European Commission

52 steps towards a greener city

Environment

52 steps – towards a greener city

European Commission
Directorate-General for Environment

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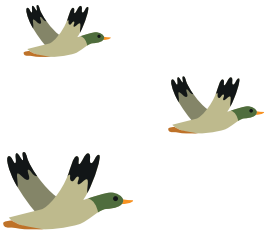

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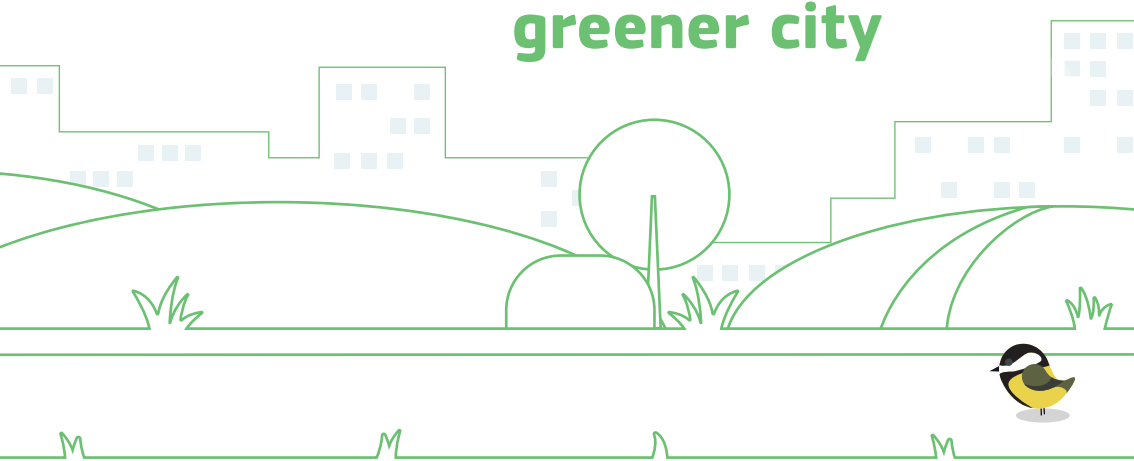


Foreword

As the European Commissioner for the Environment, it's my job to look after Europe's nature. Over the past few years, I've visited forests and parks, farms and harbours, and I've met thousands of volunteers who are doing their bit to protect our unique natural heritage.

I've had many surprises. One of the largest was finding out how much nature exists inside our urban areas. There are more than 100 Natura 2000 sites in 32 major cities, sheltering 40 percent of threatened habitat types, half our bird species, and one quarter of the rare butterflies protected by EU legislation. Our city parks are a treasure trove of nature.

In our gardens and our window-boxes, singing outside our window, nature is there to be discovered, cherished and protected.

I hope these tips can help you unearth that treasure. There is something here for everyone, from eating local foods when they are in season, to simply learning more about the world around us and helping nature recycle .

Something for everyone, and something within everyone's reach. Proof that we can all make a difference, wherever we live.

I hope you can put them into practice. Nature will thank you if you do!

Karmenu Vella
Commissioner for Environment

What is biodiversity?

From flowering meadows with butterflies and bees to forests sheltering birds and bats, we share our planet with a rich variety of life called biodiversity. It forms a delicate web of inter-connected living things, and you are part of it.

In fact it's **your** job to protect it, and keep it safe...

Biodiversity in cities

Cities contain a huge amount of biodiversity. There is life wherever you look, from the top of the highest building to the bottom of your local pond.

There are plants and animals in green areas beside roads and riverbanks, in allotments and brownfield sites, in gardens, parks and cemeteries, in walls and on roofs. Some species are so well adapted that they thrive in the urban environment.

Even in built-up areas, we need to make space for nature. More than half of Europe's capital cities are home to Natura 2000 sites, the EU network of protected natural areas.

That's just as well, because we need nature. It improves our quality of life, cleans our air, protects our homes from floods, and provides us with food and water. It's even good for our mental health.

The way you travel, clean your house, even the pet you choose – these choices affect our web of life. Make time to learn about and care for the living things around you – to preserve their many benefits.

What can I do?

This booklet contains 52 suggestions about how to support urban biodiversity throughout the year. It includes:

- Practical things you can do every day
- Activities to start or join in your community
- How you can help research by watching and recording wildlife, and
- Using sustainable techniques in your garden

For more information on biodiversity, go to:

