

The little guide to the European hedgehog



Provided by *Erinaceus France*
Illustrated by Nanou Gribouille

I've been around for a long time

The hedgehog's ancestors appeared 60 million years ago. Hedgehogs, as we know them today, were first around 15 million years ago, much earlier than impressive mammals like the woolly rhinoceros, the sabre-tooth tiger and the mammoth that became extinct. There are 16 hedgehog species in the world; European hedgehogs (*Erinaceus europaeus*) are iconic animals in our gardens.

I am quite small

An adult measures 20 to 30 cm with males being slightly longer than females. A new-born hoglet measures between 6 and 10 cm and weighs 8 to 25 grams.

Hedgehogs are short-sighted, but their hearing is acute: they can hear an earthworm under many centimetres of ground. They have a very well-developed sense of smell that they use to find food. They can detect a squashed beetle a metre away, recognise their fellow hedgehogs, follow smells and detect dangers. They can smell a dog up to 11 metres away and mice 5 metres away.

I am very beautiful with my spines

A hedgehog's back is covered in spines of various colours that are 22 to 25 mm long and 1 to 2 mm wide. They have 6000 to 7000 spines.

The spines are modified hairs; their structure is hollow and stiff. They allow the hedgehog to ward off predators. These spines are orientated in all different directions, they are planted in the skin in groups of 3. External fluting reinforces their rigidity. They are very tough and practically unbendable. As they are hollow, they are lightweight. A new-born hedgehog is pink and naked with tight, swollen skin. The first white spines come through the skin straight after birth.

*I am in danger,
find out how you can help me.*



On the front page Piquounnete and her gentle eyes was at the start of Erinaceus France. Martine here and Piquounnete were nursed back to health and have since returned to the wild.

I am suspicious of some animals

Hedgehogs have few natural enemies; they protect themselves by curling up in a ball and showing their spines. However, they are the victims of badgers, foxes, dogs, martens, polecats and large birds of prey. Rats can attack the young. While they are hibernating, hedgehogs are at risk of being eaten by rodents.

Hedgehogs can completely disappear in areas where there is a significant badger population. Foxes can also diminish the effective population.

My nest. I snuggle in it, safe and sheltered

Hedgehogs need nests all year round to hide and protect themselves from the weather. There are three types of nests: day-time nests used during the summer, when this nocturnal animal sleeps; “reproduction nests” used by the female and her offspring and “winter nests”.

A winter nests or hibernaculum is carefully made and generally of solid construction. Dried leaves and grass collected by the animal are used to build the walls and they absorb some of the outside temperature variations.

The disappearance of wild hedges, piles of wood and branches affect their survival and reproduction.

I travel long distances

The territory of a hedgehog covers 1.8 to 2.5 hectares and a male can occupy up to 50 hectares. There he will encounter his fellow hedgehogs. Female hedgehogs can roam 0.5 to 1.5 km per night whilst males can travel further, up to 3km. The appropriate habitat must contain enough invertebrate prey and nesting materials.

A large variety of habitats are used by hedgehogs, especially agricultural land, wooded areas, hedges, suburban garden and urban parks. Forest-edge habitats are preferred.

However, vast zones of monoculture with intensive use of pesticides and lack of hedges are not appropriate.

Be careful when you move leaves with a fork or burn piles of grass or dead leaves because I might be settled there. I like these shelters.

*Be careful when you move leaves with a fork or
burn piles of grass or dead leaves
because I might be settled there.
I like these shelters.*



I am an insectivore

Hedgehogs belong to the insectivore family but, in reality, their diet is omnivorous with a strong animal origin preference.

Essentially, they eat what is at ground level. They ingest many invertebrates (beetles, lawn grubs, earwigs, slugs, snails, earthworms and a few spiders). They also eat some vertebrates (small amphibians, reptiles, small birds and mammals) as well as some vegetation, grass, mushrooms, fruits and grains found on the ground.

I become a mother.

My offspring are very fragile

When the female is between nine and twelve months old, and weighs between 550 – 650 grams or more, she can have hoglets.

Females give birth to between two and seven hoglets once or twice a year. The female hedgehog feeds her babies for four weeks and while she has five pairs of ventral teats, it doesn't seem possible for her to feed more than five hoglets at a time. Hedgehog milk is very concentrated, rich in protein, fat and but low in lactose.

Juvenile mortality before weaning can reach 20%. The female can eat her offspring if she is disturbed just after birth (in the first few days). After this period, she will move the offspring to a new nesting place. In response to the high-pitched calls of her offspring, that last for about four weeks, the female will return to her hoglets and will actively defend her litter if she is threatened.

The female and her hoglets will stay together until the hoglets are about five or six weeks old.

