BEST PRACTICE GUIDELINES FOR TRAPPING OF MAMMALS IN EUROPE

Vulpes vulpes

2013/2014











Trapping is a **legitimate** and **indispensable** activity for regulating wildlife populations.

FACE is sharing a series of Best Practice Guidelines for 5 specific mammal species.

These Guidelines seek to share a greater understanding of trapping activities and promote high standards of trapping methods.

Vulpes vulpes

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IMPORTANT CONSIDERATIONS & DISCLAIMERS

CHECK NATIONAL LEGISLATION

Before engaging in any trapping or capture of wild animals it is necessary to understand and follow the national legislation or regulations pertaining to that species or methods used. Each trapper must be aware of days of trapping season, special requirements (possession of the trapping exam, permission from landowner, areas where trapping is allowed, number of specimen allowed to trap, etc.). This document provides guidance only.

USE OF CERTIFIED TRAPS UNDER THE AIHTS

Trappers may use different types of traps according to national legislation. Some of the traps presented in this document are certified in accordance with the AIHTS. Others have not been certified as the process of testing is ongoing. Although they have not yet been certified, this is not to say that they have not undergone assessment, and may meet the standards once tested. According to the implementation schedule of the AIHTS, after 2016 it will only be permitted to use certified traps for species listed in Annex I of the agreement.

TRAPPING METHODS

Trapping is diverse activity and each country and region has different methods that are allowed and used to trap. The following document is presenting only limited number of practices that have been highlighted by those with expert knowledge. Learn about the current legislation in your country to check which trapping methods are allowed.

UPDATING OF BEST PRATICE GUIDELINES

The practice of trapping is continually developing to ensure better selectivity and improved welfare for trapped animals. This document will be updated on regular basis, so check back regularly for latest information.

DISCLAIMER

Whilst all reasonable care in producing these guidelines, FACE disclaims all liability for costs, claims and damages arising from the use of traps and trapping methods described in these guidelines, and disclaims all responsibility for consequential losses arising from their use.

These guidelines are meant for trappers, authorities, NGO's and other parties interested in trapping of mammals. The information presented in this document refers to specific species and guidelines for trapping them while ensuring a high standard of welfare for the trapped animals and to ensure that any non-target captures are minimal.

Trapping is a legitimate and indispensable activity for regulating wildlife populations. To avoid that there are unjustified restrictions of this activity and to ensure that trapping remains ecologically and socially sustainable, more needs to be done to create greater understanding of trapping activities and promote high standards of trapping methods.

To progress towards this aim FACE developed best practice guidelines for certain mammal species. The Trapping Guidelines are a series of five guidelines covering the following species: *Nyctereutes procyonoides, Mustela erminea, Vulpes vulpes, Martes Martes* and *Ondatra zibethicus*.

BACKGROUND ON REGULATION OF TRAPPING IN THE EU

In the EU, trapping is generally subject to specific legal provisions and rules. These can include the types of trap, the conditions under which these may be used, methods required to avoid capture of non-target species (selectivity), as well as the elimination of avoidable suffering (regular inspections). Several Member States require that trappers must have taken and passed mandatory training courses in hunting and/or trapping. In addition, trappers are often required to obtain a valid trapping and/or hunting license along with landowner permission where they wish to trap.

IMPORTANT NOTE: Before engaging in any trapping or capture of wild animals it necessary to understand and follow the national legislation or regulations pertaining to that species or methods used. Each trapper must be aware of days of trapping season, special requirements (possession of the trapping exam, permission from landowner, areas where trapping is allowed, number of specimen allowed to trap, etc.). This document provides guidance only.

LEGISLATION

In 1987 the International Organisation for Standardization ISO through its Technical Committee TC 191 (where FACE has an observer status) started working to agree acceptable trapping standards from a point of view of animal welfare. Although good progress was made, the process did not manage to establish the welfare thresholds for which it strived. Nevertheless excellent work of ISO-TC 191 resulted in 1999 in an agreement on methods for testing restraining traps, respectively for killing-trap systems used on land and underwater.

Few years after the ISO-TC process started the Council of the European Union adopted in 1991 the "Leghold Trap" Regulation 3254/91 prohibiting the use of leghold traps in the Community and the introduction into the Community of pelts and manufactured goods of certain wild animal species originating in countries which catch them by means of leghold traps or trapping methods which do not meet international humane trapping standards.

In 1995 negotiations began on the Agreement on International Humane Trapping Standards (AIHTS) between the EU, Canada, Russia and the US and concluded successfully in 1998, although it only came into force much later, in July 2008 after the ratification by the Russian Federation. The EU and its Member States have therefore an international obligation to comply with the standards set by AIHTS. According to the standards, Parties to the Agreement will have until 2013 (5 years after entry into force) to test and certify trapping methods, and until 2016 to implement the use of certified traps.

