep them warm, and a longer, waterproof over fur to keep them dry.
- They have sensitive whiskers on their face and paws, which help them ‘see’ underwater
- They can drink with their head underwater! Very clever!
- They stand up on their hind legs, a bit like meerkats do when they are looking around or checking for danger
- Otters have webbed feet with 5 toes. Cats, dogs and foxes only have 4 toes. Badgers and mink also have 5 toes.
- Otters are a good ‘indicator’ species. Generally if otters are present then you know the watercourse is unpolluted and of high wildlife value.
- Otters can have young all year round. Cubs are born blind and helpless but they already have fur when they are born.

## Main threats to Otters

### Habitat Fragmentation & Destruction

We have lost vast areas of wetland habitat to development and drainage. Remaining habitats are fragmented and often poor quality. Otters have to travel large distances across unsuitable habitat to find mates and sufficient food and resting sites.



### Disturbance

By humans or machines and particularly by dogs which are off the lead near rivers and which will fight territorially with otters.



### Eel Fyke Nets & Crayfish Traps

Illegal fishing with crayfish traps and fyke nets often causes otter deaths where they are not fitted with an otter guard. Litter and mink traps can also cause otter deaths.

### Pollution

The main cause of otter decline in the '60's. Dieldrin and Aldrin, are now banned, but new chemicals and pollutants are also affecting otters.

### Hunting / Running With Dog Packs

Hunting otters with dogs was banned in the 1970's but hunts still 'run' dogs along rivers. This causes disturbance to riverside habitats and wildlife. It is extremely intrusive and dogs can be a severe threat to otters.

### Road and Rail Networks

We lose many otters through accidental Road Traffic Accidents and electrocutions on railways. RTA's increase when spring and autumn rains coincide with rush hour / early darkness. Otter crossings can help reduce deaths.

### Flooding

Flooding can be damaging, especially when otters have young in holts. Flood water under bridges causes otters to get out of the river and cross roads where many of them get run over.



## How to spot an Otter – Useful field signs

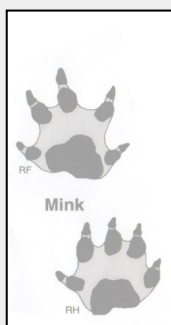
There are a number of distinctive field signs that can be used to find them. See also 'Tracks by the river bank' Guide



Otter prints



Badger



### Footprints

Otters have five toes and webbed feet. Front and hind feet are slightly different.

Badgers have five toes too, but you can see their claw marks and distinctive toes.

Otters prints are different to mink. You can cover a mink print with a £2 coin,



### Brown Staining of Plants

Where otters have sprainted or urinated regularly on rocks etc, moss and other plants can die away, leaving obvious brown patches.

### Anal Jelly

Otters secrete a substance called anal jelly which is often left in similar places to spraint and can be white, black, orange or brown.



### Feeding Remains

Otters prefer fish no bigger than 12cm long, but can eat larger ones. They tend to drag the fish up the bank, peel the flesh off the fish from the gills and leave the head. You may also find mussels and crabs with otter bite marks in them, and crayfish claws left behind where the body has been eaten.



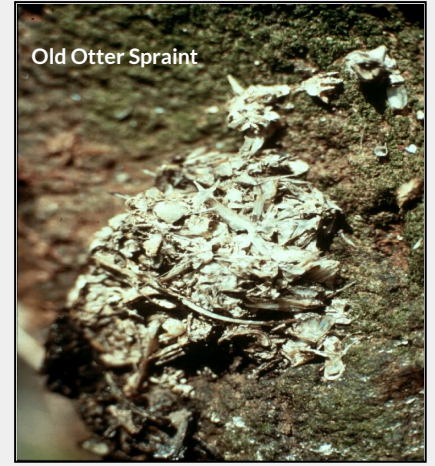
### What's not Otter?

- Cylindrical droppings with chalky white on them – these are bird
- 'Small patches of bones 'sicked up' by cormorants
- Bites you can fit 1 finger between these are mink. Otter bites tend to have about 2cm (2 fingers) between the two front incisors.



## Otter Spraint

Otters are territorial and leave their spraint (droppings) in prominent places to mark their territories. These droppings are quite distinctive once you get to know them. Surveying using otter spraints is one of the best ways to un-intrusively monitor otter presence.



