

A guide to amphibians and reptiles in urban areas



6th Edition

Urban Tails is a complete guide to amphibians and reptiles in urban areas - from how to identify them, to where you'll find them and how you can help.

© Froglife 2012

2nd edition, 2013

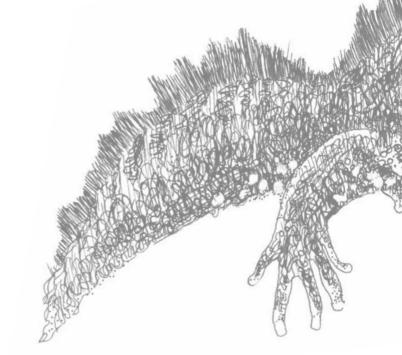
Cover image: Sue North

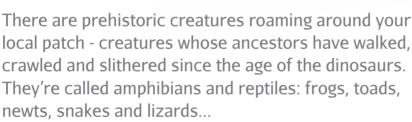
Froglife is a registered charity: no. 1093372 (in England & Wales) and SC041854 (in Scotland).

Produced by Froglife: Written by Jules Howard, Rebecca Turpin and Samantha Taylor. Edited and designed by Lucy Benyon.

Illustrations © Samantha Taylor/Froglife.







These species are all around us, in fact many are probably within one hundred metres of where you are right at this moment.

This booklet provides information on how to get out there and discover more about amphibians and reptiles in the wild.



SLOW-WORM Anguis fragilis

Slow-worms look a bit snake-like but are actually a legless lizard. They have really shiny scales that give them a smooth appearance. Slow-worms are usually bronze or gold coloured; females and juveniles have dark flanks and, often, a stripe down the back. They can grow up to 40cm. These lizards love compost heaps, where invertebrate prey thrives. Look for them on nature reserves, allotments and in gardens.

- 1. Shiny bronze or gold appearance
- 2. Lacks a distinct neck
- 3. Can blink (unlike snakes)



noptilos

COMMON LIZARD Zootoca vivipara

Variable in colour, these lizards are extremely quick - often, all you might see is the long tail as it flees into the undergrowth! If possible look out for the pointed snout and the stripes that run along the flanks. Common lizards grow up to 15cm, nose to tail. Look for them on nature reserves and on some allotments.

- 1. Long tail that can be dropped if attacked
- 2. Stripes along the back
- 3. Toes with claws
- 4. Pointed snout





GRASS SNAKE Natrix natrix

Look out for this snake near water (ponds, lakes, rivers, reservoirs, canals). Grass snakes can grow to 150cm but you're much more likely to see smaller ones. Notice the yellow and/or black markings that form a collar behind the head. They tend to be a shade of green with darker markings along the sides of the body. Look for them at nature reserves and in some gardens and allotments (particularly where there is freshwater).

- 1. Dark bars/spots along the body
- 2. Yellow and black collar
- 3. Circular pupil



naptilas

ADDER Vipera berus

This stocky little snake has a distinctive 'lightning bolt' down its back. They rarely exceed 60cm in length and can be found around patches of woodland and on heathland. Males are usually grey whereas females and juveniles are brown. Adders are our only venomous snake. Look for them on nature reserves (they're very unlikely to be found in gardens, especially in urban areas).

- 1. Dark zig-zag pattern
- 2. V or X on the head
- 3. Red eyes with vertical slit pupil



COMMON FROG Rana temporaria

A firm favourite of garden ponds. Look out for stripy legs and a dark 'eyepatch'. Adults can grow to around 9cm (nose to tail) and are very variable in colour and markings. Frogs lay clumps of spawn in pond shallows. Character: slightly nervy, often leaping at any sign of danger. Likes nature reserves, allotments and gardens and has thrived in urban areas.

- 1. Dark patch behind eye
- 2. Smooth, moist skin
- **3.** Long, stripy back legs



amphihians

COMMON TOAD Bufo bufo

Prefers crawling to jumping. Look for the dry, 'warty' skin and golden eyes. Adults are 5-11cm and usually a shade of brown or green with darker markings; variations do occur and juveniles can be very dark or brick red. Toads lay strings of spawn wrapped around pond plants slightly deeper in the water. Character: grumpy-looking! Look out for them in gardens, allotments and nature reserves.