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WHY TRAPPING? 2

Traps are used worldwide in interactions with wildlife. This may be to minimise environmental damage or to assist conservation by helping to control over-abundant or alien invasive species, or for relocation. It is an equally valuable research method, for example to fit individuals with markers or transmitters to follow their movements. Since many mammals are predominantly nocturnal, or are present around buildings or settlements, trapping is often the safest method for restraint (FACE, 2013).

SPECIES INFORMATION SHEET

Scientific name: Vulpes vulpes

Common names: Red fox (English), Renard roux (French), Rotfuchs (German)

DESCRIPTION

Is a medium sized canid, and the largest fox in the genus *Vulpes*. It is distributed across entire northern hemisphere from Arctic Circle to North Africa, Central America, and the Asiatic steppes.

Foxes are widely culled as pests, with shooting being the principal method. Foxes are also trapped worldwide (Macdonald & Reynolds, 2004)

CURRENT DISTRIBUTION

It is the most widely distributed carnivore in the world and an extremely adaptable species (Goszczyński 1995 in Tryjanowski et al, 2002). But does not penetrate into the interior of the tundra or the extreme north of Siberia (Larivière & Pasitschniak-Arts, 1996).

RANGE COUNTRIES

Native: Afghanistan; Albania; Algeria; Andorra; Armenia (Armenia); Austria; Azerbaijan; Bangladesh; Belgium; Bhutan; Bosnia and Herzegovina; Bulgaria; Canada; Croatia; Cyprus; Czech Republic; Denmark; Egypt; Estonia; Faroe Islands; Finland; France; Georgia; Germany; Gibraltar; Greece; Greenland; Holy See (Vatican City State); Hungary; Iceland; India; Iran, Islamic Republic of; Ireland; Italy; Japan; Jordan; Kazakhstan; Korea, Democratic People's Republic of; Korea, Republic of; Kyrgyzstan; Latvia; Lebanon; Libya; Liechtenstein; Lithuania; Luxembourg; Macedonia, the former Yugoslav Republic of; Malta; Monaco; Mongolia; Montenegro; Morocco; Myanmar; Nepal; Netherlands; Norway; Pakistan; Poland; Portugal; Romania; Russian Federation; San Marino; Serbia (Serbia); Slovakia; Slovenia; Spain; Svalbard and Jan Mayen; Sweden; Switzerland; Syrian Arab Republic; Tajikistan; Tunisia; Turkey; Turkmenistan; United Kingdom; Uzbekistan

Introduced: Australia; New Zealand (Macdonald & Reynolds, 2008).

POPULATIONS

Stable populations everywhere. In central Europe increasing number populations through oral immunization against rabies (Mitchell-Jones AJ. Et al, 1999).

IDENTIFICATON

APPERANCE

Vulpes vulpes belongs to the family Canidae. An adult animal can weigh between 3 to 14 kg, while average weight is dependable form area to area. The body is 46 to 68 cm long, and tail 30.5 to 55.5 cm. It is mostly rusty red colour with white belly side, black ears and black legs. On the end of the tail there is a white spot. The colour of red can vary from chestnut brown to golden with strips of red, brown, black or white colour on fur. Eyes are golden to yellow.

It is a fast runner, achieving up to 48km/h, Smell, eyesight and hearing are well developed. In winter it grows a winter fur for warmth, which it changes in spring. The body is extended, with strait and pointy muzzle. Ears are long and triangular shape (Leskovic, 2012).

They are mostly nocturnal and their activity pattern overlaps with that of their principal prey. Females may exhibit increase activity during the day while rearing young. Daytime is spent in regular rest areas. They usually select above ground rest sites, but may use underground burrow (Mammalian species, 1996).

Fox marks its territory with urine and faeces left on grass tussocks or stones along roads and at the intersections of routes (Jędrzejewski & Sidorovich, 2010). Dental formula: 3/3 + 1/1 + 4/4 + 2/3 = 42 (Leskovic, 2012).

TRACKS

The track of *V. vulpes* is similar but generally narrower than that of a small dog, and the imprint of the claw is clearly evident. The footprint is oval. In winter they have furred footpads (Bannfield, 1987 in Larivière & Pasitschniak-Arts, 1996). It is footprint is 4.4 cm width and 5.7 cm long (Leskovic, 2012).