- Otter droppings are quite distinctive. They have minimal 'goo' and tend to be packed with fish scales, fish bones, hollow frog bones etc, making them very crumbly.
- Otter spraint smells almost pleasantly fishy with a hint of jasmine tea!
- Otter spraints keep their smell even when they are old, mink scats dont

- Mink also leave territorial markings, and the two different scats can be confused.
- Mink scats smell very strong and pungent because they are carnivores and mustelids
- Mink scats are packed with fur, feathers and bones, and are often thick, black and goeey
- Mink scats tend to have a twist in one end

**Mink also leave territorial markings, and the two scats can sometimes be confused**

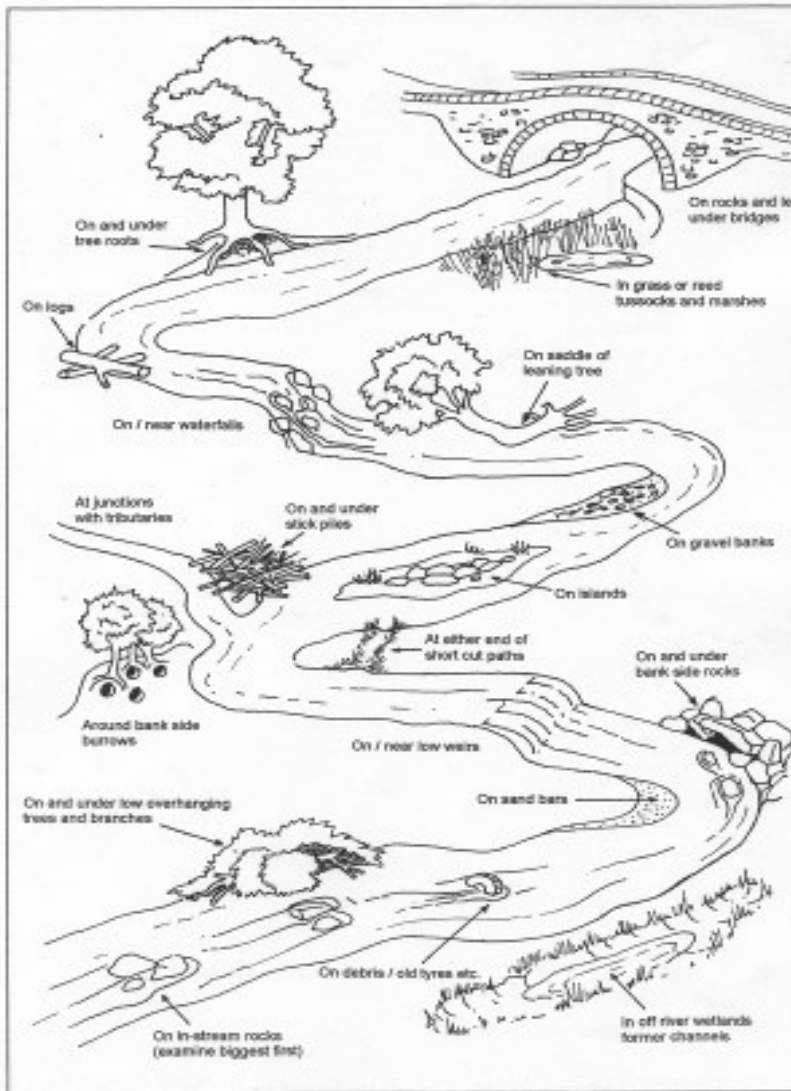


### WARNING:

Please do not touch otter or mink faeces directly. Use foil or twigs to collect, smell and move it.



### Places to check for spraints, prints and other signs



### Looking for Otter Spraint

Otters are territorial, and will mark their territories to tell other otters to 'keep out', or to tell them that they are breeding. Bear this in mind when looking for otter signs, and think about how an otter might strategically mark places along rivers and watercourses to protect food, breeding potential and habitat.

Good places to look for otter spraint include :-

- Where one or more streams / rivers converge
- At the downstream end of islands
- On ledges under bridges
- On weirs or other river structures
- On large rocks or boulders which are not regularly flooded or submerged
- On the roots or fallen trunks of large riverside trees
- By freshwater pools adjacent to coastal areas (they need them to keep their coat free of salt)
- A wetland feature which connects two other areas of good habitat

### Other Waterside Species of Interest

There are a number of other native and non native birds, plants and mammals that can be found in or near waterways, which are rare, or whose presence indicate the quality of the particular habitat. We are interested in receiving records of any of these species for future conservation work.

Brown Rat  
Common Frog  
Crayfish (native/non native)  
Dragonflies  
Fen  
Floating Pennywort  
Zealand Swamp Cress  
Marsh Frog  
Parrots Feather

Giant Hogweed  
Newts  
Water Shrews  
Wet Woodlands  
Wet/Rush Pasture  
American Mink  
Himalayan Balsam  
Toads  
Kingfisher

Reedbed  
Water Fern  
Wading birds i.e. Snipe  
Ground Nesting Birds  
Moorhen/Coot/Duck  
(indicating absence of Mink)  
Japanese Knotweed  
Skunk cabbage

## Environmental Etiquette!

### Do not remove territorial or feeding field signs

If you find droppings, do not remove them entirely. If needed for identification purposes, take less than one half of what is there or take a photo.

### Clean equipment (particularly boots and nets) between every site visit

A number of invasive, non native plants produce seeds and roots which are easily spread in tiny fragments, causing havoc with native wetlands. These plants can hitch a ride on boots and equipment. There is also a disease which can be spread to native crayfish by contact with water.