- 1. 'Warty' skin
- 2. Pair of raised glands on shoulders
- 3. Golden eyes
- 4. Short back legs



SMOOTH NEWT Lissotriton vulgaris

A very common newt in gardens and urban areas, rarely reaching more than 10cm. This species has a slightly yellow/orange belly with black spots and males have a wavy crest in spring. Females lay individual eggs which they wrap in plant leaves; newt 'tadpoles' have a frill of gills behind the head. Look out for smooth newts in gardens and on allotments and nature reserves.

- 1. Brown/green smooth skin with stripes and/or spots
- 2. Line or wavy crest down the back
- 3. Yellow/orange belly with black spots



amphibians

PALMATE NEWT Lissotriton helveticus

Can be quite common in the south west of England and Wales. Very similar to the smooth newt, but males lack a wavy crest in the breeding season. Instead, in spring male palmates develop bulky back feet and a tiny filament appears at the tip of their tail. Females and juveniles can be very difficult to distinguish from smooth newts but they usually lack spots on the throat. Individual eggs are laid and carefully wrapped in plant leaves. Look out for them in gardens, allotments and nature reserves.

- 1. Tail filament (males in spring)
- 2. Brown/green smooth skin with stripes and/or spots
- 3. Webbed, bulky back feet (males in spring)
- 4. Throat unspotted



GREAT CRESTED NEWT

Triturus cristatus

Our biggest newt. Look for the obvious warty skin (some 'warts' are white tipped) and the size is a giveaway (they grow up to 15cm and are quite stocky). Males have a white flash on the tail and a jagged crest that is much less pronounced outside of the breeding season. Females and juveniles lack this crest. Great crested newts have a bright orange belly with irregular black blotches on it. Eggs with a white centre are laid on plant leaves. Look out for them on some allotments and nature reserves; still considered quite rare (and protected) due to their patchy distribution across the UK.

- 1. Jagged crest (males in spring)
- 2. White-tipped warts
- Orange belly with black blotches
- **4.** Stripy toes



nane species

OTHER SPECIES



The following species are native to the UK but are so rare you are only likely to see them on specialist nature reserves.

SMOOTH SNAKE Coronella austriaca

This slender snake only survives in a few isolated patches of heathland in the south of England - it's very hard to spot! Look out for a heart-shaped marking on the back of the head.

SAND LIZARD Lacerta agilis

This rare lizard is normally found on sand dunes and heathland nature reserves. Males have a prominent green shimmer to their flanks during the spring breeding season. Sand lizards are relatively chunky lizards, reaching 20cm in length.



NATTERJACK TOAD

Epidalea calamita

Look for the distinctive yellow stripe down the back of the body. These noisy little toads like sand-dune ponds and are very rarely found in gardens. There are only around 60 populations in the UK.



POOL FROG Pelophylax lessonae

Once extinct, but now reintroduced to a single site in Norfolk. These charismatic little frogs are noisy, making a croak that sounds a little bit like a duck quacking manically!



To see amphibians and reptiles you have to know what makes them tick. Here's a quick guide to some of the places you might see them...

★ Where: Compost heap

Why: Both compost bins and compost heaps are used by reptiles and amphibians as places to hide and places to forage. Many compost heaps are colonised by slowworms, hiding out of sight, whilst taking advantage of the multitude of invertebrates (particularly slugs and woodlice). If compost heaps are sufficiently big, female grass snakes may choose to lay their eggs in them. If you cover your compost heap with old carpet or tarpaulin try lifting this to get a closer look at the creatures inside.

When: Possible site for overwintering amphibians and reptiles. Slow-worms may be found all year. Look out for tiny pencilsized grass snakes in late August and September.

★ Where: Sheds and greenhouses

Why: Amphibians or reptiles may flee under a shed if disturbed so could be found lurking nearby. Frogs, in particular, are known to live comfortably in greenhouses where it stays damp and there are plenty of bugs and slugs to eat.

When: All year in and around sheds; primarily spring and autumn in greenhouses.





★ Where: Long grass, flowerbeds or vegetable patches

Why: All of our amphibians are predators and need to seek ample prey to survive. Invertebrates (particularly slugs and snails) make up the bulk of their diet. To look for amphibians and lizards it helps to think about where invertebrates gather.

When: Spring, summer and autumn.

★ Where: Sunbathing spots (open areas)

Why: Being cold-blooded, the activities of snakes and lizards are linked closely to the weather. If conditions are fairly cool (12-18°C), then they'll need to get their body heat up in order to hunt prey. To do this they bask in the sun (a good time to spot them). They like to do this nestled against something into which they can flee if disturbed (e.g. a dense bit of scrub or under a shed). For this reason you are unlikely to see snakes or lizards basking in the middle of a flower bed. Instead, look for the sunny edges of low-growing thick vegetation.