BURROWS

Most fox dens are found in sandy soil, in pastures or in agricultural land. Fox dens often have several entrances. The main entrance is usually 40 cm high (Larivière & Pasitschniak-Arts, 1996). They can also populate setts or hollows at the base of standing trees, or in fallen and rotten tree stems (Jędrzejewski & Sidorovich, 2010).

DROPPINGS (SCATS)

Droppings are elongates in shape and their diameter is 1.5 - 2 cm: one side is oval and the other one is pointed.

SIMILAR SPECIES

Arctic fox (Alopex lagopus): A white morph superficially resembles white red foxes (some of which are albino) but they are up to 25% smaller, with muzzle shorter and ears shorter and rounder. Similarly, "silver" (actually black) or "cross" red foxes might be confused with blue morph of Arctic foxes.

Grey wolf (Canis lupus), and golden jackal (Canis aureus), are larger, have longer legs and relatively shorter tail. Confusion of pelts with those of smaller species more likely, due to clinal variation in body size and coloration between the largest red foxes (probably those in Scotland), and the smallest (perhaps in remote Saudi Arabia).

A mutant of the red fox found in the wild, the so-called "Samson fox", lacks guard hairs (Macdonald & Reynolds, 2004).



Illustration by Pičulin, LZS 2012

LIFE HISTORY

DIET

The main food items are rodents of the genus Microtus, while medium and big sized species dominated among birds. Plant fragments and antrophonegic food items are also quite frequent (Goldyn, 2003). It has a diverse diet, which apparently allows it to survive in variable habitats from arctic and sub-arctic barren regions to semi-arid deserts (e.g. Lindström, 1983; Macdonald, 1987; Calisti et al., 1990; Dobson, 1998; Dell'Arte and Leonardi, 2005 in Dell'Arte, 2007). Small rodents, lagomorphs, birds, carrion, insects and fruits are the main food resources, but the importance of these prey items varies largely in relation to habitat types and regional prey availability (Harris, 1981; Papageorgiou et al., 1988; Doncaster et al., 1990; Jedrzejewski and Jędrzejewska, 1992 in Dell'Arte, 2007). We found a significant difference in the diet composition between winter and summer seasons (Dell'Arte, 2007).

FORAGING BEHAVIOUR

The diet of fox changes seasonally (Jędrzejewski & Sidorovich, 2010). The species uses different hunting strategies for various prey species. Small mammals are located, often by sound. An aerial jump, which may exceed 4 m in length, is often used to capture small mammals (Henry, 1986 in Larivière & Pasitschniak-Arts, 1996). Prey are pinned to the ground with forepaws, and then bitten. Arboreal prey are captured following a quick, horizontal thrust. Rapid terrestrial prey are caught by stalking followed by quick pursuit (Henry 1986 in Larivière & Pasitschniak-Arts, 1996).

On occasional *Vulpes vulpes* may nap near a previously missed prey burrow and wait for the prey species to re-emerge (Henry, 1986 in Larivière & Pasitschniak-Arts, 1996).Play with live prey is common among both juveniles and adults. They cache surplus of food for future consumption (Henry 1986 in Larivière & Pasitschniak-Arts, 1996). In some cases the foraging behaviour changed in presence of Lynx and fox started to feed more often on deer carrion (Helldin & Danielsson, 2007).

REPRODUCTION

Period of reproduction and mating varies due to their wide geographical distribution. South populations are mating earlier from December to January while northern populations from February till April. Females have one oestrus per year, which lasts 1 to 6 days. Gestation lasts from 50 to 56 days. On average there are 5 kits in litter. Mostly kits are born in April or beginning of May. Cubs are independent at the age of 5 months, and in the same year (autumn) they move to new territory. They are sexually mature at the age of 10 months. Average age is 3 years and more in captivity (Leskovic, 2012).

HABITAT

It is found in all types of forests and open landscapes, also very adaptable to urban and suburban ecosystems and feeding conditions. Vertical distribution up to 3000 m (Mitchell-Jones AJ. Et al, 1999).

Generally, heterogeneous and fragmented landscapes constitute better fox habitat than homogeneous environments. Prey availability seems to be the most important factor affecting habitat use (Larivière & Pasitschniak-Arts, 1996).

INTERNATIONAL LEGAL & CONSERVATION STATUS

None (Mitchell-Jones AJ et al., 1999)

PREDATION

Species is killed for fur harvest, sport, to protect domestic animals and game, and to prevent the spread of rabies (Larivière & Pasitschniak-Arts, 1996).

Red foxes have few natural predators, although golden eagles (Aquila chrysaetos) may kill both cubs and adults, and badgers and domestic dogs may kill cubs. Red foxes are a regular prey of the Eurasian lynx (Lynx lynx) in the Swiss Jura Mountains (Jobin et al. 2000 in Macdonald& Reynolds, 2004). In addition, coyotes and wolves have both been recorded killing adults and cubs (Voigt and Earle 1983; Pacquet 1992 in Macdonald& Reynolds, 2004).