### Access

If you are undertaking surveys on any public footpaths, bridleways or open access nature reserves (shown on OS maps and usually signposted) then it is not necessary to obtain permission from a landowner, although it is courteous to explain what you are doing and make sure landowners are not opposed.

**Any other land is likely to be private. Please do not enter onto private land without the landowners permission.** Remember – Sussex Wildlife Trust relies on maintaining good relations with landowners to achieve conservation works. If you are planning to survey on private land then please seek permission from the landowner beforehand (the WildCall / Wetlands officer at SWT may be able to help with contact details). Details can often be found by asking at the nearest farmhouse, local shop or pub etc. **If you are unable to contact the landowner, then do not trespass. If you are refused access permission then please respect the decision of the landowner.**

### Advice and information

If surveying only, please try not to discuss or give advice on, (wetland) habitat management or other otter and water vole related issues. It can result in a misunderstanding of the purpose of your visit, and the giving of inappropriate/un-standardised advice.

**If the landowner requires any further information, has any queries you are unable to answer, or would like a site visit to discuss habitat management etc. then please ask them to contact the Wildlife Trusts Wetland officer** (see Contacts page). We also have a website with wildlife information [www.sussexwildlifetrust.org.uk/wildlife/index.htm](http://www.sussexwildlifetrust.org.uk/wildlife/index.htm)

### Disturbance to nesting birds and other wildlife

Try not to disturb nesting birds and other wildlife whilst surveying. Be aware of their breeding seasons and, for example, when surveying in reedbeds, take particular care to note and avoid reed warbler

## Submitting Records of Surveys

There is no strict format for how to survey, or for sending us your Otter Spotter records, however the following are some guidelines to help you record all the information we need in a useful format.

The most important things we need from you are the following :-

- Your name
- The date you surveyed
- The location (Site name and Grid reference)
- What you saw & where

Once you have recorded these, you can send the results to [www.sxbrc.org.uk](http://www.sxbrc.org.uk) or [pennygreen@sussexwt.org.uk](mailto:pennygreen@sussexwt.org.uk)

Sussex Biodiversity Records Centre hold all our records for rare and protected species and habitats. You can download a free Species Recorder spreadsheet which makes it easy to transfer your records into our systems from <http://sxbrc.org.uk/projects/speciesrecorder/>

**When reporting sightings, don't be afraid to say you are not sure about what you saw . If you are only 80% sure the signs are otter, then record this on your surveys. You can also take and send photos as verification of some of the field signs.**

There is also a standard riparian mammal survey form available at the back of this document. These surveys are more complicated, but they provide more local detail which is useful when specific management questions are being asked about a water vole site. See also Sussex Mammals Group and the Mammal Society for more details.



Animals such as water voles and the nocturnal otter can be recorded using motion sensor infra red cameras. This saves survey effort and can



produce some spectacular images. You can borrow these cameras for two week periods from Sussex Wildlife Trust. Call 01273 492630 to book them.

## Health and Safety

Rivers and wetlands are wonderful but they can be hazardous and great care should be taken when surveying in the field. The following is a simple guide to your own safety when surveying. Please do not be daunted by it! It is just important that you are aware of all the potential hazards.

**NOTE: You must take full responsibility for your own safety and for anyone accompanying you whilst surveying. Registered Wildlife Trust volunteers are covered by our Insurance and our lone worker support system.**

### Safety first

Never try and reach dangerous or precarious parts of a site – i.e. do not attempt to cross a river if you can't see the bottom, or to cross slippery structures. Silt in watercourses can be very deep and difficult to get out of – rivers often have over 6 feet of silt below the bottom of the water. Many river banks are steep and can be difficult to climb if crumbly or sparsely vegetated. Don't survey following heaving rain when rivers are in spate *particularly if you are working alone*.

### Lone Working

We recommend that you always go otter spotting with other people and not alone. Please contact the Wetlands officer if you are trying to find a working partner. If you do need to go out alone, then tell friends, family or a local landowner exactly where you are going (including grid reference), details of the vehicle you are travelling in and where it will be left, how long you will be and when you will get back. If necessary phone home to change arrangements if you have a change of plan. *Never put yourself in to a situation where you think you may be in danger.*

### Be prepared

An age old saying, but it works! Before you leave, make sure you have any safety equipment that you need and that you are dressed appropriately. Take note of weather conditions. Heavy rainfall upstream can cause localised and flash flooding, causing some rivers to rise several feet in a matter of minutes. *Do not go out surveying if weather conditions are bad, and particularly if rain has been heavy in the last day or so. Surveying following bad weather is often of little use as rain washes away any useful field signs.*

### Learn to swim

We would recommend that anyone who cannot swim does not undertake surveys near water. If you must survey and you cannot swim, then a self inflating life jacket must be worn. Even those who can swim should wear a lifejacket if possible.

