BEST PRACTICE GUIDELINES FOR TRAPPING OF MAMMALS IN EUROPE

Nyctereutes procyonoides

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FACE

Svenska Jägareförbundet

SUOMEN RIISTAKESKUS
FINNISH WILDLIFE AGENCY

IFF
INTERNATIONAL FUR FEDERATION

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.

Nyctereutes procyonoides

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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.

WHY THESE GUIDELINES ?

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*.

1

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.

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).

3 SPECIES INFORMATION SHEET

Scientific name: *Nyctereutes procyonoides*
Pronunciation - nic ti roy tees,pro cyon noy dees
Common names: Asiatic raccoon, Raccoon dog (English), Chien viverrin (French), Marderhund (German), Tanuki (Japanese)

DESCRIPTION

Nyctereutes procyonoides is a primitive canid native to Eastern Asia whose closest relatives are the Gray fox (*Urocyon cinereoargenteus*) of North America and the Bat-eared foxes (*Otocyon megalotis*) of Subsaharan Africa. These canids have a long, separate evolutionary history dating back to around 10 million years or more (Wayne 1993, Wayne & Ostrander 1999, Kauhala 2002).

From the 1930s to 1950s they were introduced to western Russia for fur farming. They were also released deliberately into the wild and subsequently spread throughout much of Eastern & Central Europe and north west to Finland (Kauhala 2002, Jędrzejewski & Sidorovich, 2010).

CURRENT DISTRIBUTION

The species has been widely introduced. It is now widespread in northern and Eastern Europe, thriving in moist forests with abundant undergrowth. It is also widespread in central Europe (e.g. Germany) where it uses heterogeneous agricultural landscapes (Sutor & Schwarz, 2013). The northern limit of distribution lies in areas where the mean temperature of the year is just above 0°C, the snow cover about 800mm, the duration of the snow cover 175 days and the length of the growing season 135 days (for example, in Finland the northern limit of permanent distribution is between 65°N and the Arctic Circle). If winters become milder, it may expand its range northwards (Kauhala & Saeki, 2004).

RANGE COUNTRIES

(including introductions): Belarus, Bulgaria, China, Estonia, Finland, Germany, Hungary, Japan, Korea, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Serbia, Sweden (only in the county of Norrbotten), Ukraine, Vietnam. Occasionally seen in Austria, Bosnia, Denmark, France, the Netherlands, Norway, Slovenia and Switzerland (Ellerman and Morrison-Scott 1951; Mitchell-Jones et al. 1999 in Kauhala & Saeki, 2004).

POPULATIONS

Since the 1950s the population has increase rapidly (e.g. Finland, the Baltic States and Poland). In some countries (e.g. Finland and Latvia) the population peaked in the mid-1980s and has slightly declined thereafter. Thus, after rapid increase phase the population has stabilized, at least in the eastern part of its European distribution. It may, however, still be spreading westwards in Europe (Mitchell-Jones AJ et al., 1999). Ever increasing hunting-bags from throughout north-eastern Germany demonstrate that the species is able to live in a wide range of lowland habitats and indicate that agricultural landscapes offer suitable conditions for this invasive predator (Sutor & Schwarz, 2013).

IDENTIFICATON

APPERANCE

Nyctereutes procyonoides has a fox like appearance, but far else elongated with shorter legs, tail and ears less visible. Both sexes are look similar, but males slightly heavier 5-7 kg and females 4-6 kg. Its fur is markedly different from summer to winter.

In autumn and winter it has very thick fur, giving an expression of a round animal with short and thin legs. The black facial mask, small rounded ears and pointed muzzle are typical for the species. Hair is long on cheeks. The body colour varies from yellow to grey or reddish. There are black hairs on the back and shoulders and also dorsally on the tail. Legs, feet and chest are dark. The tail is rather short and covered with thick hair. In summer when the fur is thin and fat reserves small, the animal looks much slimmer than in autumn. Dental formula is 3/3-1/1-4/4-2/3=42; m3 sometimes missing (Kauhala & Saeki, 2004).

In winter they significantly reduce their activity and they may even sleep for a few weeks. They usually become active in January or February, depending on weather conditions (Jędrzejewski & Sidorovich, 2010). In Germany temperature during winter is too mild, so they reduce their activity but show no hibernation behaviour (Sutor & Schwarz, 2011), while in northern Europe they can hibernate for months, in case of Finnish Lapland until April (Alhainen 2014, pers.comm). During hibernation their body temperature is 1.4 – 2.1 °C lower than during summer. This habit is unique among canids, and may also have contributed to the successful spread in northern Europe (Mustonen et al., 2007 in Kauhala & Kowalczyk. 2011).

TRACKS

Footprints are small and more rounded than those of the red fox, which leaves more elongated foot prints. Like in the fox the nails are always visible in the prints. The fore print measures 4-5 cm long and 5-6 cm wide, while the hind print slightly smaller. Because of its broad body and short legs, it does not place its footprints in an (almost) straight line as the fox does: the prints of left and right legs are rather widely separate. Equally the stride length is shorter, up to 30-35 cm, while the length of the fox's is much longer, often above 40-50 cm (Mulder 2011, Jędrzejewski & Sidorovich 2010).