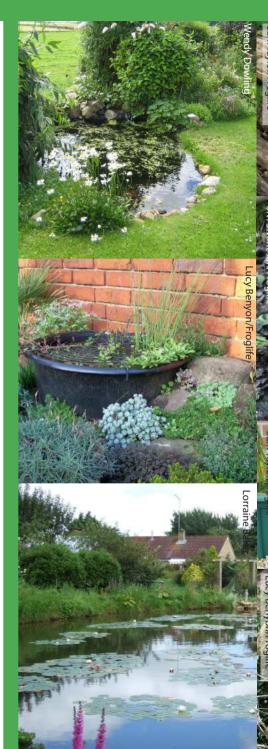
When: Spring and autumn. If it's too hot, then snakes and lizards will be fully charged by the sun and you're less likely to see them.

2 discover

🖈 Where: Ponds and water features

Why: Frogs, toads and newts all need to return to ponds to breed so this is a good place to start looking for them. A spot of pond-dipping can help you find out what amphibian larvae may be present in a pond. Night-time sessions with the torch can be equally valuable - particularly for seeing adult newts courting. Even the smallest water feature can become home to common species like frogs and smooth newts. You may see grass snakes visit ponds, lakes and canals in search of amphibian prey.

When: Look for breeding amphibians on mild, damp spring nights by torchlight. In summer, 'metamorphs' (newly developed frogs, toads and newts) make their first miniature steps out of the pond as fullyformed adults - look for them in vegetation surrounding the pond but be careful not to step on them! Outside of the breeding season (May to October) you can expect to see amphibians up to one kilometre away from their breeding ponds (depending on the species). Adult newts may hang around longer at the pond in order to hunt for aquatic invertebrates and tadpoles.







★ Where: Logs and log piles

Why: Amphibians may seek protection from predators or extreme weather by hiding underneath logs; toads can often be found buried down in soft mud. Decomposing wood is also a great place for amphibians and slow-worms to hunt for invertebrates.

When: All year.

★ Where: Hidey holes - such as in between plant pots or behind wheelie bins

Why: Seeking protection from predators. If you carefully look in or around these areas you might find amphibians or reptiles lurking!

When: Spring, summer and autumn. If there is enough protection from the elements amphibians may choose to overwinter here too.

★ Where: Rockeries and paving slabs

Why: With their nooks and crannies, rockeries are great places for reptiles and amphibians. There are plenty of basking opportunities for grass snakes and lizards, with easy escape routes if disturbed. Check under paving slabs for newts or toads hiding out.

When: All year.

2 discover

Now you know what you're looking for and where you'll find it, things should be simple right? Unfortunately not. All of our native species are facing some serious threats to their future and once common species are getting more and more scarce.

The top three threats facing the UK's amphibians and reptiles are...

DESTRUCTION OF THEIR HOMES

Habitat destruction is one of the biggest problems for all our wildlife. As human habitat has spread, animals have lost the woodland, ponds, meadows, heathland and other wild places they call home. Habitats have also been broken up by roads and development, so that where one large population lived before. there are now smaller fragmented groups. All of this makes it harder for animals to find places to live, breed and feed, making their lives more fragile. This has been a particular problem for reptiles, meaning that smooth snakes and sand lizards are now incredibly rare.

ROADS

For amphibians, and common toads especially, roads can present a real challenge. As the roads break up habitats, they sometimes cut hibernation sites off from breeding ponds. When the toads wake up in spring and try to migrate back to the ponds to breed they have to cross these busy roads. It's estimated that 20 tonnes of toads are killed every year on roads - through being hit by cars or becoming trapped by kerbs or drains. Fortunately, some lucky toads have Toad Patrol volunteers to help. Every year, volunteers rescue anything from 35,000 to 70,000 toads!

AMPHIBIAN DISEASES

There are two diseases that are of concern to amphibians and we are working with the Zoological Society of London on research into managing them. Ranavirus makes frogs lethargic and very thin, and can lead to the sad sight of groups of dead frogs around a pond. These mass dieoffs generally happen in hot summer months. Chytridiomycosis (or chytrid for short) is a fungus that grows on the skin and causes the animals to suffocate. Chytrid has wiped out populations of frogs and toads across the world. Although serious when it does occur, there have been very few cases in the UK so far. Please report any incidences of disease to Froglife.

threats

unsung heroes?

