

BEST PRACTICE GUIDELINES FOR TRAPPING OF MAMMALS IN EUROPE

Castor fiber

2014/2015



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.

Castor fiber

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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 PRACTICE 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*, *Castor fiber*, *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.

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: *Castor Fiber* L.1758

Common names: European Beaver, Eurasian Beaver (English), Castor D'Eurasie (French), Europäische Biber (German)

DESCRIPTION

Castor fiber belongs to the family Castoridae. The range of this species almost entirely covers Europe.

CURRENT DISTRIBUTION

The continuous population ranges from eastern Poland through the Baltic States and European Russia to central Siberia. There is a large disjunct population in Norway and Sweden, and smaller scattered disjunct populations through the rest of mainland Europe. Although natural spread has contributed significantly to range and populations, most of the expansion is due to reintroductions (Halley and Rosell, 2003)

POPULATIONS

After being reduced to about 1,200 animals in eight isolated populations by the beginning of the 20th century, European beavers (*Castor fiber*) have powerfully recovered in both range and population. Populations are now (2003) established in all countries within their former natural range in Europe with few exceptions (Halley and Rosell, 2003).

RANGE COUNTRIES

Beaver is native in Belarus; China; France; Germany; Kazakhstan; Luxembourg; Mongolia; Norway; Russian Federation and reintroduced in the following countries Austria; Belgium; Croatia; Czech Republic; Denmark; Estonia; Finland; Hungary; Italy; Latvia; Liechtenstein; Lithuania; Montenegro; Netherlands; Poland; Romania; Serbia (Serbia); Slovakia; Slovenia; Spain; Sweden; Switzerland; Ukraine, (Batbold et al., 2014).

IDENTIFICATION

APPEARANCE

The beaver is the largest rodent in Europe with a combined head and body length of 75-100 cm and a tail length of 30-40 cm. Average adults weigh 18-20 kilograms with a maximum weight of 35 kilograms (e.g. Wilsson, 1971; Zurowski and Kasperczyk, 1986 in Bau, 2001). The colour of the skin varies from greyish brown to black brown. The tail is used as driving power, manoeuvring, diving while swimming (Bau, 2001 in Charrin, 2004). It also assumes a function in regulation of body temperature, body energy reserve and defence against enemies ("tail slapping"). The fur is thick, formed by two layers which function as isolation when in water. The nostrils are closable as well as the opening of the ears; and eyes are covered by transparent eyelids when beaver dives. Its hind and front feet have 5 digits with claws. The hind feet are webbed and the 4th claws form a comb, used for grooming (Richard, 1980; Bau, 2001; Laanetu, 2001 in Charrin, 2004). Diving time is 2-5 minutes normally but can extend up to 15 minutes (Rouland & al., 1984; Richard, 1980; Bau, 2001 in Charrin, 2004). Dental formula: $1/1 + 0/0 + 1/1 + 3/3 = 20$ (Leskovic, 2012).

Beavers have an active period during the night but in quiet places, they can be active during daytime (Richard, 1980; Bau, 2001; J-C Gaudin, pers. comm.). And their average life expectancy is seven to eight years (Kautenburger and Sander, 2008).

TRACKS

On land, beavers walk on all four legs but can also walk on their hind feet in a upright position with the tail stabilising the posture (Carlson & Welker, 1976 in Bau, 2001; Richard, 1980 in Charrin, 2004)

BURROWS

Dams

If the water depth requirements of beavers are not met by naturally-occurring riparian conditions, beavers are likely to build dams to raise water levels and reduce the flow of water (Campbell-Palmer and Rosell, 2013). Dams are built by placing sticks and branches downstream against the flow of water, thereby forming supportive structures, and then pushing up sedimentary material from the river or lake bed to form the base and inner surface of the dam (Macdonald et al. 1995, Müller-Schwarze & Sun 2003 in Campbell-Palmer and Rosell, 2013).

Lodges and Burrows

Beavers will dig burrows if the bank material is suitable, but can build lodges as a supplement to, or in place of, burrows (Zurowski & Kasperczyk 1988 in Campbell-Palmer and Rosell, 2013). Both lodges and burrows contain an entrance tunnel starting underwater, a feeding chamber at water level and a sleeping chamber above water level, and may have more than one of each (Wilsson 18 1971 in Campbell-Palmer and Rosell, 2013).

Trails & Canals

Where beavers regularly use the same route to forage on land, well-worn trails develop. These can fill with water and beavers may push mud from the bottom and pile it up on the banks of these channels or begin digging at the water's edge, thus creating a canal (Müller-Schwarze & Sun 2003, Wilsson 1971 in Campbell-Palmer and Rosell, 2013).

