

Procyon lotor



Taxon	Family / Order / Class / Phylum
<i>Procyon lotor</i> L. 1758	Procyonidae / Carnivora / Mammalia / Chordata

COMMON NAMES (English only)

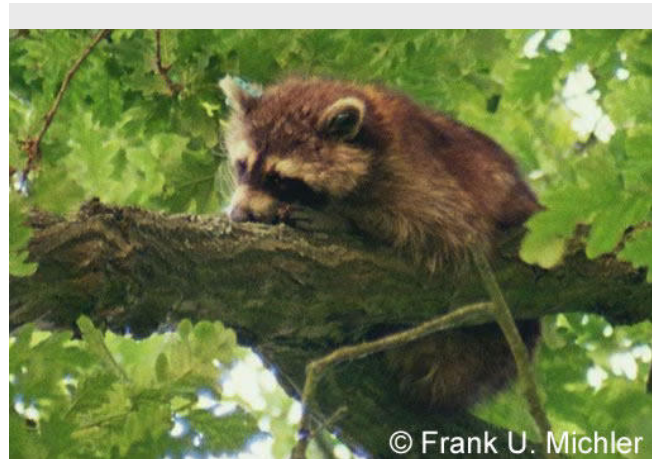
Raccoon
Common Raccoon
Northern Raccoon
Coon

SYNONYMS

Ursus lotor L., 1758
Lotor vulgaris Tiedemann, 1808
Procyon annulatus G. Fischer, 1814

SHORT DESCRIPTION

This cat-sized omnivore, mostly nocturnal carnivore, with its black and white face, can live in almost all terrestrial habitats. It has a distinct sense of touch and an excellent climbing and swimming ability.



Procyon lotor is a cat-sized, mostly nocturnal carnivore.

Photo: Frank U. Michler

BIOLOGY/ECOLOGY

Dispersal mechanisms

Females are often philopatric: the adult home range is the same as the birth area. Mean home range is between 40 and 400 ha (5 ha in urban areas and 5000 ha on grasslands), and mean migration distances are between 5 – 10 km.

Reproduction

They mostly have one litter per year with 2-4 young in April after a mean gestation period of 50-70 days. The mean weaning time is 16 weeks. Up to 75% of females within their first year can reproduce.

Known predators/herbivores

Eagle owl (*Bubo bubo*) or Red Fox (*Vulpes vulpes*) can feed on young raccoons.

Resistant stages (seeds, spores etc.)

HABITAT

Native (EUNIS code)

B: Coastal habitats, D: Mire, bog and fen habitats, E: Grassland and tall forb habitats, F: Heathland, scrub and tundra habitats, G: Woodland and forest habitats and other wooded land, H: Inland unvegetated or sparsely vegetated habitats, I: Regularly or recently cultivated agricultural, horticultural and domestic habitats, J: Constructed, industrial and other artificial habitats, X11: Large parks, X22: Small city centre non-domestic gardens, X23: Large non-domestic gardens, X24: Domestic gardens of city and town centres, X25: Domestic gardens of villages and urban peripheries

Habitat occupied in invaded range (EUNIS code)

B: Coastal habitats, D: Mire, bog and fen habitats, E: Grassland and tall forb habitats, F: Heathland, scrub and tundra habitats, G: Woodland and forest habitats and other wooded land, H: Inland unvegetated or sparsely vegetated habitats, I: Regularly or recently cultivated agricultural, horticultural and domestic habitats, J: Constructed, industrial and other artificial habitats, X11: Large parks, X22: Small city centre non-domestic gardens, X23: Large non-domestic gardens, X24: Domestic gardens of city and town centres, X25: Domestic gardens of villages and urban peripheries

Habitat requirements

They have a preference for woody habitats adjacent to fresh water or for urbanized areas. Its climatic range is very large, surviving harsh winters and desert like conditions.

DISTRIBUTION

Native Range

South Canada to Panama, except Baja California, alpine regions (above 200m) of Rocky Mountains

Known Introduced Range

In Europe: France, Germany, Austria, Switzerland, Netherlands, Belgium, Luxembourg, Poland, Czech Republic, Slovakia, Hungary. First occurrences in Slovenia, Romania and Serbia. Furthermore populations in Belarus, Caucasus region of Russia, Georgia and Azerbaijan and in whole Japan.