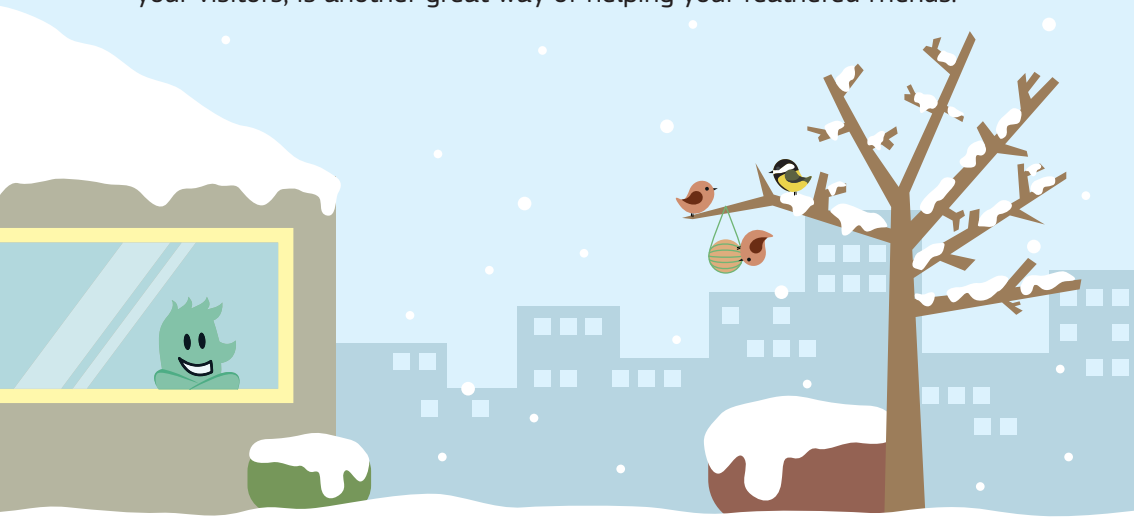
http://ec.europa.eu/environment/nature/index_en.htm

Feed birds during winter

In winter, when insect larvae, seeds and berries are thin on the ground, birds find it harder to get their usual food.

You can help by putting out homemade snacks of vegetable fat and sunflower seeds. Hang your bird treats in a place protected from rain and out of reach of predators. Clean feeders regularly, and remove fallen food from the ground to protect birds from getting ill.

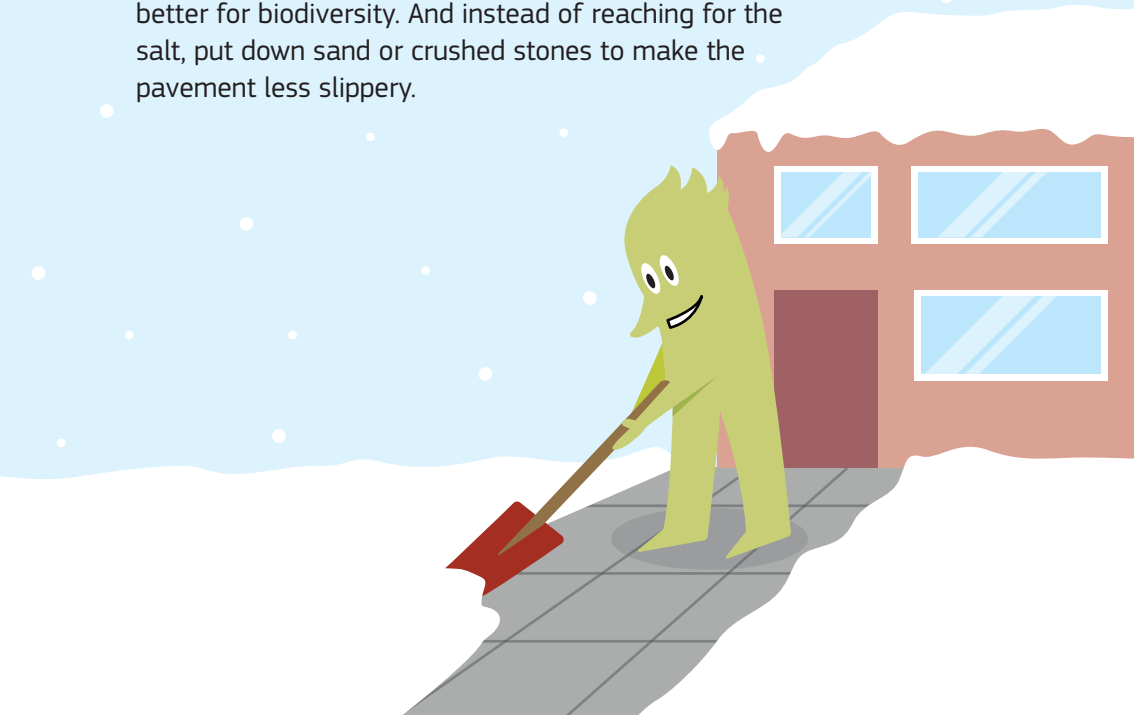
Taking part in a winter survey of garden birds, identifying and counting your visitors, is another great way of helping your feathered friends.



Clear away snow with care

Road salt isn't just bad for your winter boots – it also harms soil and attacks the roots of trees and hedges lining the streets. And when it runs off in melted water, it causes big problems for aquatic ecosystems.

Clearing snow from the pavement with a brush or shovel is much better for biodiversity. And instead of reaching for the salt, put down sand or crushed stones to make the pavement less slippery.



Say farewell to food waste

Farming uses almost half of Europe's land area, and our food system takes a heavy toll on nature. Farms use more than one third of Europe's water, millions of tonnes of fertilisers, and vast quantities of energy. Food costs money and does not belong in the bin.

