



OSI summer camp in London 2023
Iban, Karlo, Garance, Flora



HANDBOOK TO FOXES IN LONDON



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Urban ecosystems in London: an 11-days science trip in London for French teenagers.

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Objectif Sciences International is a science education focused NGO, with has special consultative status of the UN (ECOSOC). It has been a leader in the field of citizen science since 1992. OSI brings together volunteers of all ages who come to learn various techniques from different scientific disciplines by using them in the framework of participative research camps (field trips, science vacation camps...). It organises science education activities and scientific research to help solving our sustainable development problems (water, food, energy, biodiversity, climate...).

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Foxes have been living around humans for a long time. For many cultures around the globe they have a kind of mystical aura. Foxes symbolize cunning, intelligence, patience or the ability to seduce.

In Christian tradition foxes are believed to be linked with Satan as they lure their preys by playing dead. To Celts foxes were perceived as guides into the forests and the world of spirits. Asian cultures also have a positive vision of the fox. For instance in Japan, the *kitsune* symbolize chance and wisdom. They are deities related to the *Kami Inari* that represents fertility and agriculture. They can change their appearance and play tricks on humans to punish proud or selfish persons.

These examples show that foxes are not only animals but also a source for legends and prejudices. Nowadays there are thousands of foxes living in British cities such as London. People might have divergent points of view on these wild* animals but little knowledge about them.



Fumei Chōja and a fox-spirit (British Museum)

BIOLOGICAL FACTS

The red fox is a canine. There are 37 species, among which 12 belong to the « *Vulpus vulpus* » type. The red fox is the largest one. It reaches 1 to 1.2 meters.

The « *Vulpus vulpus* » has a great sense of adaptation to its environment. For exemple, the fennec lives in the desert and has very long ears to detect small animals in the sand. The polar fox survives in very cold conditions. Its fur changes according to temperatures in addition of providing good camouflage.



Renard (Wikimedia Commons, photo de Susanne Nilsson)

The red fox moves at the average speed of 6 to 13 km/h and goes up to 60 km/h when he runs. He weight between 4 to 7 kg with a maximun of 14 kg. Foxes have a small stomach, and have to eat small portions regularly.

FOOD CHAIN

Foxes are omnivorous*. They eat small animals, for example rabbits, chicken and mice. They can also be vegetarian if there is no meat available, they also like vegetables and fruits. Foxes are very good hunters. They jump high and they are fast. Foxes have a very good night vision so they can hunt in the dark.

The provider in the fox family is the male. He brings the prey or food to feed the vixen* and the kits*. Foxes in the city have a different life from the one they live in forests. They find food in the garbage and also eat rats.

The fox has almost no predator apart from humans, but kits* can be eaten by prey birds. In the wild, foxes can also be eaten by wolves in case of a dispute over carcasses.

EXCREMENTS

Fox droppings are extremely variable, depending on their diet. Fox example when they eat birds their droppings are twisted and pointy, when they eat worms and berries they are rather liquid.

Foxes use their droppings to delimitate their territories. They leave it on mole hills, tussocks or branches. This is useful to differentiate their droppings from dog's poop. They also use their urine as a landmark for hidden food.

HABITAT

The house of the fox is called a den* or a sett* if he sleeps with a badger. Foxes dig* holes* in the grass to make a den. The fox puts his bones in his den, he keeps his bedroom clean. Foxes lives in almost every habitat in the UK.



Red fox kits huddled at den entrance. © Daniel J. Cox/Getty

REPRODUCTION

The female is fertile for a very short time: only 6 days a year. The reproductive period is between December and February with a peak in January. When the male finds a female, he follows her all the time and the sexual tension is visible as he stretches his tail upwards. As most mammals they mate in doggy-style position.

Most of the time, red foxes live in faithful couples and their offsprings are called kits*. Sometimes, other females live with a couple. They don't mate but they help with the kits.