### General Rules of Health and Safety

- Always make sure you wear suitable clothing and footwear.
- Take a first aid kit with you and have first aid training if possible.
- Make sure your tetanus is up to date, and tell your doctor you are working near water.
- Stop your search before daylight begins to fade.
- Clean and cover any cuts with waterproof dressings.
- Always clean your hands with sterile water before eating; if necessary use sterile wipes.
- Always tell someone where you are going and for how long.
- Be aware of local hazards such as poisonous plants, pollution signs etc.

## General Hazards

River areas are often hazardous but there are some things to particularly watch out for :-

- Holes such as badger and rabbit holes hidden under vegetation
- Barbed wire, trash and fencing etc. hidden in vegetation and silt
- Soft, steep or crumbly river banks and soft muddy areas
- Plank bridges, logs and woody debris, they can be rotten
- Unstable bankside trees which may come loose if used as hand holds
- Submerged debris such as sharp metal and glass which cannot be seen from the surface



## Specific Hazards

**Giant Hogweed (above)** - Highly toxic. It produces sap and has hairs on the stem and leaves that cause a severe allergic reaction (swelling, blistering and irritation) , made worse by exposure to sunlight. The plant grows up to 5m tall) with large clusters of white flower heads

**Hemlock Water Dropwort** - Another toxic plant with poisonous sap. If eaten in sufficient quantities it can cause severe discomfort or even kill you. The sap also causes blistering if exposed to sun.

**Consult a flower book so that you can identify these plants. Wear clothing that covers your arms and legs and do not touch any plants you do not recognise.**

**Weils disease / Leptospirosis** - 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. Consult the Health and Safety Executive website before surveying [www.hse.gov.uk/pubns/indg84.pdf](http://www.hse.gov.uk/pubns/indg84.pdf) . **If you suspect Weil's disease show a copy of the HSE Leptospirosis card to your doctor immediately. The disease can be fatal.**

**Lyme's disease** - This disease is prevalent in Sussex and South downs area. The illness is caused by bacteria which live in the gut of ticks – small insects usually found in long grass particularly if animals like sheep and horses are present. If bitten by an infected tick, this bacteria can be passed to humans. Symptoms start within a week to a month of being bitten. An initial sign of infection can be a red rash like ring around a bite up to 50cm across. Flu like symptoms occur with headache, chills, fever, tiredness and joint aches. The best cure is not to get bitten. See [www.nhs.uk](http://www.nhs.uk) for further advice.

### **Exposure, hypothermia, sunstroke, exhaustion, hunger**

Make sure that you are equipped with the appropriate clothing, footwear, food and drink for your individual needs on any given day. Cut your survey short if you feel ill in any way.

### **Livestock and wildlife**

Livestock can be very inquisitive. They are unlikely to be aggressive, however bulls and mothers with calves may be protective. Any injured animal or animal with young can be dangerous if approached. Some animals may attack any face or hand placed into a nest or burrow, particularly if there are young inside!



### **Blue - Green algae**

Certain forms of blue green algae can be toxic to humans. If you are unsure of the algae in a water course then do not put yourself in contact with it. Always wash your hands after contact.

## **General Safety in water**

- Only enter or cross water if there is a good reason to do so. If you wish to investigate something that is only accessible by entering the water then only do so if with another adult, who is watching you from a safe vantage point and is prepared with a rope or branch to help you if you get into difficulty. Give them any first aid kit, mobile phone etc to hold.
- Only go in to water to just under your knees. Never use chest waders – if you fall in they can fill with air and tip you upside down in the water.
- Never go in barefoot – there may be unseen hazards underwater.
- Use a strong stick to help you keep your balance and to help pull you up steep banks. The stick can be used to check water depth and the condition of the river bed.
- Place each footstep carefully and firmly.
- Walk upstream – this will keep the water clear so you can see what you are stepping on.
- Beware of pools – they can be very deep. They are often found under trees, at the end of riffles and in the outside bend of meanders.
- Beware of slippery rocks, particularly if they are covered in green or brown moss or algae.
- Do not enter the water anywhere that you can see white water (rapids)
- Do not cross or enter the water near weirs, dams or waterfalls.

## Lone Working Policy for Sussex Wildlife Trust Volunteers

We appreciate your offer of helping us by being a volunteer Otter Spotter. We like to ensure that whilst volunteering for us you are safe at all times. We value your health and safety far more than any survey information etc. you can give us. So please do not take unnecessary risks when volunteering.

Volunteers are now treated in the same way as staff when lone working and so they must follow lone working policy for the Sussex Wildlife Trust (SWT). These notes are an amended form of that policy. Lone working should be avoided where possible – it is safer and more enjoyable when working in pairs. If unavoidable, the following procedures are recommended:-

- Do not survey areas of high risk (e.g. steep river banks, deep water etc.), and don't survey alone
- When lone working carry a fully charged mobile phone switched on at all times
- Before surveying make sure that you have filled in all the necessary SWT volunteer forms and that the Wetlands officer/volunteer co-ordinator know your contact details and those of your next of kin.
- Before surveying let a friend/relative know where you are going (grid references/maps) and when you expect to be back. Alternatively during office hours (9 am – 5 pm) SWT reception (01273 492630) operates a lone working buddy system which you are welcome to use.
- If possible avoid surveying outside of regular office hours and particularly in evenings.
- If several sites are to be visited during volunteering then inform your lone worker contact of locations and times you expect to arrive/leave each site.
- At the end of the day ensure that you speak directly with your lone worker contact to advise them when you will return home (do not leave phone messages)
- Have an emergency contact entered into your mobile phone as 'ICE' (In Case of Emergency).
- If you have an accident/incident, inform your SWT/lone worker contacts as soon as possible. An accident report needs to be completed for each incident.
- It is advisable if possible when working near water, wear a self inflating life jacket. We regret that we are unable to supply these to volunteers.