DROPPINGS (SCATS)

Longitudinal or oval droppings, deposited singly, cylindrical 2.5 to 4 cm long and 2 cm thick, or spherical with a diameter of 2 cm, contain only undigested plant parts, especially the crust. Beaver defecates most frequently in water, rarely on dry land (Valachovič, 2014).

SIMILAR SPECIES

Castor canadensis – the North American beaver. The two species are very similar in morphology, mode of life and behaviour although *Castor canadensis* is somewhat bigger and generally has a larger litter (e.g. Wilsson, 1971; Patenaude, 1983; Novak, 1977 in Bau, 2001).

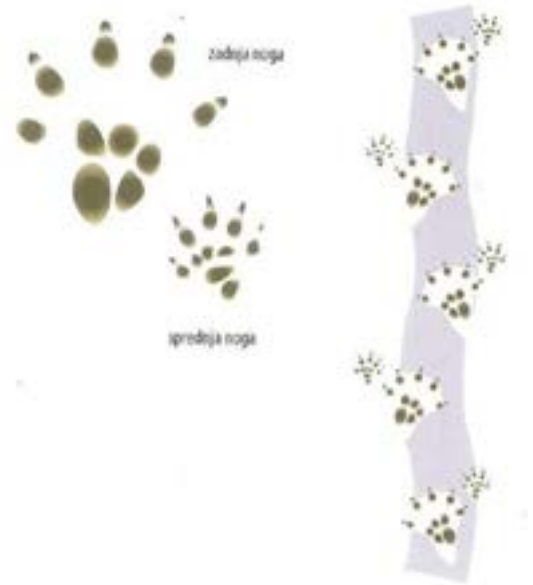


Illustration by Pičulin, LZS 2012 (from left to right: hind foot, front foot, trail of movement on land)

LIFE HISTORY

DIET

During winter and late fall bark is the main food source (e.g. Nolet et al., 1994 in Bau, 2001). In spring and summer beavers forage on leaves, shoots, buds, bark and twigs of deciduous trees (e.g. Curry-Lindahl, 1967 in Bau, 2001) as well as on aquatic and herbaceous plants, which constitute a great deal of the food (e.g. Bradt, 1938; Tevis, 1950; Curry-Lindahl, 1967; Macdonald et al., 1995 in Bau, 2001).

FORAGING BEHAVIOUR

The beaver is a generalist herbivore, feeding on bark, shoots and leaves of woody plants, terrestrial herbs and forbs, ferns and aquatic vegetation (Wilsson, 1971; Jenkins, 1975; Svendsen, 1980; Nolet et al., 1995; Donkor & Fryxell, 1999 in Rosell et al., 2005). Beavers have the ability to cut mature trees, but they tend to ingest only a proportion of the total biomass harvested (Rosell et al., 2005).

At latitudes where the ponds and waterways freeze during winter beavers begin to gather branches and twigs for a food cache in the autumn (e.g. Collett, 1897; Salvesen, 1927; Novakowski, 1967; Aleksyuk, 1970 in Bau, 2001). These branches and twigs are secured on the bottom of the pond or stream outside the lodge. The food cache provides the winter food when ice prevents the beaver from leaving the pond or stream to forage elsewhere (Jenkins, 1979 in Bau, 2001).

REPRODUCTION

Beavers are monogamous and live in family with an average of 2-7 members concerning European beavers: an adult reproducing pair, young from last years and young of the years (Charrin, 2004). Sexual maturity is reached at the age of 1.5-2 years (e.g. Larson, 1967 in Bau, 2001). Mating usually takes place in January or February and the gestation period lasts approximately 107 days (Doboszynska and Zurowski, 1983 in Bau, 2001). The kits are born in May-June (e.g. Curry-Lindahl, 1967 in Bau, 2001). Dispersal of the young usually occurs at two years old and in spring. However, dispersal could be delayed (e.g. Svendsen, 1989 in Charrin, 2004).

HABITAT

Lakes, swamps, streams, rivers and ditches where they have year-round access to water and woody vegetation. Although generally a woodland animals, they can live on farmland and even in quite urban areas. Prefer lowland areas, but some introductions at approximately 500 m above sea level have persisted (Mitchell-Jones AJ. et al, 1999).