So don't buy more than you need. Keep perishable foods in the fridge, keep an eye on expiry dates to ensure that nothing gets thrown away, and encourage your family to take only as much as they intend to eat. That way, you can serve untouched food later – or use it to make a new dish.

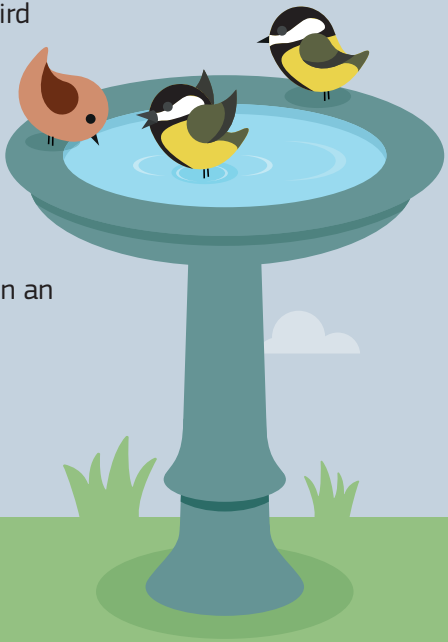
Use eco-cosmetics and hygiene products

Be different! Whatever cosmetic or hygiene products you use, there's bound to be an eco-alternative. By using eco-friendly shower gels, skin creams, deodorant, make-up and nail polish, you can do your bit to keep preservatives, synthetic perfumes and detergents out of your body and out of nature.

Stop feeding birds in spring

Many birds need extra seeds as power food in the winter but when spring arrives, their diet changes. Birds play a vital role in keeping insects under control, and their young can choke on hard food like peanuts or large seeds. So a spring bird feeder can do more harm than good.

It's best to stop feeding birds after 1 April, and to cut back gradually from early March. But they still need water. A broad, shallow container with sloping edges where they can drink or bathe is best. But put it on a stand or in an elevated place... a cat is never far away!



Build a nesting site for bees and butterflies

Without wild pollinators like solitary bees and butterflies, most flowering plants can't set their seeds or bear fruit.

Building a winter shelter and a summer nesting site for these little helpers is a great idea. Try not to disturb their hideaways, or better still, build your own hotel, drilling holes that are 5-10 mm wide into but not through small bundles of bamboo. The ideal location is high up, south facing, and sheltered from the wind and rain.

Look after your fruit trees

Fruit trees bring you all the joys of gardening, and their fruits are delicious! They provide shelter and food for small animals too, but they need to be treated with care.

Improve the soil around the roots with compost, and water them with rainwater – not too often but thoroughly, to encourage the roots to grow deep. If pests or diseases attack your trees, use natural means to protect them. Clear away dead leaves and remove any wood that is dead or diseased, dressing any wounds if necessary. Prune after the last frost but before March, so as not to disturb nesting birds.

Make your windows bird-safe

Windows, greenhouses, verandas and glass windbreaks are transparent, and can reflect surrounding vegetation. Sometimes birds do not see them and fly into the glass, with serious or lethal consequences.

You can avoid the problem by placing vertical stripes, stickers, colourful or sandblasted patterns on the surface of your windows. Shutters and bead curtains can also help, making them even more visible.

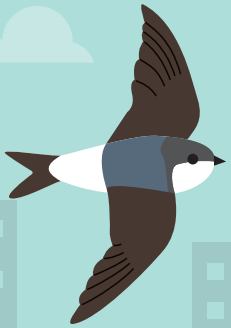
Grow your own vegetables

Spinach, salad and rocket are just some of the vegetables that are easy to grow in a garden or on a balcony. Home-grown food is good for you, and it always tastes better. There's no time like the present for learning how to grow vegetables from seed, and how to protect them from parasites using natural means. And remember to share the excitement of growing your own food with family and friends... you might start a trend!

Artificial nests for birds and bats

Birds like house martins struggle to nest in towns. Good locations are scarce and mud is hard to find, and it rarely sticks to cornices made from synthetic materials.

You can help house martins and other bird and bat species by placing artificial nests in suitable locations. They can be occupied at once and are larger than natural nests. Remove them in winter, to clean them or work on your façade.



Organising a neighbourhood clean-up

Are you proud of your neighbourhood, or is there rubbish beside the roads and riverbanks? If the bushes have turned into dumping grounds, why not get together with friends and neighbours to clean up your surroundings?

As well as building a sense of community, you'll be helping the local ecosystem. You'll stop animals from injuring themselves, getting trapped in beverage containers, and choking on plastic they mistake for food.