BURROWS

They have little tendency to dig burrows (Mulder, 2011) and often use burrows that were dug by foxes or badgers (Yamamoto 1994 in Kauhala & Saeki. 2004). The use of burrows for reproduction and overwintering is reported (Goszczynski 1999; Kauhala et al. 2007; Drygala et al. 2008a, b, c; Kowalczyk et al. 2008 in Kowalczyk & Zalewski, 2010, Sutor & Schwarz, 2011).

DROPPINGS (SCATS)

They deposit their faeces in one spot or in a few latrines only (Mulder, 2011). Their shape is very diverse and depends on the composition of food. Scats may resemble those of fox, badger, marten and even wolf. However, usually they are more fragmented as compared to other species. Often they are found in the form of round, pointed pellets. It usually have a characteristic, vegetable-like smell (Jędrzejewski & Sidorovich, 2010).

SIMILAR SPECIES

It can be confused with the raccoon (*Procyon lotor*) in Germany, France and Hungary, or the Eurasian badger (*Meles meles*), although neither are canid species. The badger has black stripes on the white head, is more strongly built and has shorter legs and tail. The tail of the raccoon is furry with dark bands. The badger and raccoon have five toes in each foot (Kauhala & Saeki, 2004).

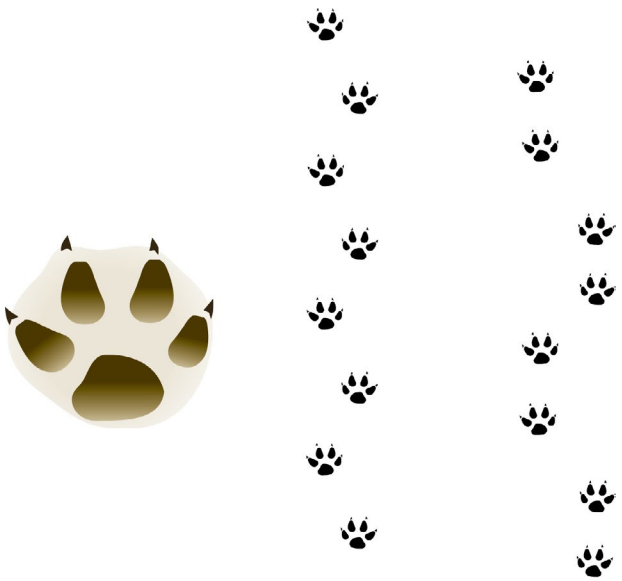


Illustration by Pičulin, LZS 2012

LIFE HISTORY

DIET

They are true omnivores and seasonal food habits shift as food availability changes (Ivanova 1962; Kauhala et al. 1993a in Kauhala & Saeki, 2004). The review of 81 data sets from nine countries showed that species diet composition was influenced as well by the landscape structures as by the seasons (Sutor et al., 2009). In most areas small rodents form the bulk of their diet in all seasons (Bannikov 1964; Nasimovic and Isakov 1985 in Kauhala & Saeki, 2004). Frogs, lizards, invertebrates, insects (including adults and larvae of *Orthoptera, Coleoptera, Hemiptera, Diptera, Lepidoptera, Odonata*), birds and their eggs are also consumed, especially in early summer (Barbu 1972; Kauhala et al. 1993a, 1998b in Kauhala & Saeki, 2004). Plants are frequently eaten; berries and fruits are favoured in late summer and autumn when they serve as an important food source before winter dormancy. Oats and other agricultural produce (e.g., maize and fruits) are often found in stomachs contents. Carrion (e.g. ungulate carcasses), fish and crustaceans (e.g., crabs, crayfish) are consumed when available (in Kauhala & Saeki, 2004).

FORAGING BEHAVIOUR

As opportunistic generalists, they forage by searching close to the ground and, in Japan, may also climb trees for fruits. They are mainly nocturnal and forage in pairs, leaving their dens 1–2 hours after sunset (Kauhala et al. 1993b in Kauhala & Saeki, 2004). When they have pups, females also forage during the daytime while the male is caring for young (Kauhala et al. 1998c in Kauhala & Saeki, 2004). Usually the foraging pair wanders some distance apart from each other. They decrease their food intake before entering winter dormancy (Korhonen 1988 in Kauhala & Saeki, 2004).

REPRODUCTION

It has a high reproductive capacity; higher than expected for a medium-sized carnivore species (Kauhala 1996a in Kauhala & Kowalczyk, 2011). Mean litter size is 8–10 in areas with favourable conditions, both in native and introduced ranges (Judin, 1977; Helle and Kauhala, 1995; Kowalczyk et al., 2009 in Kauhala & Kowalczyk, 2011). They are monogamous and the male participates in pup-rearing by warming and guarding the pups when the female is foraging (Ikeda, 1983; Yamamoto, 1987; Kauhala et al., 1998b; Drygala et al., 2008a in Kauhala & Kowalczyk, 2011).

They achieve sexual maturity at 9-11 months. Females can deliver young annually. Mating occurs from February to April, usually in March (Helle and Kauhala 1995 in Kowalczyk, 2006). The gestation period is nine weeks, and cubs are born from April to June. In Japan litter size is smaller (4-5 young/litter) than in the Russian Far East and in the introduced area in Europe (mean 7-9 young/litter, max 16) (Judin 1977, Helle and Kauhala 1995, Kauhala 1996c, Kowalczyk et al. 2000, Kauhala and Saeki 2004b in Kowalczyk, 2006). Proportion of breeding females in the population averages 80%. Climatic conditions (especially the length of the summer) and food availability may influence reproductive output (Kauhala and Helle 1995 in Kowalczyk, 2006).