DISEASE

It represents the most widespread reservoir of rabies in the wild (Larivière & Pasitschniak-Arts, 1996).

Echinococcus multilocularis is a tapeworm occurring throughout the Northern Hemisphere, which is transmitted primarily between wild definitive carnivorous hosts (in Europe mainly red foxes and raccoon dogs) and wild intermediate hosts (small mammals, mainly arvicolid rodents). Dogs and cats can also be infected by ingestion of an intermediate host harbouring the larval form of the parasite, and may act then as definitive host. Humans can become accidentally infected by ingesting tapeworm eggs excreted by the definitive host and the resulting infection, alveolar echinococcosis (AE), is considered one of the most severe human parasitoses in nontropical regions. In Europe, *E. multilocularis* is found in foxes in a range of central European countries, but has never been found in Finland, Ireland, Malta and the United Kingdom (EFSA, 2012).

IMPACTS (ECOSYSTEM, HUMAN HEALTH, ECONOMIC)

It was observed that there is a negative effect of the proximity of fox dens on the total density of the bird community (Tryjanowski et al., 2002). It also has an influence on fawn survival, as sometimes it is the main predator of fawns (Panzacchi et al., 2008). Foxes also predate handreared and release game-birds (Macdonald& Reynolds, 2004).

GENERAL OVERVIEW OF TRAPS

Within the EU traps must meet international standards, for those species (1) referred to in Agreement on International Humane Trapping Standards (AIHTS) (see section 1.3 for timeline of implementation). However, regardless of the species; efforts should be made to reduce pain, distress and suffering of trapped animals as much as technically feasible.

When trapping it is important to avoid the capture of non-target animals. This is achieved by carefully planning and setting the trap. The most important factor in selective trapping is location. Each species follows certain habits and has preferences for food and habitat. For generalist species identification of tracks and signs is essential. Knowledge of these factors is essential to find best places to set your traps. Prior observations in the trapping area will reveal which locations are the best for specific species. You should also avoid trapping close to trails that are heavily used by people and their pets, and avoid areas which hunters use with their hunting dogs.

Once you chose the proper location, choosing the proper size and type of trap for the situation and species is also a key component of trapping selectively. Use the proper bait, lure to ensure selectivity, as each animal response to certain food smells (New York State – Department of Environmental protection, 2011).

(1) Species listed in Annex I of AIHTS, present in EU: Canis lupus, Castor canadensis (FI only), Castor fiber, Lutra lutra, Lynx lynx, Martes martes, Meles meles, Mustela ermine, Nyctereutes



SPECIFICATIONS OF TRAPS 5

RESTRAINING TRAPS

All traps, trapping sets and technics are explained to reach the best and highest selectivity level on the field, and also the highest animal welfare level.

LIVE CAPTURE SNARES

Wisconsin snares: 18 cm high/ 18 cm loop. Cable 2 mm in diameter and 1,75 meters long



Images: Winsconsin snare, Albert Roura.

Trail set: The snare should be placed in a way to take advantage of the trails and natural movements of foxes.

There is no need to use any lure or bait when using these kinds of sets.



Image on the left: Gap with the snare, Paco Montoto (illustration) Right side: Gap with the snare, Albert Roura

CAPTURE SETS:

Artificial straight wall: Pile up branches creating kind of a wall or barrier, which should be about 1 m high and long as we want.

Cut gaps in the wall, which should be made every 10 - 15 meters. Wall will require foxes going through the gaps where snare are set up.



Image: left to right: Wisconsin snare on the trail, Albert Roura, Snare on the trail, Paco Mototo (illustration), Wisconsin snare on the trail, Albert Roura

Artificial circle wall: Choose an area with dense brushes and trees, and set the bait in the middle. Use carrion of an ungulate or livestock and bury it underground, this should be done to avoid catching other non-target species especially raptors. Afterwards it is necessary to look for trails of the fox in order to set up the snares. When setting up the snares always walk in and out of the area on the same trail to avoid being detected by foxes.



Image: The big circle indicates where the carrion should be set up, the small ones show where snares should be, Albert Roura.

To improve the welfare of captured animals while trapped it is important to remove small branches around the trap, so the animal does not get entangled and that it can lie down. Also to be sure that the animals spends as short amount of time in the trap it is important to check the traps early in the morning, and when approaching do so approach quickly, to release or to dispatch the animal Therefore avoiding undue stress.