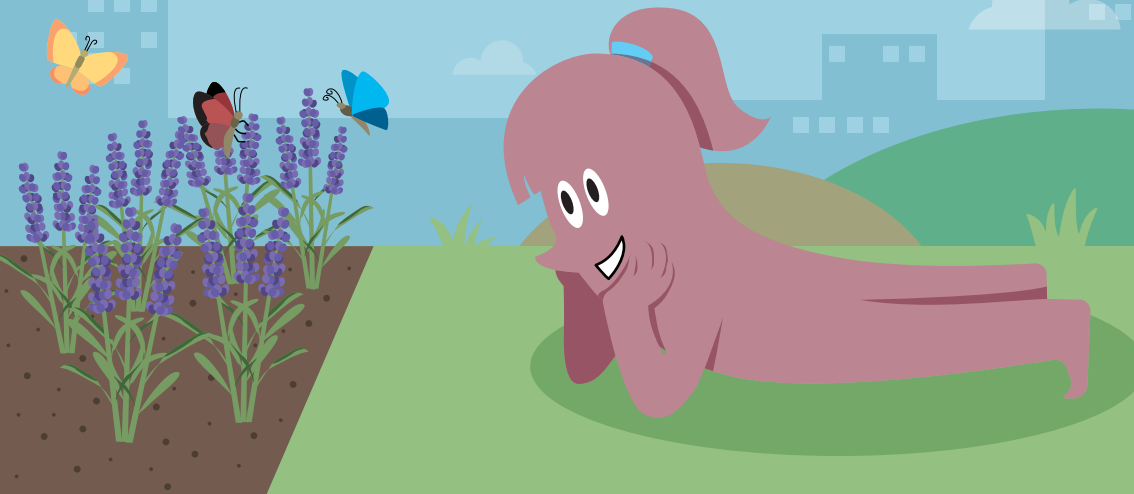
And when you're done... don't forget to recycle the rubbish.

How to welcome butterflies and moths

Times are hard for butterflies and moths – their habitats are disappearing, many host plants are in decline, and pesticides are accumulating in their environment.

You can help by growing the things they need, like nettles, holly and ivy, flowers, vegetables and aromatic herbs. A native hedge is ideal, as is an old hollow tree. Most importantly, avoid chemical pesticides and fertilisers.

And if you have a balcony or window-box, you can make new friends by growing nectar-bearing lavender, sage and thyme.



Harvest your rainwater

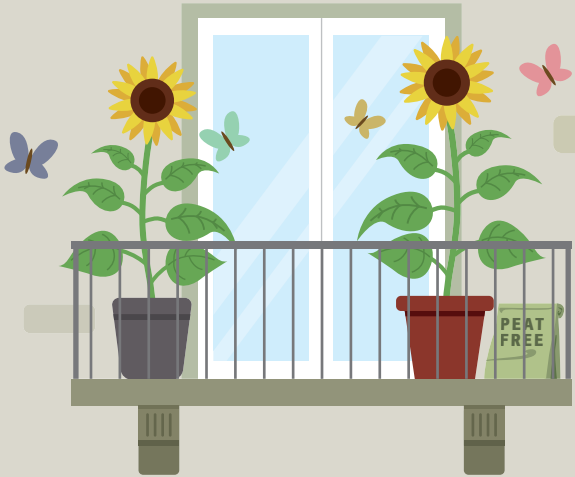
Rainwater is ideal for watering plants and filling ponds – it's not chlorinated, so it doesn't damage soil micro-organisms and sensitive plants.

If you have a garden or a balcony, you can recover rainwater in an underground cistern, a barrel below the gutter, or even a well-placed bucket. You might even see your water bill go down as well.

Buy peat-free potting soil

Light and rich in organic matter, peat is what remains when mosses, cotton-grass, sedges and other plants decompose in wet, acidic bogs. These bogs play a vital role, retaining water and keeping carbon out of the atmosphere, and providing a home to threatened species like large heath butterflies, spearhead bluet dragonflies, and countless plants.

But peat bogs are becoming rare, and it takes nearly a century to make just 5 to 10 cm of peat. Protect these vulnerable habitats by buying peat-free soil.



Cherish nature in cities

Surprisingly, when the countryside is covered in monoculture, you're likely to find greater biodiversity in the city.

Take a close look at your urban surroundings and admire the plants and animals in public parks, ponds, along streets and hedges. Drink in the sight of green roofs and terraces, gardens and balconies decked with flowers.

Nature is your natural environment. Make the most of it whenever you can!

Enrol your child on a nature course

Children need contact with nature to grow up healthy, develop a responsible attitude towards the environment and value our natural heritage. Spending time in nature forges this link and allows kids to explore, play, exercise and learn.

Next school holiday, why not enrol your child on a nature course, or send them to a green school or camp with their friends. And in the meantime, perhaps there's an after-school nature club they could join?