## Miscellaneous Information

If you are interested in conservation work in general and would like the opportunity to work with other local groups then please contact Sussex Wildlife Trust (SWT) and ask for their volunteer co-ordinator or (01273) 497500. SWT supplies insurance for its registered volunteers.

If you see any signs of otters or water voles and you have a camera then please take a photo of the signs and a Grid ref of where you saw them if possible, plus the date seen. These records can be sent to the Su

## Daily Risk Assessment – Example

Name of Survey Leader.....

Date of Task.....

Task.....

Activity	Yes/No
Site and Task Risk Assessments filled in by leader	
Hazards identified, and preventative and precautionary measures imparted to the group e.g. ground terrain, proximity of water, machinery etc. CONTINUE OVERLEAF IF NECESSARY	
1:	
2:	
3:	
4:	
5:	
6:	
7:	
Volunteers given introduction to site, the task and reasons for the work	
Tool talk, including safe transportation, and use	
First Aider(s) nominated	
Location of first aid kit given	
Access for emergency vehicles - see site safety map	
Mobile Phone present	
Nearest public phone	
All correct PPE given (as specified by risk assessments)	
Any medical conditions of group known	
If an accident occurs, volunteer organisation (i.e. SWT) informed at the earliest opportunity	
Accident form completed and sent to organisation responsible for managing surveys	
List names of all volunteers undertaking task, including emergency details and signatures for all volunteers	
Confirmed with other organisations bringing work parties that they are correctly insured and Risk Assessed. Exchanged Insurance and RA docs with each of these parties.	
Confirm who has overall H & S responsibility as task leader for the current task	



## Contacts

### Sussex Wildlife Trust

[www.sussexwt.org.uk](http://www.sussexwt.org.uk)

01273 497555

### Natural England

0845 600 3078

[enquiries.southeast@naturalengland.org.uk](mailto:enquiries.southeast@naturalengland.org.uk)

### IOSF—International Otter Survival Fund

[www.otter.org](http://www.otter.org)

### National Otter Network

Otternetwork@yahoogroups.co.uk

### Wildlife Crime

(Local Police Line)

0845 60 70 999

### Environment Agency

Ask for Fisheries & Biodiversity teams

03708 506506

[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

### Sussex Wildlife Trust

(Wildlife advice line)

01273 494777

## References & Further Reading

- **Monitoring the Otter:** Conserving Natura 2000 Rivers, Ecology Series 10
- **Liles G. (2003) -[Otter Breeding Sites. Conservation and Management.](#)** Conserving Natura 2000 Rivers Conservation Technical Series No.5 English Nature, Peterborough.
- **Chanin P. (2003) [Ecology of the European Otter.](#)** Conserving Natura 2000 Rivers Ecology Series No.10 English Nature, Peterborough.
- **Hans Kruuk (2006):** Otters; Ecology, Behaviour & Conservation
- **Environment Agency. (2009-2010).** The fifth otter survey of England
- **Environment Agency and Wildlife Trusts.** Otters and Stillwater fisheries.

**If you see any pollution incidents or dead otters then please call the Environment Agency  
(See contact above)**

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All information contained within Sussex Wildlife Trust factsheets is to the best of our knowledge true and accurate at the time of printing. The Sussex Wildlife Trust will not accept any responsibility or liability for any losses or damage resulting from the advice given.

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## Managing your land for Otters and Water Voles



Otter



Water Vole



5. Create  
Reedbeds



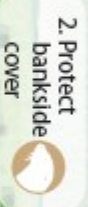
10. Hedging - by ditches or  
connecting water courses



15. Restore natural river  
channels and wetlands



13. Otter underpasses



2. Protect  
bankside  
cover



8. Maintenance of  
ditch systems



3. Fence meanders



1. Plant trees  
and shrubs



9. Natural  
Reinforcing of  
riverbanks



4. Buffer Strips



6. Creation of  
off-stream refuges



11. Artificial Otter holts



7. Islands



14. Cattle drinks

7

See overleaf for more information on numbered options

8

# Land Management

Simple ways to manage your land for Otters, Water Voles and other wildlife.



## 1. Plant Trees and Shrubs:

Otters need dense vegetation to lie up in during the day. Planting areas with willow, hawthorn, blackthorn and brambles can quickly create suitable habitat. Old trees on river-banks with large rock cavities, especially oak and ash, provide secure breeding holt for Otters. Permission and advice on location of trees may be required from the Environment Agency.