HABITAT

The species is very adaptable and lives in a variety of habitats. It prefers the proximity of water and wetland habitats, where it readily takes to water either in its movements or when disturbed. It is found in both deciduous and coniferous forests, with preference for humid forests with undergrowth providing shelter.

They are very efficient scavengers (Sidorovich et al. 2000, selva et al. 2005 in Kowalczyk, 2009)) and in some areas, carrion or kill remnants left by larger predators are a very important component of their diet (Jędrzejewska & Jędrzejewska 1998, Sidorovich et al, 2000, 2008 in Kowalczyk, 2009).

HUMAN AND WILDLIFE INTERACTIONS

INTERNATIONAL LEGAL & CONSERVATION STATUS

AIHTS – Annex I

PREDATION

They seldom are hunted for their fur (because the fur of wild *Nyctereutes procyonoides* currently has little value), but rather because they are considered pests. However a study showed that between 90.000 and 100.000 animals are trapped annually in EU (Talling & Inglis, 2009). However this numbers are probably much higher, as just in case of Finland the annual harvest is between 150.000 and 200.000 (Alhainen 2014, pers. comm).

DISEASE

It is an important vector of rabies and it also carries trichinosis and sarcoptic mange (Mitchell-Jones AJ et al., 1999). They can also be infected by the Small fox tapeworm (*Echinococcus multilocularis*) (Alhainen 2014, pers.comm).
Invasive wildlife species have the potential to act as additional host and vector species for infectious diseases. Studies conducted during the last 20 years identified a total of 35 species of endoparasites, five ectoparasites, six bacterial or protozoan species, and five viruses found in the subspecies *Nyctereutes procyonoides ussuriensis* in its original and newly occupied habitat or in *Nyctereutes procyonoides koreensis* in its original habitat (Sutor et al. 2013).

IMPACTS (ECOSYSTEM, HUMAN HEALTH, ECONOMIC)

Waterfowl and their eggs are consumed at the seashore and the archipelago in early summer (Ivanova 1962; Naaber 1971, 1984 in Kauhala & Saeki, 2004). Fish from fish ponds may also be consumed (Saeki 2001 in Kauhala & Saeki, 2004). In the inland habitats of Finland, birds occur in the diet less often, and most of them are passerines (Kauhala et al. 1998b in Kauhala & Saeki, 2004). Remains of grouse are found only occasionally in the faeces (Judin 1977 in Kauhala & Saeki, 2004). When the diets of *Nyctereutes procyonoides*, red foxes (*Vulpes vulpes*) and badgers in early summer were compared in southern Finland, the diet of *Nyctereutes procyonoides* was the most diverse, and they consumed game animals less frequently than foxes (Kauhala et al. 1998b in Kauhala & Saeki, 2004).

In regard to its diet composition, gathering foraging strategy and inactivity during winter, *Nyctereutes procyonoides* probably preys less often on game animals and birds than the native red fox (Sutor et al. 2009).

4 GENERAL OVERVIEW OF TRAPS

Traps must meet the humane trapping standards, referred to in Agreement on International Humane Trapping Standards (AIHTS), and should reduce pain, distress and suffering of trapped animals as much as technically feasible. Seven types of trap are used to catch mammals in the EU; three categories of restraining trap i.e. box/cage, non-killing snares and foot snares, and four categories of killing trap i.e. spring traps, dead-fall traps, drowning traps and killing snares (Talling & Inglis, 2009).

When trapping it is important to avoid catching non-target animals. This is achieved by carefully planning and setting the trap. The most important factor in selective trapping is location. Each species lives in a certain kind of habitat, eats certain kinds of food, and follows certain habits. This knowledge is essential to find best places to set your traps. Pre-season scouting 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).

RESTRAINING TRAPS

NAME OF TRAP

KaNu is a cage trap designed by Kalevi Nurmentaus in the late 1980's. The name KaNu – comes from the initials of the designer.

HOW TO CHOOSE THE BEST LOCATION TO SET UP THE TRAP

Best locations are in preferred habitat such as shorelines, alongside streams, moist areas, dry islands in the wetlands and marshes, and places with human activities such as garbage dumps and fields/gardens with attractive crops. Game paths and latrines from the specimen may indicate where the best locations are.

RIGHT WAY TO SET THE TRAP

General

The trap should be set in a quiet place with low disturbance, surrounded by sheltering vegetation and easy to check daily. The trap needs a flat area to be assembled in since it is rather large and slopes may result in that the trap does not close correctly.

The mesh size in the trap should not be larger than 1 inch 25 mm x 25 mm to prevent tooth damage to trapped animals trying to escape.

HOW TO ASSEMBLY AND PREPARE THE TRAP

- Find a relatively flat place that is larger than the cage, 2,0 m x 1,5 m minimum. A tree or pole should be approximately 1-2 meters behind the cage for setting up the trap.
- Remove all lose materials and rocks from the site
- Assemble the floor and the cage to the site and carefully cover the floor with the removed materials
- Check that the cage will drop straight down against the floor and between the guiding steels
- Attach the steel wire to the front corners of the trap. Measure the wires to be at least 0,5 meters behind the cage to where the trigger is situated.
- Attach the wire to the tree/pole at about 1,2-1,4 meters high and attach the trigger to the wire in a way, that the cage will be open at about 30 degrees angle.
- Assemble rocks or logs alongside the trap to prevent the animals from pulling the bait from the side in a way that the cage could drop on the animals back causing possible injury or escape.