Protect nature against invasive alien plants

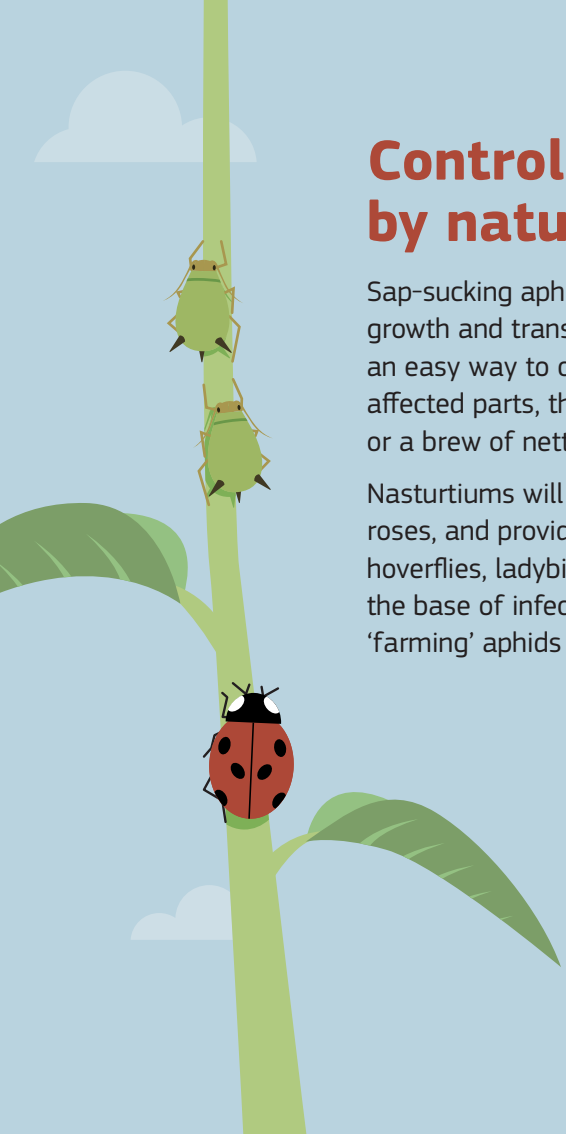
Exotic plants adorn many gardens and ponds. But when they escape into the environment, some of these exotic plants can upset ecosystems and stifle native flora.

If you have ornamental plants, make sure they can't spread outside your garden. Check new plants to ensure that they are not listed as invasive alien species. If you find any such plants in your garden, pull them out before they set seed, dispose of them with household waste... and replace with native species.

A safe haven for biodiversity

Homes and gardens should be safe havens for biodiversity. By avoiding pesticide use, you protect nature, your health and that of your family. A wealth of natural alternatives are available to keep garden pests and weeds at bay.

Find out all about them, test them and spread the word to your neighbours and friends. Nature will thank you for it!



Control aphids by natural means

Sap-sucking aphids spread quickly, damaging new growth and transmitting disease. Luckily, there's an easy way to control them – remove the worst affected parts, then spray with a mild soap solution, or a brew of nettles, garlic or onions.

Nasturtiums will attract aphids away from your roses, and provide shelter for predators like hoverflies, ladybirds and earwigs. Sticky strips at the base of infected stems will also stop ants from 'farming' aphids for their honeydew.

Welcoming wildlife to your garden

A city garden can be home to all sorts of wildlife. Flowering plants will provide nectar for insects, and seeds and fruit will attract wild birds and other animals. An undisturbed shady corner is an ideal nesting habitat for bees and hedgehogs. You could also set up an insect hotel, or a pond for frogs.

Your new guests will help with pest control and pollination. And you can enjoy the birdsong, admire the acrobatics of the squirrels, and doze off to the humming of bumblebees in the sun.

Make a mini pond

A mini pond provides a touch of nature for you on your balcony, and it means a refreshing drink or bath for birds.

Fill a container with water and some sandy soil, add some native aquatic plants and stones for birds to stand on, and put in a small fountain to ensure the water stays fresh and free from mosquitoes. Keep it in a shady corner of the balcony and look after it with care, removing dead leaves and adding water as needed.

Respect nature when you go for a walk

There's nothing like a walk in nature. It's a chance to enjoy new sounds and scents, as the invigorating fresh air boosts your well-being. But nature needs its space to be respected.

Make as little noise as possible, and keep to marked paths. Observe animals from a distance and keep your dog on a lead. Remember to pick or collect only what is allowed, and take your rubbish home.

That way you keep green areas safe for wildlife and a pleasure for all.

Grow a natural hedge

Biodiversity-rich hedges provide shelter and food for birds, insects and other small animals. Bats use them as a navigation aid.

If you have a hedge, plant a variety of native flowering shrubs that provide fruit and flowers throughout the growing season. Avoid pruning and trimming when birds are nesting, from spring to mid-summer, and turn your hedge into a wildlife corridor by linking it to existing trees and shrubs, watercourses and neighbouring hedges.

Buy furniture made from certified wood

All over the world, forests are affected by illegal logging. To make sure you're not supporting this, don't buy furniture unless it is certified by the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certification (PEFC). If you stick to European wood products, you'll also help protect vulnerable tropical forests.

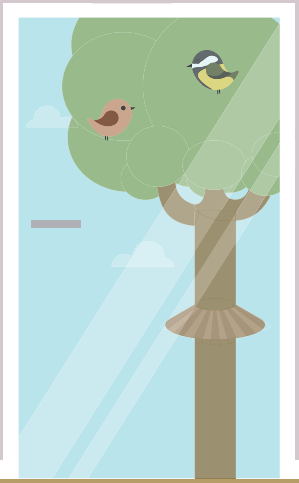
Find out more about the sustainable use of wood at www.fsc.org and www.pefc.org.

Protect wildlife from your cat

If you have a domestic cat, it's probably a formidable hunter. Even the most innocent-looking feline can be a major threat to small mammals, birds, reptiles and amphibians.