Trend

There is a trend of range expansion towards South and East Europe. It is expected that the raccoon will expand its range in the already invaded countries very quickly.

MAP (European distribution)



Legend

	Known in country		Known in CGRS square		Known in sea
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INTRODUCTION PATHWAY

It was intentionally released for hunting and because of its fur for the first time in Germany. Escapes from fur farms, zoological gardens and from animal husbandries have occurred in France, Russia and several other countries of Europe.

IMPACT

Ecosystem Impact

They can occasionally predate on birds (nests) and amphibians with resulting decreased nesting success and/or decreased population sizes.

Health and Social Impact

Due to the raccoon roundworm (*Baylisascaris procyonis*) there is a high potential of zoonosis for humans and its animal vectors. The *cerebral larva migrans* in humans caused by the raccoon roundworm can be lethal. But at the moment there have not been any lethal cases nor serious raccoon rabies cases in Europe.

Economic Impact

It is considered a pest in some urban areas. However, costs from being a zoonosis vector, a consumer of agricultural products or causing nuisances to housekeepers (e.g. Central Germany, Berlin) are at the moment not serious.

MANAGEMENT

Prevention

Management plans should focus on communication programs and diminishing conflict. In urban areas it is possible to control the denning behaviour by reducing climbing opportunities at houses, on roofs etc. It is important to avoid providing freely available food on compost piles or from pet feeding places.

Mechanical

In its native range eradications from islands are documented. But population control mechanisms by hunting are only possible with enormous effort, longevity and effectiveness. An effective control program in its invaded range was done after fencing and trapping near Berlin for great bustards (*Otis tarda*).

Chemical

Unknown.

Biological

Unknown.

REFERENCES

- Stubbe M (1993) *Procyon lotor* (Linné, 1758) - Waschbär. In: Niethammer J and Krapp F (eds) Handbuch der Säugetiere Europas, pp 331-364, Aula Verlag, Wiesbaden
- Winter M (2005) Zur Ökologie des Waschbären (*Procyon lotor* L., 1758) in Sachsen-Anhalt. Diploma, Institute of Zoology, Martin-Luther-Universität Halle-Wittenberg, Halle/Saale, p 132
- Zeveloff SI (2002) Raccoons. A natural history. Smithsonian Institute Press, Washington, London, p 200

OTHER REFERENCES

- Červený J, Anděra M, Koubek P, Homolka M, Toman A (2001) Recently expanding mammal species in the Czech republic: distribution, abundance and legal status. Beiträge zur Jagd- und Wildforschung 26: 111-125
- Chamberlain MJ, Conner LM, Leopold BD, Hodges KM (2003) Space use and multi-scale habitat selection of adult raccoons in Central Mississippi. Journal of Wildlife Management 67:334-340
- Cirovic D, and Milenkovic M (2003) The first record of the free-ranging raccoon (*Procyon lotor* Linnaeus, 1758) in Yugoslavia. Mammalian Biology 68:116-117
- Clark WR, Hasbrouck JJ, Kienzler JM, Glueck TF (1989) Vital statistics and harvest of an Iowa raccoon population. J Wildl Manage 53:982-990
- Dunn JP, Chapman JA (1983) Reproduction, physiological responses, age structure, and food habits of raccoon in Maryland, USA. Zeitschrift für Säugetierkunde 48:161-175
- Endres KM, Smith WP (1993) Influence of age, sex, season and availability on den selection by raccoons within the Central Basin of Tennessee. American Midland Naturalist 129:116-131
- Fritzell EK, Hubert Jr. GF, Meyen BE, Sanderson GC (1985) Age specific reproduction in Illinois and Missouri raccoons. J Wildl Manage 49:901-905
- Gey A (1998) Synopsis der Parasitenfauna des Waschbären (*Procyon lotor*) unter Berücksichtigung von Befunden aus Hessen. Dissertation, Veterinärmedizin, Justus-Liebig-Universität Gießen, Gießen, p 201
- Gineev AM, Gineev MA (2001) *Procyon lotor* L. on Eurasian continent (Russian). Actual problems of ecology and conservation of ecosystems of the Southern part of Russia and nearby territories, pp 99-101, Krasnodar
- Hartman LH, Eastman DS (1999) Distribution of introduced raccoons *Procyon lotor* on the Queen Charlotte Islands: implications for burrow-nesting seabirds. Biological Conservation 88:1-13
- Hohmann U (1998) Untersuchungen zur Raumnutzung des Waschbären (*Procyon lotor* L. 1758) im Solling, Südniedersachsen, unter besonderer Berücksichtigung des Sozialverhaltens. Hainholz Verlag, Göttingen, p 153
- Hohmann U (2001) Stand und Perspektiven der Erforschung des Waschbären in Deutschland. Beiträge zur Jagd- und Wildforschung 26:181-186
- Hohmann U, Voigt S, Andreas U (2001) Quo Vadis Raccoon? New visitors in our backyards - on the urbanization of an allochthone carnivore in Germany. Naturschutz und Verhalten, UFZ - Berichte 2:143-148
- Ikeda T, Endoh M, Murano N (2001) Home ranges of invasive raccoons in Nopporo Forest Park. J. Rakuno Gakuen Univ. 25:311-319