SETUP OF THE TRAP

- Open the cage and hold it open with a stick
- Attach the string to the bait and set the bait at the end of the trap
- Pull the string through the mesh at the back of the cage and tie the string to the trigger. The string should not be under tension, but if the bait is moved more than a centimetre, it should release the trigger
- Remove the stick that holds the trap open.

HOW TO ENSURE SELECTIVITY AND EFFECTIVENESS OF TRAPS

Most predators are very careful and avoid human scent. In recently established areas such as northern Sweden and Finland species is less bothered by human scent and this is used to avoid capturing other predators when this is not the purpose.

Human saliva for example repels red fox, while the *Nyctereutes procyonoides* will pass the saliva and go into the trap for the bait.

In Southern Finland species is starting to be smarter, possibly due to a high hunting pressure, and therefore it is suggested that scentless traps are used in such areas to be able to capture the more experienced individuals.

Well set scentless trap will catch all small predators, but non-targeted animals are easily released without harming them. Species is generalists and many different meats, eggs, fish or fruits will work as bait. Preferred baits are white fish, meat and apples. Apples work well and don't attract other predators as much if this is a critical point.

In the vicinity of the trap, use long distance lures to draw the animals attention. Most of the food based general predator baits will work well for the *Nyctereutes procyonoides.*

RECOMMENDATIONS

Next to KaNu trap there are also many various cage / box traps, which can be used for trapping the species. They are smaller and easier to transport but not as efficient as the KaNu. They may however be more suitable in cases where you have one certain animal to catch, for example living under a house where you do not want a large permanent construction on the lawn, or in rough terrain where there is difficulty to find a large enough flat surface for the KaNu.

Efficiency could potentially be increased much further by the use of Soft-catch traps. The Soft-catch trap is a new generation leg hold trap with the jaws dressed in rubber to avoid damages on the animal. While this trap is used affectivity in North-America, and certified for some species under the AIHTS standards, in the EU their use is not permitted since EU council regulation No 3254/91 does not allow for any derogations, even for research or protection of native fauna. The Soft-catch would also have other advantages. It is small and fast to move and set, it can be used in many different habitats and relatively cheap.

5 GENERAL CONSIDERATIONS WHEN TRAPPING SPECIES

BASIC EQUIPMENT FOR THIS TYPE OF TRAP EACH TRAPPER SHOULD HAVE AND ITEMS NEEDED TO SET THE TRAPS

- Spare parts that can break and extra bait should always be brought when checking the trap.
- If there is a closed season for the trapping the species an adequate pre-baiting is essential. During the off-season the traps are locked open and baited regularly, meaning that there is something to eat constantly. Pre-baiting can be done with the same bait that is used during trapping season, but also dog food pellets can be used to attract it and other small predators. Dry dog food pellets are easily delivered to the trap, hygienic and not so attractive to birds or other animals than small predators. The pellets can be used for basic bait during the whole season accompanied by the main bait attached to the trigger. Well pre-baited trap has offered easy food for local animals and their pups the whole off-season. As the traps are set a trap can catch the whole family group within weeks, since the animals are used to feed in the trap. Old baits can be effectively refreshed with artificial scent products.
- For effective trapping two traps can be set right next to each other. As they move in couples, there is a high possibility to have an animal in both traps in case both individuals have not been trapped in the same cage. The other trap can also be another type of trap than KaNu.

HUMAN SCENT AND EFFECTS OF IT ON TRAPPING AND HOW BEST TO MINIMIZE IT

Species do not avoid human scent as much as other predators, especially not in recently established areas. See "How to ensure selectivity…" above.

HOW OFTEN DO WE HAVE TO CHECK THE TRAP?

Traps have to be checked every day, preferably in the morning since the species is nocturnal. Several tools for trap surveillance are available such as MMS-cameras, Mink Police and other mobile phone alerts. Such surveillance tools need to send the trap status every day even if no capture is made to ensure the technique is working.

CONSIDERATIONS TO IMPROVE WELFARE OF TRAPPED ANIMALS

The best way to improve the welfare of trapped animals is to use an alert system that alerts the trapper when the trap has caught an animal. This will ensure little time for the animal to hurt itself and a quick culling of the animal.

To provide shelter from snow and rain, branches or reed can be put on top of the cage. This will keep the animals calmer while they are waiting.

HOW TO RELEASE OR DESPATCH THE ANIMAL

Trapped animals are easy to shoot in the head with a .22 through the net. It is easy to release non-targeted animals, just open the trap.

USER SAFETY CONSIDERATIONS

6

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).