Cat-proof your garden by placing nesting boxes and bird feeders out of reach and by fixing anti-climb collars around trees. Try and keep cats inside at night, and watch them carefully if they are out during the day when birds are nesting from May to August.

If your cat roams free, make sure that it is neutered, identified and wears a bell.



Limit outdoor light at night

Outside lighting can disturb many species in rural and urban areas. Owls and other animals whose sight is adapted to nocturnal light find it harder to see obstacles, avoid predators and locate their prey. Migratory birds are disoriented, and moths beat against lights until they are exhausted.

You can avoid many of these problems by thinking twice before you light your garden, terrace or doorstep in the dark. If lights are necessary, use non-glare bulbs, point them downwards, and turn them off when you go inside.

Save water in the garden

Saving water will protect your garden plants and the environment, and help keep your water bill down as well.

Native perennials like vervain, sage and thyme can thrive in dry conditions, and there are drought-tolerant varieties of vegetables like garlic, beet and potatoes. Remember to water near the roots in the late evening or early morning, or better still, install a drip system. Hoeing and mulching flowerbeds will reduce water loss.

And if a drought hits... remember not to mow the lawn.

Spend more time in nature

Nature isn't just good for your physical health – it boosts your mood as well! Contact with nature also improves children's concentration and helps their mental development.

Improve your health and well-being by spending a few hours enjoying nature. Visit local Natura 2000 sites, parks and green spaces or drop by on your way to and from the office.

After all, what would you prefer... a working lunch at your desk, or a restorative half-hour in a local green area?

Choose and reuse pet litter

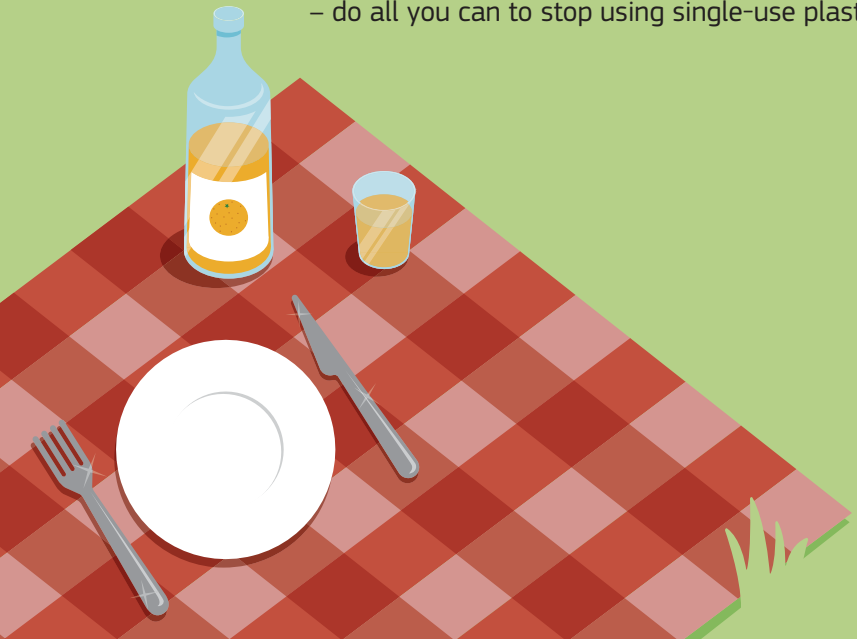
Some clay-based pet litter is mined from the Earth, which can damage the environment. Pet litter and bedding discarded in the rubbish can also add to waste problems.

If you use cat litter, look for natural alternatives to clay such as those based on wood chips, paper or grains. When you clean out your pet guinea pig's cage, put wood chips and other bedding materials to good use in your garden, around plants to fertilise and mulch the soil, or add them to your compost pile.

Say no to single-use plastics

Europe produces, uses and disposes of large amounts of single-use plastics such as cups, bottles, bags, coffee capsules, straws and packaging. This is wasteful and endangers marine wildlife, because large amounts of single-use plastics end up as ocean litter.

It's time to take a stand. Say goodbye to single-use plastics by bringing your own mug to the cafeteria, taking a canvas bag to the shops and a reusable water bottle to work or school. But don't stop there – do all you can to stop using single-use plastics!



Learn from wildlife

Nature is a source of ideas and inspiration for scientists, engineers and artists, and we can all tap into this resource. You can find out amazing things about spider web silk, about how some ants grow their own food, and how honeybees communicate with each other. Don't be afraid of spiders and insects – watch them, and learn more about how nature works.

Become a locavore

When you eat food that is locally produced, you cut CO_2 emissions caused by transport. It's good for biodiversity too, as many animals and plants are facing extinction because of climate change.

Wherever you live, try and find seasonal fruit and vegetables and look out for forgotten local varieties. Buy food from local producers if you can, and visit farms in Natura 2000 sites to see what they are doing to support nature and biodiversity.

Put a green roof on your house

A green roof on your city house can provide a welcome boost for insects and birds. Mosses, succulents and grasses require minimal maintenance, and with expert advice you can choose plants that are best suited to your situation, the weight your roof can bear and the time you are willing to spend on it.