COLLARUM LIVE CANINE CAPTURE



Image on the right: Stop closing mechanism avoids capture of non-target species, like mustelids. Swivel is placed to avoid injuries to the animal's neck, as it allows the snare to turn, Albert Roura

CAPTURE SETS:

Collarum setting placement: Collarum has to be placed where foxes usually walk to improve capture efficiency. Trails, small roads and forest roads are suitable locations to set the trap. In the trigger bait is placed to persuade the animal to bite and to avoid other non-desired behaviour of the fox, such as standing on the trap, or simply not being attracted.



Image: Process of setting the Collarum trap, Albert Roura.



Image: The right way to set the Collarum trap and the best location, Paco Montoto, (Illustration).

To ensure selectivity when capturing with Collarum live, lure should be used to attract fox and ensure their right approach. Do not use meat as a lure to avoid catching raptors. To ensure animal spending as short amount of time in the trap as possible, it is important to check the traps early in the morning, and when approaching do so quickly, to release or to dispatch the animal. Therefore avoiding undue stress.

BELISLE TR 6





Image: Belisle tr 6 parts, Albert Roura.

Dirt hole Set: American trapping technic. Trap should be placed in front of an obstacle such as stone, log, tree, and brush to avoid the fox entering from behind the trap. Once the trap is set up, make a hole at 45 ° angle where the lure is applied, to ensure approach of the animal in the right direction. The hole has to be a little bit to the left of the trap. Distance between paw of the trap and the hole should be around 15 cm. In parallel to the trap a small object like stone or branches should be placed to avoid animal stepping in the other side of the paw of the trap.



Image: Belisle tr 6 Setting process: Setting the trap, covering the trap, activating the trap, final presentation in the centre, Albert Roura

CAPTURE SETS:

Urine: For this technique we place the trap in front of a stone with urine of another fox. The set should be placed on the edge of a field, forest road or trail and the stone should not block the canine's way.

The fox, while walking will explore the strange scent of another "individual of the same species", and it will feel the necessity of marking it with the urine. When approaching the stone, it will step on the trap. This set takes advantage from the natural behaviour of foxes.



Image: Applying the urine's technic in setting the trap, Albert Roura

Scat: this is an efficient technique during a short period. Fox scats from another territory are placed in the middle of a small brush or patch of grass. The first trap must be set a little bit to the right of the scat (as seen on the image below). A second trap can also be used, which is placed on the other side of the scat in the same way. Setting traps like this will leave the brush or grass in the middle among the two traps. So when the animal will detect the presence of a rival fox, it will investigate and try to mark the scat, which gives as an opportunity to catch it.



Image: The picture shows how to place the trap when using wolf or fox scats (depending on target species), Albert Roura

CAPTURE SETS:

Carrion: when natural carrion is found in the field, it is only necessary to place traps around the carrion.

When the fox comes and explores the carrion, it will step upon the traps.



Image: Author: Albert Roura

Carrion hanging from the tree: We can hang out some carrion on a branch, and few meters from the tree we can set the trap.

Other option is to place traps under the tree, when the fox comes under the carrion or jumps to get to the carrion, it will trigger the traps

To be sure that the animals spends as short amount of time in the trap it is important to check the traps early in the morning, and when approaching do so quickly.

BELISLE SELECTIF

CAPTURE SETS:

This trap uses the natural fox's behaviour for capturing and it also doesn't require several sets. While the canine is digging to get to the food buried underground, it will trigger the trap. Traps should be set near crossings of trails, small forest roads or other places where foxes usually walk. It should be understood that the trigger has to be placed in the right direction, as it can be triggered only in that direction. This ensures high selectivity of the Belisle Selectif.



Image: Main parts of the trap. Round trigger, safety device to block the trap while setting it, Albert Roura

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Image: Process of setting Belisle Selectif. It is important to cover the trap in the end with some soil, Albert Roura.

CAGE TRAP

CAPTURE SETS:

Cage traps are in general not the most efficient trapping method to catch foxes. The majority of catches will be yearlings and pups as they lack experience. The best is to place the box trap at crosses of forest roads.

However, because of the low selectivity of these kinds of traps, they are not desirable from economic and selectivity terms. Although nontarget animals can be released.



Image: Set cage traps. The one in the rigth with cought fox, Albert Roura.

FALSE EARTH TRAP

False earths were invented to control foxes without having to locate natural earths in order to bolt foxes from them. By building networks of false earths, foxes are able locate the manmade structures established in their territories. Usually false earths are investigated by animals holding territories, however not all foxes that enter, will move in to occupy them, or are absent at the time of control by hunters and their dogs. Adding a trap to restrain foxes from leaving the false earth was a natural idea, therefore there is a great diversity of false earth traps found mainly on the Continent.