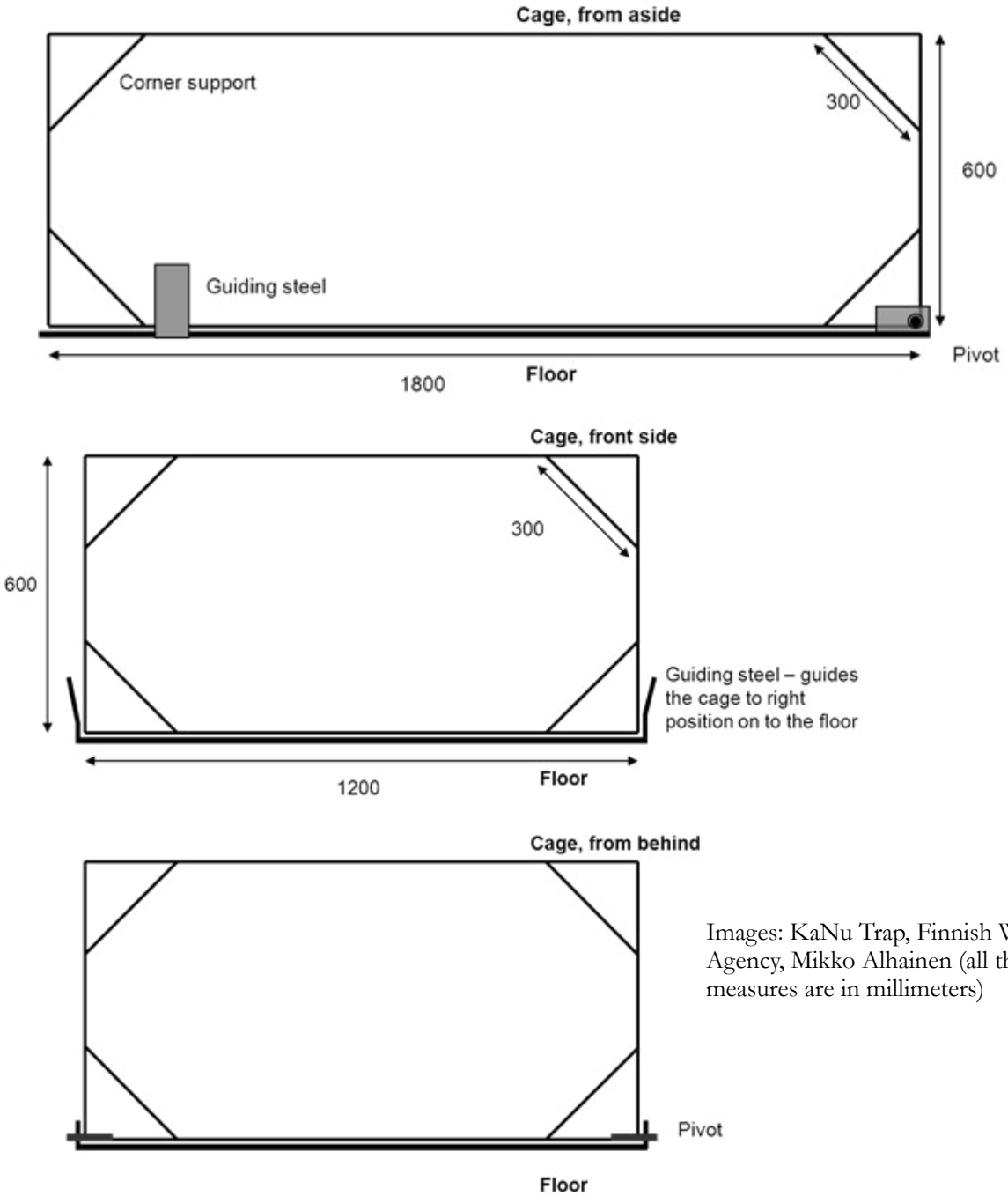
7 SPECIFICATIONS OF TRAPS

a. KaNu TRAP

ASSEMBLING THE TRAP:

Materials:

- Frame of the cage: 10 mm steel or treated wood, total of 20 meters
- Frame of floor: 50 x 100 mm treated wood or 10 mm steel, total of 6 m
- Strong steel mesh: 25mm x 25 mm loop at the most, 1,8 mm wire. Total of: 13,2 meters of: 0,6 m wide or 6 meters of 0,6 m wide + 3,6 m 1,2 m wide; total of 7,92 m2
- Guiding steel 2 pieces: 2 – 3 mm thick steel measuring 70 x 150 mm
- Pivot: Many different options
- Staples etc. to attach the mesh to the frame