A green roof retains rainwater, improves air quality, protects your home against excess heat and cold, and even provides insulation against noise. Spread the word!

Use water sparingly

Fresh water is a precious and limited resource that we all need every day. Optimise your water use by taking short showers, collecting rainwater for your plants and using water-saving washing cycles.

Don't leave water running unless you have to, and fix leaky taps and toilet cisterns as soon as you can.

That way you leave more for nature and animals, and you save money as well.

Make compost

Kitchen and garden waste contains valuable nutrients that should be recycled back to nature.

It's easy to put a composter in your garden or on your balcony, creating a great source of free, good-quality natural fertiliser. Make sure you protect it from the wind and sun and remove any weeds, and take care not to compost plants that are diseased or anything non-biodegradable or treated with chemicals.

If you don't have room for a composter, there's almost certainly a communal composting project somewhere nearby.

Cut the concrete!

Healthy soil is vital for our food and our future. Paving, tarmac and concrete can destroy soil and the life it contains, and they also seal the ground, making it impermeable to water.

If you have a city garden, think twice before paving it over, and use greenery, gravel or perforated slabs instead. That way the rain can soak in, helping plants grow, and protecting you from the summer heat. Some local authorities even offer subsidies to help you do this.

Support nature-protection associations

Many associations work to protect nature and biodiversity, counting birds and insects, setting up and managing protected sites, and doing restoration work. They often organise events to help people get back in touch with nature.

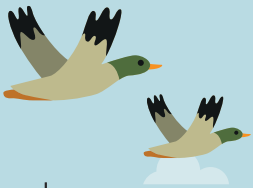
They need your support. Why not become a member, or make a donation? Better still, volunteer for conservation or monitoring activities, or take part in a citizen science project. Maybe you have a special skill they need!

Protect earthworms

Earthworms make the soil fertile, and we can't live without them. They recycle mulch and leaves, keeping soil healthy so that fruits and vegetables grow. Their tunnels loosen the earth, enabling roots to develop and water to seep down so plants can absorb it.

You can protect these garden helpers by cutting back on chemical fertilisers and pesticides. Try not to drive on soil, especially during wet weather, and if gets too compacted, break it close to the surface to avoid disturbing earthworms deeper down.

Care for wetlands



Biodiversity-rich wetlands provide water, food and shelter for numerous species. Birds nest there, and fish spawn among the reeds. We need them too, because they protect us from floods and droughts, absorbing floodwater and releasing it slowly, and replenishing groundwater supplies.

You can protect these habitats by taking part in a wetlands management and restoration project. Find out about events in your area from the EU's Natura 2000 programme, local authorities and nature protection associations.

Pets and the wild don’t mix

Exotic pets can be fascinating, but they aren’t all suited to life in captivity. Releasing them into the wild is no solution, as they might become invasive and out-compete native wildlife. They can also spread disease or alter ecosystems for the worse.

So think carefully before you buy. Make sure you can care for your pet until the end of its life, and if that becomes no longer possible, contact a vet or animal welfare organisation for advice – someone will have a solution.

Remove bad smells naturally

Do you really need industrial air fresheners – aerosols, scented candles and so on?

A cup of vinegar with some citrus zest, or thyme or rosemary in boiling water is usually enough to get rid of most unpleasant odours. Baking soda absorbs odours in the fridge or from cat litter, while lavender sachets and soaps with natural essential oils can perfume your cupboards and drawers.

Safe passage for animals

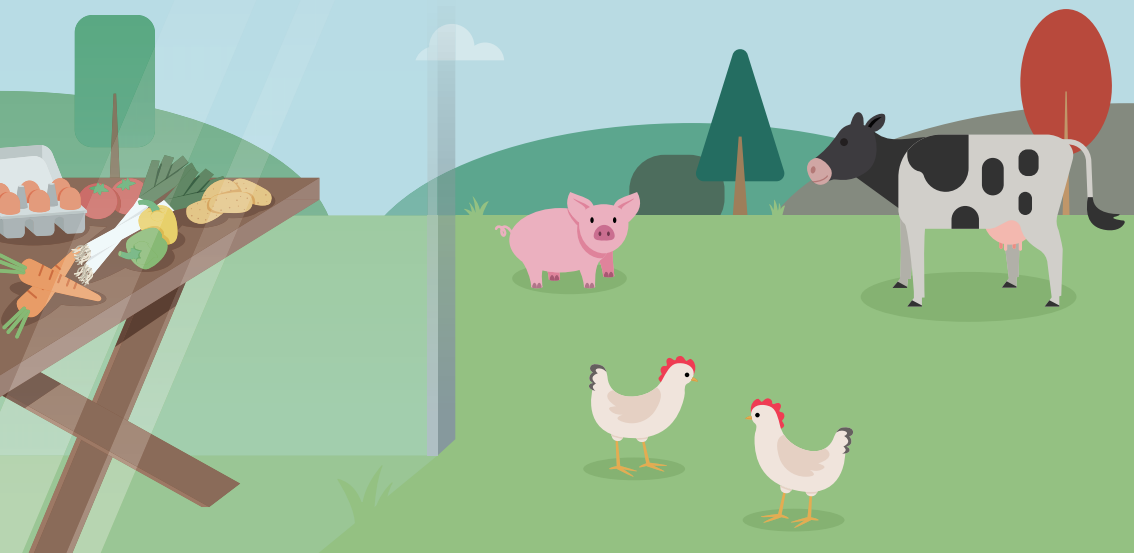
An urban garden can be a green oasis in the concrete jungle, attracting a surprisingly wide variety of animals. If you have a garden like that, encourage your neighbours to leave little gaps in the fence or the wall to let hedgehogs, shrews, frogs, toads and other urban critters slip through.