In most cases these traps are not baited at all, because earths are visited and controlled frequently by territorial foxes during the breeding period and before cubbing. Well positioned traps may help to capture the majority of foxes that are trying to occupy the territories that have false earth sets. By creating a dense network of false earth traps, fox populations may be reduced to the density of minimum effect on prey species, thus the survival of ground nesting birds and their nesting success will be greatly improved. Adult foxes are trapped before cubs are born. Repopulation by juvenile foxes to the trapped

False earths were invented to control foxes area will only start during the late summer and without having to locate natural earths in order autumn, after the end of the reproduction season.

The false earth traps are ideal for use in densely populated areas because of their low profile, selectivity and humane functioning. Capture stress within the dark sets and balanced underground temperatures is low. In respect of animal welfare it is important to note that foxes may be bolted from the false earth traps without the use of dogs, by application of telescopic stick (aka "rubber terriers" by operators). Daily control of traps may be facilitated by high visibility signals or mobile alarms.

Trigger systems of traps may be grouped according to the following: see-saw action, trip wire, trigger plate, trigger stick. Selectivity may be enhanced by increasing trigger tension or the length of trigger sticks.

For animal welfare reasons inner surfaces and parts of the traps accessible for the trapped animals should be designed and built in a way that does not cause injuries. E.g. wooden trigger sticks help to avoid injuries of the teeth or smooth inner surfaces help avoid claw loss.

INSTALLATION OF FALSE EARTH TRAPS

Trapping is not a dangerous activity; however there are few safety issues each trapper should consider.

As activities require spending time outside, warm clothes to avoid hypothermia and boots and rubber gloves when setting traps in water are recommended. For setting the traps, good safety equipment, e.g. gloves, knelling pads, should be used. In case the trap springs while setting, – Dep each trapper must have knowledge how to free himself. If using firearms while trapping, keep them unloaded until required for dispatching animals.

Carry a map and compass. Don't rely only on GPS and mobile phone, as they might not work when needed. Consider also trapping with another person, who can help you in distress.

As trapping season coincides with the hunting season, it is important that clothes you wear are highly visible at all times. Consider wearing hunter orange vest or cap (New York State – Department of Environmental protection, 2011).



Image: Assembly parts of the "False earth trap" by; Péter Pál Hajas

Image: Structure of the "False earth trap" by; Péter Pál Hajas



Image: Entrance of the "False earth trap" by; Péter Pál Hajas

LETHAL METHODS – KILLING TRAPS

BODY GRIP TRAPS:

CAPTURE SETS:

Natural hole or natural cave: A piece of meat is attached on a tree, and the entrances which lead to it are blocked, apart from one which is kept free. The Super X trap is then set in the hole. When the fox enters head first in to the hole, it will be captured by the trap. Best model is 220, to ensure quick death. On the other hand, we should keep in mind that the body grip traps are less selective, so not recommended, even if it's legal to use these traps to catch foxes, to avoid accidental catches of raptors, even pets.



Image: 2 models of Body grip traps: Belisle Super X (top) and Duke (bottom), Albert Roura



Image: Watching fox cubby for killing traps seting, Albert Roura

LURES AND BAITS

Which lures and baits to use is a wide and divided topic. Each region and each trapper uses a magic "recipe" to catch a red fox. However, here is some general information about how to make lures and baits and which kinds are the most attractive for foxes, and in which season.

Baits:

- a. Wild ungulate meat: wild boar, red deer, roe deer, rabbits and hares are the best to bait. Visceral parts of the animal are the most attractants for foxes (Fall /Winter season)
- b. Livestock meat. Cattles, sheep, same a above (Fall/ Winter seasons)
- c. Visceral contents: Heart, stomach and livers (Fall/ Winter seasons)
- d. Pig's fat (whole year)

Lures:

- a. Natural fish oil (whole year)
- b. Fish mixed with olive oil (full year)
- c. Aniseed and sugar mixed with meat (fall season)
- d. Fox glands (end of winter / spring season)
- e. Fox urine (end of winter/ spring season)
- f. Beaver glands (whole year)
- g. American mink glands (late summer, fall and winter season)
- h. Lynx urine (whole year)

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FURTHER SPECIFICATION OF TRAPS

Collarum trap:

Collarum trap consists of throw mechanism with the cable support arms and the capture cable. The capture cable is set in the support arms, which when triggered; throws the cable over the head and around the neck of the canine.