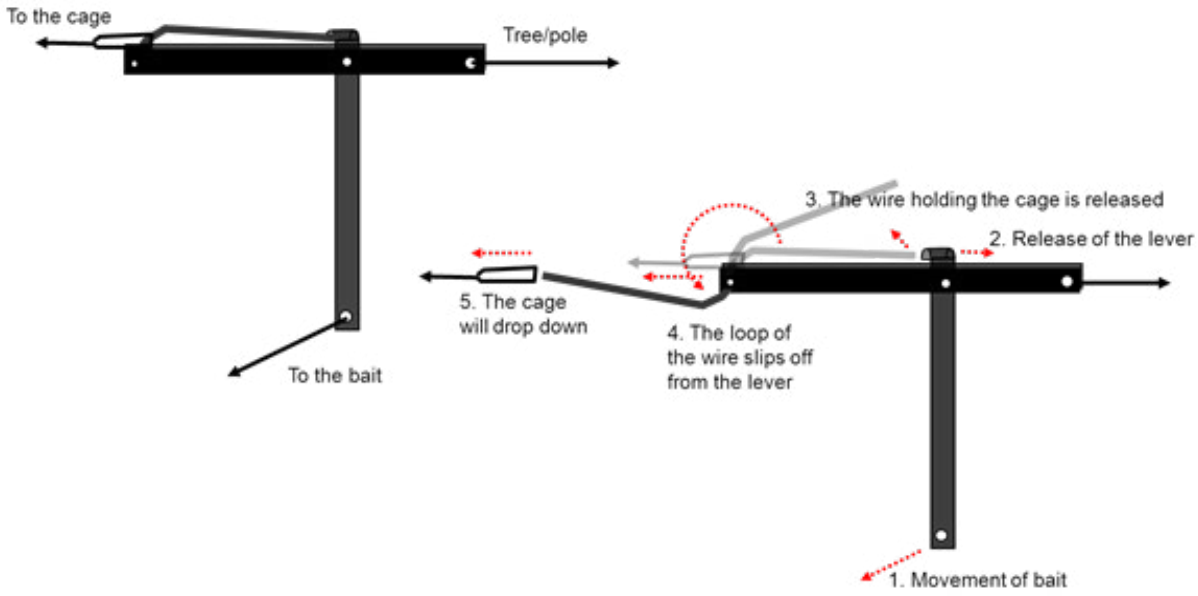


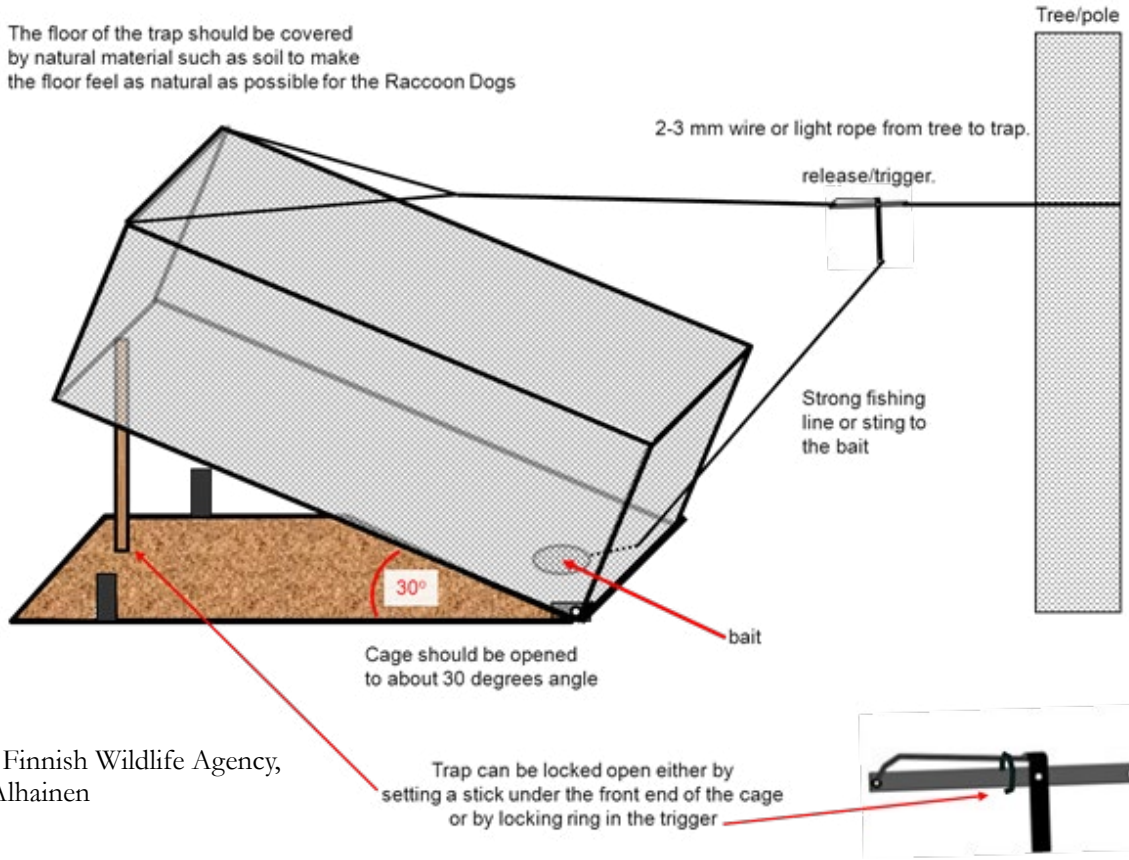
Images: KaNu Trap, Finnish Wildlife Agency, Mikko Alhainen (all the measures are in millimeters)