## 2. Protect bankside cover:

When providing Otter habitat, ensure that suitable areas for other species i.e. Water Vole are not destroyed. Retain some open areas with lush, green herb growth such as reeds, rushes and sedges.



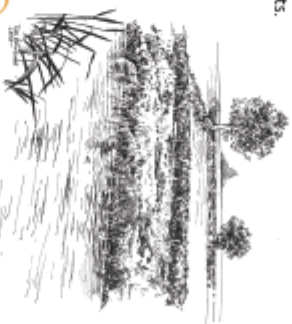
## 3. Fence Meanders:

Fencing off field corners and river meanders close to water courses provides potential Otter 'sanctuaries'. These can be useful locations for artificial Otter holt and provide wetland vegetation for Water Voles and other wildlife.



## 4. Buffer Strips:

A riverside buffer strip can provide food and cover and can have a high conservation value. Buffer strips may be permanent or part of an arable crop rotation. They help improve fisheries by reducing pollution and silt entering the watercourse, and are also good for birds and insects.



## 5. Create Reedbeds:

Reedbeds provide good resting and feeding areas for Water Voles, Otters and a wealth of other wildlife, and can also help improve water quality.



## 6. Landforming and creation of offstream refuges:

Creating bays, shelves, scalloped edges and online scrapes along ditches or creating ponds, wader scrapes, backwaters and wetlands, can offer important refuges for Water Voles, (particularly where water courses are liable to flooding or drying). These provide a diverse range of habitats, suitable for many species. Ponds can also provide alternative or additional feeding sites for Otters and Water Voles.



## 7. Islands:

Vegetated islands with no access provide ideal non-intervention sites for Otters and Water Voles. Islands can also benefit fisheries.

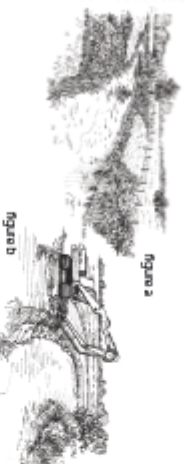


Good for Otter



## 8. Maintenance of Ditch Systems:

Where possible, routine ditch maintenance should be carried out in autumn to minimise effects on Water Voles. Work short stretches at one time in rotation on alternate banks (figure 9). When de-silting, work as far back from the water's edge as possible to minimise compaction by machinery.



## 9. Natural reinforcing of river banks:

If bank protection is essential, river banks can be reinforced or re-profiled in ways that improve Water Vole habitat. There are many methods involving 'soft' engineering techniques (coir fibre rolls, willow spilling etc) rather than 'hard' engineering (concrete, steel sheet pile etc).



## 10. Hedging:

Hedges can be used as an alternative to fencing. They provide habitat, food and migration corridors for many species – as long as they do not shade out vegetation on the bank. Hedges should be broad at the base and trimmed on a rotational basis to provide a range of different structures and habitats.



## 11. Artificial Otter holt:

There are very few natural holt sites on lowland rivers. An artificial underground holt or a log pile is a simple way of creating a secure lying up site for Otters. Ask your OARF officer for advice on suitable locations.

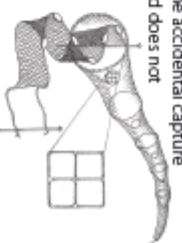


Good for Water Vole



## 12. Otter Guards:

The fitting of Otter guards on fyke nets and Mink traps can prevent the accidental capture or drowning of Otters and does not affect catch efficiency.



## 13. Otter underpasses:

Where Otter road casualties are a particular problem, Otter underpasses can be built, i.e. near bridges. Fencing guides Otters towards underpasses and away from roads.



## 14. Cattle-drinks:

Cattle-drinks allow livestock direct access to a watercourse but confine damage and trampling of river banks to localised areas and reduce siltation.