The kits are born 50 days later. There is usually 5 kits in a litter, but sometimes more if the conditions are favorable. These kits are born blind and deaf and drink their mother's milk during 4 weeks. When they start growing the foxes usually move to a larger den*. In June, the kits start to go out of the den, to play and to learn how to hunt with the helping female.

In September or so the youngs are almost adults and start looking for their own territory. They are able to reproduce as from their first year.

MAIN CAUSE OF DEATH

The main cause of death for foxes are road accidents. It often happens when they are looking for a territory. Foxes and hedgehogs* are very common casualties on roads when cars hit them. Around 80% of foxes do not reach their first birthday due to their vulnerability. After being struck by a car, some still manage to survive. In fact, it was estimated that 1/3 foxes in London recovered from a car accident.

WHY DO THEY LIVE IN LONDON?

Foxes are a bit like pigeons or other urban birds. They are attracted by abundant food that humans leave in their bins. In London, there are also a lot of parks which is convenient for foxes. London has also a lot of quiet neighbourhoods for foxes, especially at night when the animal starts searching for food.

DISADVANTAGES TO HUMANS

Foxes can annoy humans. They might spread diseases, or scatter waste in the streets by looking for food in trash. They can also damage gardens and eat chickens. In rare cases, they can attack babies or young children but most of the time foxes will fear them.

DISEASES

The red fox can catch diseases and sometimes transmit them to humans. Scabies makes them lose their fur before starving them to death. They may catch several different diseases such as parvovirus, distemper or ear cancer. The tococana is an intestinal worm which can be transmitted to

dogs and in very seldom cases to children. In addition, foxes can spread other diseases such as the echinococcosis. The latter can also be detected in 30 % of pets.

Red foxes have been vaccinated against rabies during the 80s/90s by distributing food that contained the treatment.

AGGRESSIVITY

In 2013, a fox bit an infant in London. The fox entered a house, was confronted with the child, got afraid and bit them. This event was widely broadcasted in the medias and many people were confirmed in the idea that foxes are dangerous.

However foxes are easily frightened by humans and usually flee when facing them. Basically they are not aggressive, but might bite if they feel they have no other solution.



Fox eating in the street (photo: Evening Standard)

ADVANTAGES TO HUMANS

Foxes are useful for the ecosystem as they eat animal carcasses and prevent animal proliferation, reducing the need for toxic products. They also reduce the prevalence of Lyme disease by eating infected animals that are easier to catch. Finally, they contribute to spreading seeds to new places by leaving the seeds in their poop.

ARE HUMANS A THREAT TO FOXES?

Some people don't like foxes because they come into their houses, they destroy waste bags or they make noise when they mate. Some people even have a phobia about foxes, they are called fennecaphobes. Some people kill them with poison or other means like gassing, asphyxiation, maiming, stabbing, impaling, drowning, clubbing and most forms of snaring.

As it is forbidden to be cruel to animals the RSCAP tries to protect wild* animals such as foxes in London. To do so, they target the public. They explain how to behave with foxes, what to do if they enter one's garden or house, how to deal with waste... They also try to explain people that is not a good idea to befriend with foxes or to tame* them. In fact, if a fox becomes used to humans it might trust ill-intentioned people.

In conclusion, foxes are very adaptable and it's easy for them to live in an urban environment. London is a great example: the population of foxes has been multiplied by 2 in 20 years. Nowadays, there are roughly 10 000 foxes living in the Greater London. Nonetheless, should foxes stay in the cities? Should we hunt them, or learn to live with them or do nothing? Our cities are currently designed only for humans. Do we need to adapt our cities to wild animals or give them more space in the countryside? Do we have to change the way we define

ourselves among other living creatures? Should foxes and other animals in general have the same legal rights than humans?

GLOSSARY

(a) Burrow – A hole* in the ground dug by an animal such a rabbit, especially to live in.

(a) Den – The home of particular types of wild* animals.

(a) Domestic animal – An animal that is not wild, and is kept as a pet or to produce food.