RELEASE/TRIGGER ONE MODEL AMONG MANY, THAT WORKS

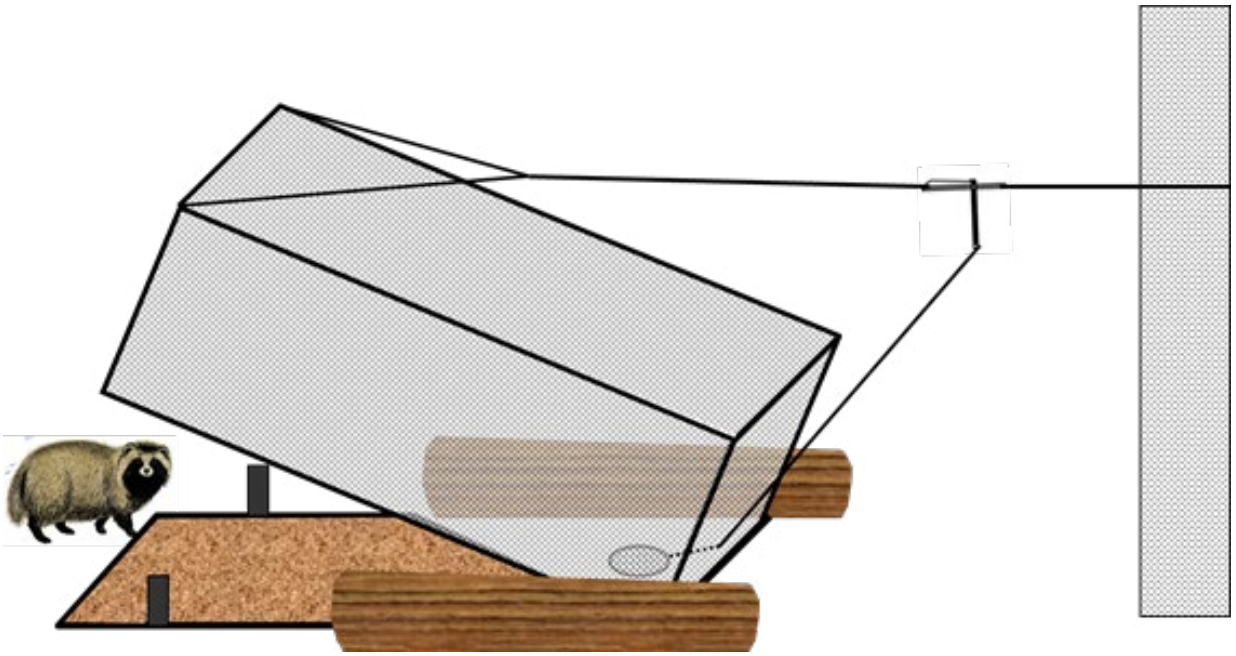
Materials:

- Frame: 3 pieces of 2mm x 20 mm x 150 mm steel
- Lever 5 mm steel wire
- Pivot 3 – 5 mm steel wire
- The end of the other frame piece bends to U-shape of 7-9 mm wide.
- Holes for pivot wire drills to the frame pieces
- Lever wire bends to curve shape and loop or hole is made in the other end for the pivot wire
- The trigger is put together with pivot wire/ nails etc

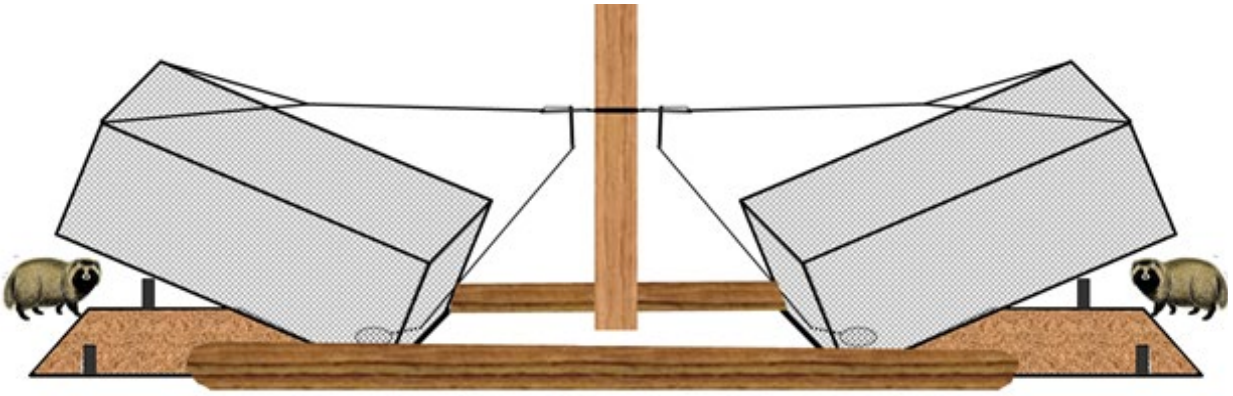




Images: Finnish Wildlife Agency, Mikko Alhainen



- Logs or rocks needs to be put alongside the trap to prevent animals from pulling the bait from aside. This could result the cage to fall on the animals back causing injury and possible escape.
- Additional log (not in picture) may be set behind the trap to prevent animals from approaching form behind and accidentally releasing the trigger while trying to get the bait.



- Double setup on opposite (in the picture) or parallel can be considered. This gives chances to trap both animals from the couple if they are not trapped in the same cage.

Images: Finnish Wildlife Agency, Mikko Alhainen

KaNu trap assembled on a wetland shore. Improvements to achieve best practice:

- Trap should be located in sheltering vegetation. At the open trapped animals will stress more than in the cover. With adequate baiting the animals can be lured in to nearby forest edge.
- Continuous pre-baiting during the summer is essential for effective trapping during the season.

KaNu trap with a trapped animal. Improvements of the trap to achieve best practice:

- Trap should be located in sheltering vegetation, or reed should be placed on top of the trap to provide cover and to keep the animals calm.
- Guiding logs should be set alongside the trap to prevent animals from pulling the bait from aside of the trap
- The corner supports should be longer to stabilize the trap in windy weather etc.
- Good idea: Emerging flag that allows visual checking from distance. Plastic box for remote checking device

8 CONTRIBUTIONS & 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

Finish Wildlife Agency

The Finnish Wildlife Agency promotes sustainable game management, supports the activity of game management associations, and deals with the implementation of wildlife and game policy. The Finnish Wildlife Agency also manages the public administration tasks laid down for it. It is an independent institution governed by public law.