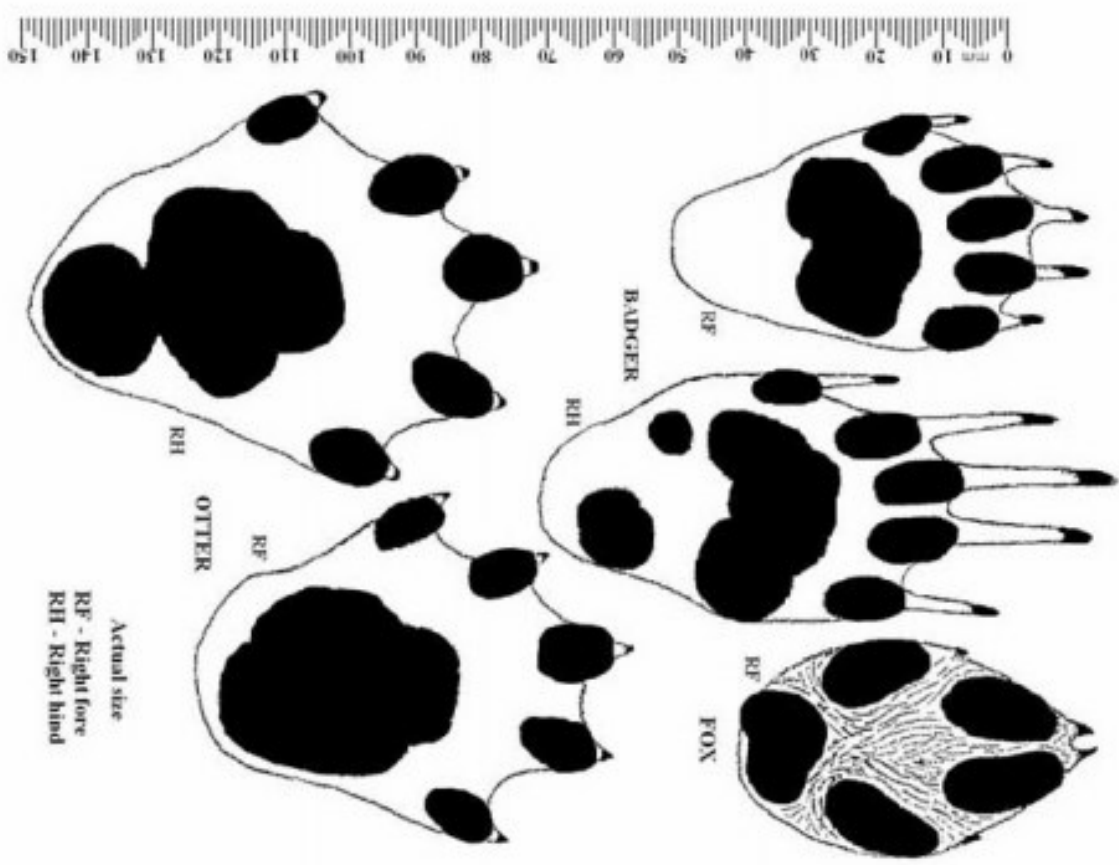


## 15. Restore natural river channels and wetlands:

Many river channels have been intensively managed, straightened and canalised over the years. River rehabilitation and wetland restoration is a long term commitment but can have immense benefits for people and wildlife.