- Kaufmann JH (1982) Raccoon and Allies. In: Chapman JA, Feldhammer GA (ed) Wild Mammals of North America, pp 567-585, John Hopkins Univ. Press, Baltimore
- Lagoni-Hansen A (1981) Der Waschbär. Verlag Dieter Hoffmann, Mainz
- Lutz W (1984) Die Verbreitung des Waschbären (*Procyon lotor*, Linné 1758) im mitteleuropäischen Raum. Z. Jagdwiss. 30:218-228
- Lux E, Priemer J (1995) Zur Parasitierung wildlebender Waschbären unter dem Aspekt ihrer nordamerikanischen Herkunft. Verh. ber. Erkr. Zootiere 37:429-434
- McVey M, Hall K, Trenham P, Soast A, Frymier L, Hirst A (1993) Wildlife exposure factors handbook. Office of Health and Environmental Assessment, Washington D.C., p 572
- Michler FU, Hohmann U, Stubbe M (2004) Aktionsräume, Tagesschlafplätze und Sozialsystem des Waschbären (*Procyon lotor* Linné 1758) im urbanen Lebensraum der Großstadt Kassel (Nordhessen). Beiträge zur Jagd- und Wildtierforschung 29:257-273
- Pedlar JH, Fahrig L, Merriam HG (1997) Raccoon habitat use at 2 spatial scales. J Wildl Manage 61: 102-112
- Prange S, Gehrt SD, Wiggers EP (2004) Influences of anthropogenic resources on raccoon (*Procyon lotor*) movements and spatial distribution. Journal of Mammalogy 85:483-490
- Röben P (1975) Zur Ausbreitung des Waschbären, *Procyon lotor* (Linne, 1758) und des Marderhundes, *Nyctereutes procyonoides* (Gray, 1834) in der B.R.D. Säugetierk. Mitt. 23:93-101
- Sanderson GC (1987) Raccoon. In: Novak M, Baker JA, Obbard ME, Malloch B (eds) Wild Furbearer Management and Conservation in North America, pp 487-499, Ontario Trapper Assoc., North Bay, Toronto (Ontario)
- Sanderson GC (1995) Final report
- Sorvillo F, Ash LR, Berlin OGW, Yatabe J, Degiorgio C, Morse SA (2002) *Baylisascaris procyonis*: An emerging helminthic zoonosis. Emerging Infectious Diseases 8:355-358
- Stubbe M (1990) Der Status des Waschbären *Procyon lotor* (L.) in der DDR (1975 bis 1984). Beiträge zur Jagd- und Wildtierforschung 17:180-192
- Stubbe M (1993) *Procyon lotor* (Linné, 1758) - Waschbär. In: Niethammer J, Krapp F (eds) Handbuch der Säugetiere Europas, pp 331-364, Aula Verlag, Wiesbaden
- Urban D (1970) Raccoon population movement patterns, and predation on a managed waterfowl marsh. J Wildl Manage 34:372-382
- Zeveloff SI, Doerr PD (1981) Reproduction of Raccoons in North Carolina. The Journal of the Elisha Mitchell Scientific Society 97:194-199

Author: Marten Winter

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