The Finnish Wildlife Agency was an associated beneficiary of LIFE+ MIRDINEC project (2010-2013) aiming to stop the invasive alien raccoon dog from establishing in Scandinavia.

The KaNu trap illustrations were originally developed for the Wetlands management handbook in 2010 and further developed for the Best Practise – document in 2014.

The Swedish Association for Hunting and Wildlife Management

The Swedish Association for Hunting and Wildlife Management (SAHWM) is a non-profit making member organization to which the Swedish Government has delegated responsibility to deal with information and advice with regard to hunting and game management.

SAHWM was the coordinating beneficiary of LIFE+ MIRDINEC project (2010-2013) aiming to stop the invasive alien raccoon dog from establishing in Scandinavia. In this management the KaNu trap is one important tool which has been used with great success.

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 9

http://riista.fi/en/

www.jagareforbundet.se

www.mardhund.se

www.minkpolice.dk

www.wearefur.com

REFERENCES 10

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

Iossa G., Soulsbury CD., Harris S., Mammal trapping: a review of animal welfare standards of killing and restraining traps, Animal welfare, 16: 335 -352

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

Kauhala K., Kowalczyk R., 2011 Invasion of the raccoon dog *Nyctereutes procyonoides* in Europe: History of colonization, features behind its success, and threats to native fauna, Current Zoologz 57 (5): 584 – 598

Kauhala K., Saeki M., 2004, Raccoon dog *Nyctereutes procyonoides*, http://www.canids.org/species/raccoon_dog.pdf Canids: Foxes, Wolves, Jackals and Dogs Status Survey and Conservation Action Plan. IUCN 2004

Kauhala, K. (2002) Finnish Game and Fisheries research Institute, Helsinki. In: Macdonald, D.(ed) The New Encyclopaedia of Mammals. Oxford University Press

Korhonen H., Harri M., Asikainen J., 1984. Moulting and Seasonal Pelage Varataions in the Raccoon Dog, Acta Theriologica, Vol. 29, 7: 77-88

REFERENCES

Kowalczyk R., Zalewski A., 2010 Adaptation to cold and predation – shelter use by invasive raccoon dogs *Nyctereutes prcyonoides* in Białowieza Primeval Forest (Poland), Eur J Wildl Res, This article is published with open access at Springerlink.com

Kowalczyk, R. 2006: NOBANIS – Invasive Alien Species Fact Sheet – *Nyctereutes procyonoides*. – From: Online Database of the North European and Baltic Network on Invasive Alien Species – NOBANIS www.nobanis.org, Date of access 2/12/2013

Kowalczyk, R. Zalewski, A., Jędrzejewska B., Ansorge, H., Bunevich, A.N. 2009: Reproduction and mortaliy of invasive raccoon dogs (*Nyctereutes procynoides*) in the Białowieża Primeval Forest (eastern Poland). – Ann. Zool. Fennici 46: 291 -301

Leskovic B., Piculin I.2012. Divjad in Lovstvo, Ljubljana, Lovska zveza Slovenije, Zlatorogova knjiznica, p. 424: In Slovenian

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. 320 – 321

Mulder J.L., 2011, The raccoon dog in the Netherlands – a risk assessment, Bureau Mulder-natuurlijk, p. 56

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.

Sutor A., Kauhala K., Ansorge H., Diet of the raccoon dog *Nyctereutes procynoides* – a canid with an opportunistic foraging strategy, Acta Theriologica, Volume 55, Issue 2 , pp 165-176

Sutor A., Schwarz S., 2011, Home ranges of raccoon dogs (*Nyctereutes procyonoides*, Gray, 1834) in Southern Brandenburg, Germany, European Journal of Wildlife Research, Volume 58, Issue 1, pp 85-97

Sutor A., Schwarz S., 2013, Seasonal habitat selection of raccoon dogs (*Nyctereutes procyonoides*) in Souther Brandenburg, Germany, Folia Zool. 62(3): 235-243

Sutor A., Schwarz S., Conraths F.J., 2013. The biological potential of the raccoon dog (*Nyctereutes procyonoides,* Gray 1834) as an invasive species in Europe – new risks for disease spread? Acta Theriologica, Volume 59, Issue 1, pp 49-59

Talling J.C. & Inglis I.R. (2009) Improvements to trapping standards.DG ENV, http://ec.europa.eu/environment/biodiversity/animal_welfare/hts/pdf/final_report.pdf

Wayne, R. K. and Ostrander, E. A. (1999), Origin, genetic diversity, and genome structure of the domestic dog. Bioessays, 21: 247–257.

Wayne, R.K. (1993) Molecular evolution of the dog family. Trends in Genetics, June; 9(6), 218-24

Images

Pičulin I., Footprints Rakunasti pes ali enok (*Nyctereutes procynoides*), [illustration]. From Divjad in lovstvo (pg. 424), 2012, Ljubljana, Lovska zveza Slovenija - Zlatorogova knjižnica

Photo on p. 11 , J.L. Mulder. From A review of the ecology of the Raccoon dog (*Nyctereutes procyonoides*) in Euorpe, Lutra 2012 55 (2) 101-127

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