The capture cable is made up of multiple wires and a total section not inferior to 0,45 cm in diameter. Cable also has a stop device set to 25 cm from the end. This device determines a minimum diameter of 8 cm. Cable also incorporates swivels in the end and a spring with the purpose to muffle the impulses of the animal for releasing itself, which is an additional element to minimize the suffering of the captured animal. The capture cable must be anchored in the ground or around the tree. Also the throw mechanism must be anchored, to prevent movement when canine is biting the bait.

Wisconsin snare:

Snare composed by a cable formed from multiple wires of same section or superior to 2,44 mm and 1,50 m of approximate longitude, provided of a relaxing Lock (180° "bend relaxing lock"), two swivels (one the middle and the other at the end), a hook Breakaway device "S-hook" 50 kg and two Stop devices that determine a minimum diameter non inferior to 6,5 cm and maximum from 20 to 25 cm. The stop device should be constituted by fixed elements as fixed washers or rivet, and not adjustable as mobile elements.

Belisle tr 6 / selectif:

14, 8 cm when trap is open and active. Stain less steel material. Killing Traps: larger: 18,5 cm , Higher: 17,5 cm.

Cage traps:

Usually trappers can build their own traps, but normally it's better to use a box trap with the following measures: 1 meter long, at least 30 cm high and at least 30 cm wide.

GENERAL CONSIDERATIONS WHEN TRAPPING SPECIES

Basic equipment for this type of trap each trapper should have and items needed to set the traps?

While trapping, responsible trapper should bring all the material needed to carry out the activity as professionally as possible. Bag, box, setting tools such as trowels, pans, hammers and wires, plastic to set above the traps, lures, baits, different traps. Trappers must have respect for wildlife and nature and also for private properties. The trapper will need maps of the area, previous visits to ensure target species presence, non-target species presence, natural trails, and best places to set the traps.

How often do we have to check the trap?

Live capture traps should be checked every morning, before 12: 00 o'clock, or earlier in summer or in hot conditions.

Human scant

Before setting traps, we have to be sure they are completely without unwanted smell and clean. This is especially necessary for canines such as foxes as they note the scent of humans for a long time. Foxes can also detect the trap under the ground. Oxide is the first canines will detect, so be careful to have the traps in perfect conditions, and odourless. You can also use products such as Speed Dip or similar, to avoid scents and avoid the shinning effect of these. So in case the trap gets a little uncovered, this product will avoid shinning in front of the animal view.

How to release or despatch the animal

A long handling snare can be used to immobilise the animal. The handling snare is placed around the neck of the animal to ensure that it cannot move and then it is released from the trap or dispatched. When shooting observe safety conditions.

USER SAFETY CONSIDERATIONS

Trapping is not a dangerous activity; however there are few safety issues each trapper should consider.

As activities require spending time outside, warm clothes to avoid hypothermia and boots and rubber gloves when setting traps in water are recommended. For setting the traps, good safety equipment, e.g. gloves, knelling pads, should be used. In case the trap springs while setting, each trapper must have knowledge how to free himself. If using firearms while trapping, keep them unloaded until required for dispatching animals.

Carry a map and compass. Don't rely only on GPS and mobile phone, as they might not work when needed. Consider also trapping with another person, who can help you in distress.

As trapping season coincides with the hunting season, it is important that clothes you wear are highly visible at all times. Consider wearing hunter orange vest or cap (New York State – Department of Environmental protection, 2011).

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FACE is the European federation of associations for hunting and conservation.

Established in 1977, it represents in the interests of Europe's 7 million hunters as an international non-profit-making non-governmental organisation (INGO). This makes FACE the largest democratically representative body for hunters in the world and is probably one of the largest European civil society organisations.

FACE is made up of its Members; national hunters' associations from 38 European countries including all EU-27 Member States. FACE also has 3 Associate Members.

FACE upholds the principle of sustainable use, has been a member of IUCN since 1987, and more recently Wetlands International. FACE works with its partners on a range of hunting related issues, from international conservation agreements to local implementations with the aim of sustaining hunting across Europe.

FACE is recognised by the European Commission as the representative body for Europe's hunters. It is consulted by the relevant Commission Directorates-General and Units during the preparation, elaboration and monitoring of EU legislation dealing with hunting, wildlife management, nature conservation, firearms, trapping, wild animal health, game meat hygiene, etc.

Partners

UETA - Union of European Trapper's Associations

Founded in 2012, it represents trappers to other authorities and sectors of the society by guarding and defending the rights of trappers. Member organizations can be found throughout Europe.

UETA promotes responsible and sustainable trapping including training programs respecting national regulations. UETA is involved in trap develop- and test programs.

UETA supports the implementation of AIHTS and codes of Best Management Practice in territories of member organizations. UETA collaborates with FACE to achieve these goals.