Winter is hard for me. I hibernate

Hibernation is an adaptation mechanism due to the disappearance of food sources (prey is rare) and the arrival of the cold (the animal isn't protected against the rigours of winter). Vital functions are modified to save energy. To prepare for hibernation, hedgehogs lay down two types of fat: white and brown. White fat is consumed constantly and slowly when the hedgehogs are in hibernation. Brown fat is consumed during

*I am small and I have many friends
that have been hurt or killed
by lawnmowers and string trimmers!*

*I don't like herbicides and
pesticides: they poison me.*

*Please put your lights out at night,
with night lights predators can see me.*



periods of activity, usually provoked by warmer periods during the winter.

A hedgehog's metabolism is considerably reduced during hibernation, reaching a minimum body temperature of around 4 to 5 °C; the heartbeat slows down to 20 beats a minute, compared to 120 beats for a sleeping hedgehog and 200 to 280 for an awake and active hedgehog. The number of breaths per minute is reduced from 40 – 50 to 3 or 4. A hedgehog loses weight during hibernation, weighing about 600 to 700 grams, but will put the weight back on to reach 1.1 to 1.2 kg.

I belong to nobody and I am wild and solitary, but I am a little character

Hedgehogs draw sympathy from the public who do not hesitate to help them, sometimes with too much zeal.

Hedgehogs can live up to 10 years, but because of human activity, a hedgehog over 5 years old is considered old, and the lifespan of those that survive weaning is probably 2 years.

The ones that make it through the winter have a good chance of surviving three or more years, but each hibernation is a new ordeal. Hedgehogs with insufficient reserves of one or the other fats are very likely to not survive hibernation.

Hedgehogs are solitary animals. They do not accept their fellow hedgehogs as companions, except for reproduction. They don't accept humans either and for this reason they can't be domesticated: they can't be tamed. Wild animals don't have an owner and their detention and care are regulated by laws. The hedgehog is a wild animal and is strictly protected in most European countries. Interactions between humans and this animal are regulated at a national, European and worldwide level. For instance, in France and in most EU countries, detention and care of hedgehogs are subject to a degree and a license to run a rescue.



***To find out more, please visit the association's website:
<https://erinaceus.fr/hotel-de-ville>***

If you have a swimming pool or a pond, please put in a little 10 to 15 cm non-slip plank to help me get out, otherwise I will drown.



I am protected by the law but that's not enough, my species is endangered

We must acknowledge that interactions between men and this animal are supported on a national scale, European and worldwide: by the conventions of Washington and Berne, by the ratification of the Berne convention (51 countries have signed), by the Council of the European Union (Directive on habitats..92/43/CEE and Regulation 338/97/CEE) and by numerous national laws such as Wildlife and Countryside Act 1981.

If the animal's life is in danger, law authorises you to take the hedgehog to a wildlife centre as long as transport is as short as possible and by the shortest route.

If you find a hedgehog that seems in distress, contact a wildlife centre before taking the hedgehog in. Only a wildlife centre can tell you whether to take in the animal or not. For example, a hedgehog that weighs less than 450 grams won't survive hibernation, but to take in a hedgehog that weighs 500 grams or more is counter-productive.

A juvenile found walking around during the day must be taken in because it may be sick or in danger. By contrast, during reproduction periods, a healthy female hedgehog can be outside during the day to prepare her nest or to rest and warm up outside the nest. Don't disturb her. Be careful as hedgehogs can carry diseases that are transmittable to humans, so handle the animal with caution.



**To find a list of hedgehog rescues in France or for advice,
please visit**

<https://erinaceus.fr/hotel-de-ville-liste-des-centres-de-soins>

*I travel from garden to garden
to find food, a partner, water, to hibernate -
please make a little passage for me
between each garden,
15 x 15 cm is enough.*



Help me, but get to know me first, otherwise you could hurt me

*If I visit your garden,
you can put some fresh water out for me.*

Don't feed me.

*Feeding a wild animal is an ecological trap
because I will become lazy and I will stop hibernating.*

*You can help me **occasionally** with kitten or puppy
kibble but only a month before or after hibernation.*



*Now that you have read this guide,
you know whom to ask: <https://erinaceus.fr>*



Erinaceus France

We are a group of friends (veterinarians, nurses, civil servants, engineers, farmers, school teachers and more) who will not stand by doing nothing while European hedgehogs disappear from our countryside and our towns.

Erinaceus France proposes different services: information, help, veterinary expertise, reception of sick animals and reintroduction to the wild. To realise this wonderful project we need your help! We need volunteers, experts, new members but also public and private financial support.

We care for hedgehogs that are in danger, hurt or sick. We keep them until they are healed and then release them back into the wild. Our goal is to preserve the European hedgehog and maintain biodiversity.



Join us and share our Facebook page:

<https://fr-fr.facebook.com/ErinaceusFrance>

and Twitter <https://twitter.com/ErinaceusFrance>

Help us financially if you can.

And most of all, circulate this guide and information to protect hedgehogs.

Texts and photos: *Erinaceus France*

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*Joanna appreciates her visit to the vet!
Erinaceus France is a care centre whose goal is to save
and release hedgehogs in their natural environment.*



Roro, 61 grams when he first came to the Erinaceus France centre, cared for, saved and released in good health.