# Common Tracks Found on The River Bank



<b>RIPARIAN MAMMAL SURVEY FORM</b>				Site number	
				10KM square	
<b>BACKGROUND INFORMATION</b>					
Recorder				Date	
Site name/river					
County				Grid ref	
Landowner					
<b>HABITAT INFORMATION</b>				Survey distance	
<b>HABITAT TYPE</b>	<b>DEPTH</b>	<b>SHORE/BANK TYPE</b>	<b>BORDERING LAND USE</b>		<b>VEGETATION (DAFORN)</b>
<input type="checkbox"/> Ditch	<input type="checkbox"/> <0.5m	<input type="checkbox"/> Boulders	<input type="checkbox"/> Upland grass		<input type="checkbox"/> Bank trees
<input type="checkbox"/> Dyke	<input type="checkbox"/> 0.5-1m	<input type="checkbox"/> Stones	<input type="checkbox"/> Permanent/temp grass		<input type="checkbox"/> Bushes
<input type="checkbox"/> Gravel Pit	<input type="checkbox"/> 1-2m	<input type="checkbox"/> Gravel	<input type="checkbox"/> Mix broadleaf woodland		<input type="checkbox"/> Herbs
<input type="checkbox"/> Pond	<input type="checkbox"/> >2m	<input type="checkbox"/> Sand	<input type="checkbox"/> Conifer woodland		<input type="checkbox"/> Submerged plants
<input type="checkbox"/> Lowland lake		<input type="checkbox"/> Silt	<input type="checkbox"/> Peat bog		<input type="checkbox"/> Floating plants
<input type="checkbox"/> Upland loch		<input type="checkbox"/> Earth	<input type="checkbox"/> Arable crop		<input type="checkbox"/> Reeds/sedges/ rushes
<input type="checkbox"/> Reservoir		<input type="checkbox"/> Rock cliffs	<input type="checkbox"/> Salt marsh		<input type="checkbox"/> Tall grass
<input type="checkbox"/> Running water	<b>SUBSTRATE</b>	<input type="checkbox"/> Earth cliffs	<input type="checkbox"/> Urban/industrial		<input type="checkbox"/> Short grass
<input type="checkbox"/> Marsh/bog	<input type="checkbox"/> Boulders	<input type="checkbox"/> Canalised	<input type="checkbox"/> Park/garden		
<input type="checkbox"/> Canal	<input type="checkbox"/> Stones	<input type="checkbox"/> Poached	<input type="checkbox"/> Heath		<b>DISTURBANCE</b>
	<input type="checkbox"/> Gravel	<input type="checkbox"/> Reinforced	<input type="checkbox"/> Fen		(scale 1-5)
<b>BANK PROFILE</b>	<input type="checkbox"/> Sand	<input type="checkbox"/> (man-made)	<input type="checkbox"/> Cattle/grazing		
<input type="checkbox"/> Flat <10°	<input type="checkbox"/> Silt/mud	<input type="checkbox"/> Other	<input type="checkbox"/> Bank fenced?		<b>ALTITUDE</b>
<input type="checkbox"/> Shallow <45°	<input type="checkbox"/> Other				
<input type="checkbox"/> Steep >45°					<b>WEATHER</b>
<input type="checkbox"/> Vertical/ undercut					(Today+for last week)
<b>FREEBOARD HT</b>	<b>WIDTH</b>	<input type="checkbox"/> <1m	<input type="checkbox"/> 1-2m		<input type="checkbox"/> 2-5m
<input type="checkbox"/> < 10cm	<input type="checkbox"/> 5-10m	<input type="checkbox"/> 10-20m	<input type="checkbox"/> 20-40m		<input type="checkbox"/> >40m
<input type="checkbox"/> 10-30cm	<b>CURRENT</b>				
<input type="checkbox"/> 30-80cm	<input type="checkbox"/> Rapid	<input type="checkbox"/> Fast	<input type="checkbox"/> Slow		<input type="checkbox"/> Sluggish
<input type="checkbox"/> >80cm	<input type="checkbox"/> Static				
<b>WILDLIFE INFORMATION</b>					
<b>OTTER</b>	<b>WATER VOLE</b>		<b>MINK</b>	<b>BROWN RAT</b>	<b>WATER SHREW</b>
<input type="checkbox"/> Sightings (no.)	<input type="checkbox"/> Sightings (no.)		<input type="checkbox"/> Sightings	<input type="checkbox"/> Sightings	<input type="checkbox"/> Sightings (no.)
<input type="checkbox"/> Spraints (no.)	<input type="checkbox"/> Latrines (no.)		<input type="checkbox"/> Scats (no.)	<input type="checkbox"/> Droppings	<input type="checkbox"/> Droppings
<input type="checkbox"/> Footprints	<input type="checkbox"/> Burrows (no.)		<input type="checkbox"/> Footprints	<input type="checkbox"/> Footprints	<input type="checkbox"/> Burrows
<input type="checkbox"/> Anal jelly	<input type="checkbox"/> Footprints		<input type="checkbox"/> Runways	<input type="checkbox"/> Runways	<input type="checkbox"/> Footprints
<input type="checkbox"/> Runways	<input type="checkbox"/> Runways		<input type="checkbox"/> Dens (no.)	<input type="checkbox"/> Burrows (no.)	<input type="checkbox"/> Prey remains
<input type="checkbox"/> Slides	<input type="checkbox"/> Swimways				
<input type="checkbox"/> Feeding remains	<input type="checkbox"/> Feeding remains				
<input type="checkbox"/> Holts (no.)	<input type="checkbox"/> Cropped lawns around entrances (no.)				
<b>OTHER WILDLIFE</b>					
<input type="checkbox"/> Coot	<input type="checkbox"/> Moorhen	<input type="checkbox"/> Kingfisher		<input type="checkbox"/> Heron	<b>Other</b>

**SKETCH OF SITE - ANIMAL ACTIVITY INDICATED (IF ANY)**

**KEY TO SYMBOLS**

(mark route surveyed and direction of flow)

Mature trees		<b>ADJACENT LAND-USE CODES</b>
Over-hanging branches		Broadleaved wood <b>BW</b>
Fallen tree		Conifer plantation <b>CP</b>
Exposed roots		Moorland/heath <b>MH</b>
Pollarded tree		Rough pasture <b>RP</b>
Sapling		Wetland <b>WL</b>
Scrub		Improved grass <b>IG</b>
Hedgerow		Tilled land (crop) <b>TL</b>
Fence		Suburban/urban devel. + gardens <b>URB</b>
Reed/sedge bed		<b>OTHER FEATURES</b>
Flood bank		Roadbridge
Artificial bank		Footbridge
Earth cliff		Weir
Water Vole <b>Wv</b> Otter <b>Ot</b>		Culvert
Mink <b>Mk</b> Brown Rat <b>Br</b>		Ford
Water Shrews <b>Ws</b>		Outfall
Spraint <b>Spr</b> Scat <b>Sca</b>		Dredgings/spoils
Latrine <b>Lat</b> Droppings <b>Dro</b>		Silt bars
Runway <b>Rwy</b> Swimway <b>Swy</b>		Islands (mark position and size)
Feeding Remains <b>Frs</b> Burow <b>Bur</b> Sighting <b>Sig</b>		

**ADDITIONAL COMMENTS:**

Water level management  
 Signs of drying out  
 Flood debris position  
 Evidence of pollution

## Feedback Form

Name:

Address:

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Post code:

Telephone number:

Email:

Comments on training pack (i.e. contents, omissions, suggestions)

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Course/training day attended (Date, location, species)

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Comments on training received

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Any other comments

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# Thank you for your help!



Otter © S. Bray