You can help green the jungle too. Why not lobby your local authority to plant rows of native trees on city streets, so squirrels can jump between them without getting run over?

Eat less meat

It's tasty, but there's no doubt that industrial meat production damages the environment when natural areas are converted to fields and water is used for animal feed. It can bring pollution, overgrazing, and methane emissions that cause global warming.

Eating red meat less than twice a week is better for your health and your budget, and it's better for the environment too. Try privileging quality over quantity, and discover delicious new vegetarian meals for your family and friends. Cooking together is a great way of spending time with friends!



Choose organic food

Organic farming respects the environment and human health. Farm workers, soil and water are exposed to fewer chemicals, and crop helpers like earthworms, pollinators, mammals, birds and pest-eating amphibians are protected.

When you choose organic food, you're helping preserve the environment, wildlife and genetically diverse forgotten varieties. And it's healthy, too! When you choose high-quality meat, milk and eggs from animals reared under good conditions, you reduce your risk of exposure to artificial chemicals in foods.

Use chemical products wisely

Some products we use in and around our homes – like cleaning chemicals – contain substances that are best kept out of nature. Once they get into the environment, they can be difficult and costly to remove.

Protect yourself and nature by using sustainable products, such as those with the EU ECOLABEL, or natural alternatives like lemon, vinegar and baking soda. And be sure to bring any unused chemicals to designated collection points for safe disposal, and never pour them into the sink, toilet or drains.

Promote biodiversity at work

Why not spend some quality time with your colleagues taking part in an activity linked to nature?

If you have a team-building event coming up, how about discovering the animals and plants found around your office? Or a guided nature walk, a visit to a Natura 2000 site, or taking part in a conservation project?

Perhaps you could also propose a hedge and flowers for wild bees and butterflies in your car park, greening the façade or roof of your office, or setting up nests and shelters for insects, birds and other animals.

Join an organic community garden

Organic community gardens are shared spaces where neighbours can meet. They help children and adults learn how plants grow and where food comes from, they bring us closer to nature and they promote respect for biodiversity.

Join a community garden and you'll find out how to grow fruit, vegetables and herbs using natural means. You can also learn about crop rotation, composting, rainwater recovery, natural pest control, and how to create species-rich hedges and shelter for bees and butterflies.

Be a sustainable commuter

Many cities suffer from heavy traffic with unhealthy levels of noise and air pollution. Traffic congestion lengthens commuting hours and CO_2 emissions accelerate climate change.

Help turn your city into a cleaner, healthier urban habitat by walking, biking and taking public transport for longer distances. Mobile apps can help you plan your trips and keep you informed of schedules. And when you travel by car, consider sharing with others who travel the same route.

Build a garden pond

Even a small garden pond is a vital source of water for mammals and birds, a nursery for amphibians and insects, a mud mine for nest-building swallows and a hunting ground for dragonflies and diving beetle larvae. It also helps to keep a garden cool in the summer.

If you have room, build a pond for wildlife, with sloping edges to enable animals to get in and out and flat shallow shelves featuring a variety of native plants. Who knows who'll come to visit?

Save energy

Using less energy saves precious natural resources and cuts down on pollution. Switch off the light when you leave the room, and replace old light bulbs with LEDs. Make sure that TVs, computers, video game consoles are switched off or unplugged when not in use.

Don't run the dishwasher until it's full, and use shorter wash cycles and cold water when possible for laundry. In winter, turn the thermostat down. Even one degree can make a difference.

Separate your waste

When you recycle, you help recover valuable raw materials, reduce your environmental impact and save energy and money.

Separate and recycle glass, paper and plastic, and take old batteries and lightbulbs to the supermarket and unused medicines to the chemist. Organic waste can be composted or collected to produce biogas. Remember to bring old metals, paints, oils, electronic waste, cork plugs, fabric and other materials to collection points for recycling.

Find out about Natura 2000

The EU Natura 2000 network protects precious and threatened species and the natural environments that shelter them. Over 27 000 sites are already part of the network, covering over 18 % of Europe's land and 6 % of its marine territory.

There are many Natura sites close to cities. The Natura 2000 viewer (http://natura2000.eea.europa.eu/) will help you discover sites near your home, and the species found there. Visit them, take part in educational or volunteering activities, and … don't forget to vote for your favourite site in the Natura 2000 awards!

NATURA 2000

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