HUMAN AND WILDLIFE INTERACTIONS

INTERNATIONAL LEGAL & CONSERVATION STATUS

Bern Convention (Appendix III)
EU Habitats and Species Directive (Annex V for the Swedish and Finnish populations, Annex II and IV for all others)
AIHTS – Annex I

and species diversity at the landscape scale. Beaver foraging also has a considerable impact on the course of ecological succession, species composition and structure of plant communities, making them a good example of ecologically dominant species (e.g. keystone species) (Rosell et al., 2005).

PREDATION

Wolfs, bears, wolverines and lynx are considered to be the most important predators on beaver (e.g. Tyurnin, 1984; Rosell et al., 1996 in Bau, 2001). The beaver's worst enemies in present time are humans and diseases (Nolet et al., 1997 in Bau, 2001).

DISEASE

The most common diseases found in *Castor fiber* are different types of infections in the intestinal tract, for example the beaver fluke *Paramphistomum castori*, parasites and pseudo tuberculosis (Rosell et al., 1996 in Bau, 2001) report of high levels of the parasites *Stichorchis subtriquetrus* and *Travassosius rufus* – both helminths (Bau, 2001).

IMPACTS (ECOSYSTEM, HUMAN HEALTH, ECONOMIC)

Nearly all beaver damage is related to their feeding on cultivated plants (crops, trees) and dam-building (Richard, 1986; Heidecke and Klenner-Fringes, 1992; Rosell and Parker, 1995 in Nolet and Rosell, 2014). In a far smaller number of cases beavers cause problems by digging in dikes and banks (Mickus, 1995 in Nolet and Rosell, 2014).

Beavers, being ecosystem engineers, are among the few species besides humans that can significantly change the geomorphology, and consequently the hydrological characteristics and biotic properties of the landscape. In so doing, beavers increase heterogeneity, and habitat

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 procyonoides*, *Ondatra zibethicus*, *Procyon lotor*.



GENERAL CONSIDERATIONS WHEN TRAPPING SPECIES

Beaver trapping

Beaver trapping using lethal body grip traps is legal in Finland. Beavers caught squarely on the neck are killed quickly with no unnecessary suffering or a chance to escape. For example, the Conibear model #330 (250 x 250 mm) is ideal for beaver. You are only allowed to set the traps underwater. They are either set in a narrow beaver runway or channel or at the entrance of the beaver lodge. The traps are usually used together with bait, such as aspen branches.



Using Conibear-type traps

1. Block a narrow channel with sticks. Place the sticks c. 15 cm from each other and push them deep in the bottom
2. Set a pine tree across the surface of the water.
3. Attach the upper end of the trap to the pine tree (underneath it).
4. Anchor the trap system firmly. Remember that ice has a lot of power to move things in the wintertime.



Illustration: How to set a Conibear trap in a stream

Wintertime trapping

1. Clear the snow off the ice around the beaver lodge.
2. Locate the beaver lodge entrance with the help of air bubbles. Beavers carry air bubbles in their fur, which then rise towards the surface and are trapped under the ice.
3. Make a 50 x 50cm hole through the ice and confirm the entrance hole using a stick.
4. Set the trap at the entrance hole with the help of a wooden frame.

6 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, kneeling 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).

7 SPECIFICATIONS OF TRAPS

Setting the trap



Pull the folded cargo strap through the spring loops.



Loop the lower part of the strap around the foot, fold down the end of the strap...



...and push it again upwards through the loops.



Set the safety hook.
Repeat the procedure with the second spring.

Grip the strap firmly and pull it upwards to set the spring.



Squeeze the jaws of the trap to the final setting and attach the trigger. Keep your fingers outside the trap at all times!



After this, place the trap in the selected location and open the safety hooks. Handle the trap with extreme caution. The trap can be very dangerous if incorrectly handled. If necessary, use an extra strap to increase safety.

CONTRIBUTIONS AND ACKNOWLEDGEMENTS

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

Suomen Metsästäjäliitto - Finnish Hunters' Association

Finnish Hunters' Association is the largest and oldest volunteer organization for hunters in Finland. Established in 1921, we now represent more than 2,670 hunting clubs and their c. 160,000 members, which is about half of the Finnish hunters. In addition to lobbying, we also provide our members with numerous services, such as education, guidance, youth activities. We are also in charge of the Finnish game shooting competitions.

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

More information is available on wearefur.com

Finnish hunting association: <http://www.metsastajaliitto.fi/>

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Image of Beaver on the cover by ONCFS

All images of traps by are made and owned by Toni Kumpuvaara.

FOR AN HONEST RELATIONSHIP
WITH NATURE

Best Practice Trapping



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