International Fur Federation

Formed in 1949, the IFF protects the fur trade's interests, promotes innovation and high standards and presents a factual image of the fur industry. The IFF represents 49 national associations and organizations from 38 countries. Members are drawn from the entire fur supply chain: farmers, trappers, auction houses, merchants, brokers, buyers, dressers and dyers, designers, manufacturers, wholesalers, marketing organizations and retailers. The IFF has contributed some €10 million to the implementation of the Agreement on International Humane Trapping Standards (AIHTS) in Canada, the Russian Federation, the European Union and the United States.

The IFF has been a full voting member of the International Union for the Conservation of Nature (IUCN) since 1985 and supports the principles of Sustainable and wise Use.

More information is available on wearefur.com

USEFUL LINKS

International Trapping Course: trappingcourse@gmail.com

5 days courses taking place in different countries.

UNAPAF : Trapper's school

Spanish Trapper's Association AIHTS Course (facilities in French and English). Complete course lasts 3 days.

Collarum live capture VIDEO: http://youtu.be/3QBcjJuV7pY http://youtu.be/em7_yFjIaCE

Belisle selectif

VIDEO: http://youtu.be/b1zAGT3uev8 http://youtu.be/IIhloa9gHrk

Body grip traps VIDEO: http://youtu.be/gvm3DaMw_sc

Wolf Urine WCS: VIDEO: http://youtu.be/Bb73HUeSa3M

Mink glands WCS: VIDEO: http://youtu.be/cq0ljRIaqdQ

FACE. 2013. Annual Report

IAHTS – International Agreement on Human Trapping Standards, http://eur-lex.europa.eu/LexUriServ/LexUriServ/do?uri=OJ:L:1998:042:0043:0057:EN:PDF

Goldyn B. Hromada M., Srmacki A., Tryjanowski P., 2003, Habitat use and diet of the red fox *Vulpes vulpes* in an agricultural landscape in Poland, Z. Jagdwiss, 49, 191 – 200

Graziella Lucia Dell'Arte, Toni Laaksonen, Kai Norrdahl, Erkki Korpima ki. 2007. Variation in the diet composition of a generalist predator, the red fox, in relation to season and density of main prey, actaoecologica 31(2007)276-281

Helldin, J-O.&Danielsson, A.V. 2007: Changes in red fox *Vulpes vulpes* diet due to colonisation by lynx Lynxlynx. - Wildl. Biol. 13: 475-480.

Larivière S., Pasitschniak-Arts M., 1996, *Vulpes vulpes*, American society of mammalogists, mammalian species, no.537, pp 1-11

Leskovic B. 2012. Lisica (*Vulpes vulpes*). In: Divjad in lovstvo. Leskovic B., Pičulin I. (ur). Ljubljana, LovskazvezaSlovenije: 419-422: In Slovenian

Macdonald, D.W. & Reynolds, J.C. 2008. *Vulpes vulpes*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. <www.iucnredlist.org>. Downloaded on 16 December 2013.

Macdonald, D.W., Reynolds, J.C. 2004, Red fox *Vulpes vulpes*, http://www.canids.org/species/raccoon_dog. pdf Canids: Foxes, Wolves, Jackals and Dogs Status Survey and Conservation Action Plan. IUCN 2004

Mitchell-Jones AJ, Amori G, Bogdanowicz W, Krystufek B, Reijnders PJH, Spitzenberger F, Stubbe M, Thissen JBM, Vohralik V, Zima J (1999) The atlas of European mammals. Poyser Natural History, Academic, London, p. 318-319

New York State – Department of Environmental Conservation. 2011. `Killing trapping methods' means traps designed and set with the intention of killing a trapped animal of the target species. Student Manual. New York State – Department of Environmental Conservation., p 112.

Panzzachi M., Linell J.D.C., Odden J., Odden M., Andersen R., 2008. When a generalist becomes a specialist: patterns of red fox predation on roe deer fawn under contrasting conditions, Canadian journal of zoology, vol 86, 116-126

Tryjanowski P., BartlomiejGoldyn, Surmack A., 2002. Influence of red fox (*Vulpes vulpes*, Linnaeus 1758) on the distribution and number of breeding birds in an intensively used farmland, Ecological Research, Vol 17, 395-399

Jędrzejewski W., Sidorovich V. 2010. The art of tracking animals, Mammal Research Institute, Polish Academy of Sciences.Białowieza, Poland

Images:

Pičulin I., Footprints Lisica (*Vulpes vulpes*), [illustration]. From Divjad in lovstvo (pg. 420), 2012, Ljubljana, LovskazvezaSlovenija – Zlatorogovaknjižnica

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