To dig – To break up and move soil by using a tool, a machine or your hands. To form a hole* by moving soil.

(a) Hedgehog – A small mammal with spikes on his back as a protection against predators.

(a) Hide – A place where animals can see without being seen.

(a) Hole – An empty space in an object, usually with an opening to the object's surface, or an opening that goes completely through an object.

Hollow – Having a hole* or empty space inside.

(a) Kit – Babies of small mammals.

Omnivorous – An omnivorous animal can eat any kind of food, such as vegetables, meat, insects, fruits...

Opportunistic – The fox adapts itself and survives by eating various food in different places, depending on seasons and surroundings*.

(a) Root – The part of the plant that grows into the earth to get water and food, and hold the plant firm in the ground.

(a) Sett – A badger's den*.

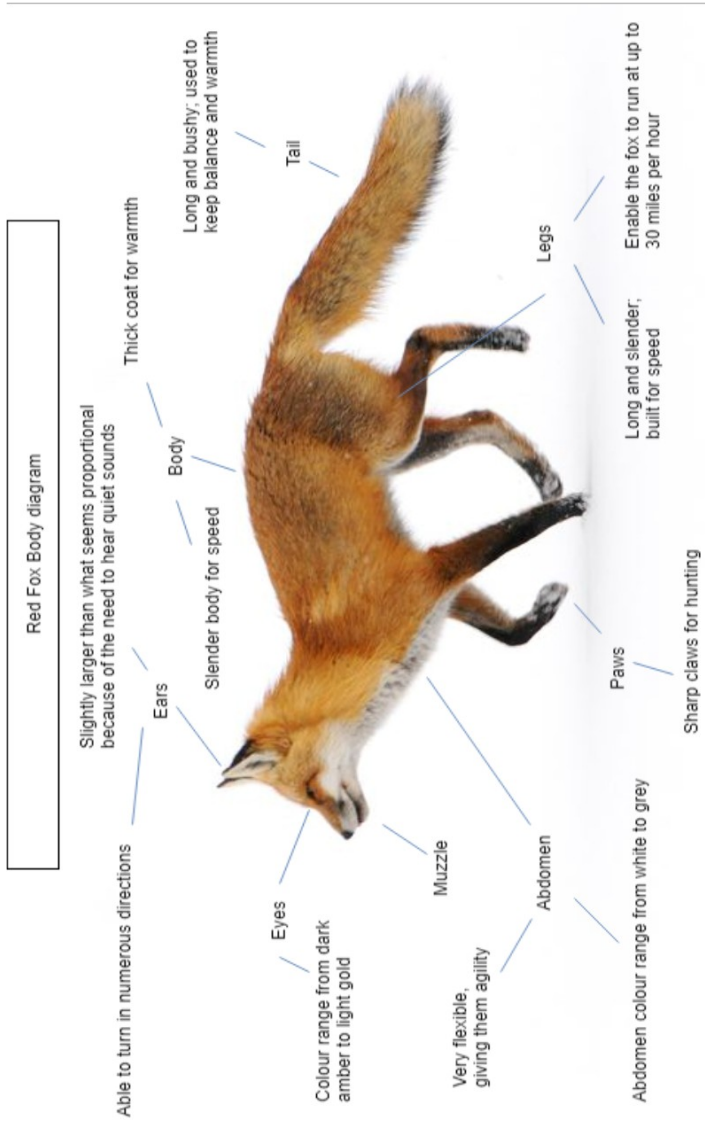
Surroundings – The place where someone or something is, and the things that are in it. The place where someone lives and the conditions they live in.

Tame – Not wild* or dangerous, either naturally or because of training or long involvement with humans.

(a) Vixen – A female fox

Wild – Used to refer to animals that live independently in natural conditions and with natural characteristics.

Yepping – The scream of the fox.



(image source: Nikographer [Jon] / Getty Images Diagram by: Hugo Zhou)