We love them, but we're aware that frogs, toads, newts, lizards and snakes are often forgotten about. Not only have we had a tendency to undervalue our wildlife in the UK, the creatures Froglife represents are sometimes misunderstood as nasty or dangerous. Sadly, this has lead to people deliberately killing amphibians and reptiles or removing them from their gardens.



Want to get involved in helping amphibians and reptiles but not sure where to start? An urban tail to inspire you...

Hidden behind Green Lanes in Haringey, the lush vegetation of Railway Fields Nature Reserve blocks out noise from the surrounding streets, creating a peaceful, safe refuge for wildlife. But things weren't always this way...

The site was originally established as a British Rail goods yard in 1868, probably used mainly for coal. A hundred years later, the yard closed and the site went on to house a community centre for Haringey Social Services. Then, in 1985, it was transformed into a haven for both wildlife and people and became Haringey's first 'nature park'. In 1990 the site was declared a statutory Local Nature Reserve and in 2004 was awarded Green Flag status for achieving and maintaining excellent standards for a public park.

One of the best features of the reserve is the pond, which was created during the 1980s in order to encourage wildlife like frogs, toads and dragonflies on to the site. Not only is it a fantastic place for aquatic wildlife but it also attracts birds and mammals, such as blackbirds and bats, which come to drink, bathe and find food.

20

case study

The most frequent visitors to the pond are the blue-tailed damselfly and the common frog but below the surface there is an array of aquatic insects, from water beetles to dragonfly larvae.

Several years ago the water levels in the pond started to drop beyond what was acceptable and experts felt that, unless the pond was repaired, the local population of frogs, toads and newts would disappear. So in 2010, Froglife, with the help of the Heritage Lottery Fund, re-lined the pond. The health of the pond was restored almost immediately. The pond still has to be carefully managed and maintained to ensure its survival. This is normally done in winter and involves removing fallen leaves and excess plant growth, plants such as duck weed grow very quickly. The pond, and the rest of Railway Fields, is maintained through monthly volunteer workdays organised by conservation charity BTCV.

At only a hectare in area (the size of $2^{1}/_{2}$ football pitches) this hidden treasure is one of three local nature reserves in Haringey and is a fantastc example of how wildlife can flourish in an urban environment.



3 leap forward

If you have an allotment here are some tips for making the area 'frog-friendly' and a 'reptile-refuge'. These tips can also be used in your garden or if you help out at a park or nature reserve.



Key: This habitat is used for:



Hiding **2** Hunting **3** Breeding



WHY ARE ALLOTMENTS SO GOOD FOR AMPHIBIANS AND REPTILES?

Allotments are havens for amphibians and reptiles as they provide many of the features these creatures depend on, and all in one place. They provide places to sunbathe, find prey, hide and, in many cases, crucial places to breed (such as ponds and compost heaps).

Often, allotments have been around for years (sometimes a century or more), and this means that they have had more time to be colonised by amphibians and reptiles. Allotments have become a sort of 'historical safe-house' - a safe place for frogs, toads, newts, snakes and lizards to live, in a landscape that is changing all around them.

Allotments are particularly important places for reptiles, which have very specific requirements. Because reptiles need places to bask, thick vegetation in which to hide, and opportunities to find a range of prey, you're more likely to find reptiles on allotments than in gardens.

3 leap forward



The key to helping reptiles and amphibians, particularly in urban areas, is linking up habitats. Think about your allotment, garden or local green space... you can make it a wildlife haven but can the creatures get there or spread out?

What features surround the area? Amphibians and reptiles flourish when there's lots of different habitats that they like, all in one area. Basically you're more likely to see amphibians and reptiles in places that are surrounded by other 'frog-friendly' habitats.

For instance, if an allotment or garden is surrounded by other gardens (good

foraging habitat for amphibians) and woodland, then expect to see more amphibians and reptiles here than on a site that's surrounded by roads, fences and concrete.

Generally speaking, as well as gardens, woodlands and allotments, amphibians and reptiles may be attracted to heathland, hedgerows, cemetaries,

how to help



parks and general overgrown

wasteland. If your garden or allotment is surrounded by lots of these features, and they are well connected, then odds-on you'll have good populations of amphibians and reptiles.

South-facing slopes, such as railway embankments are a feature particularly associated with reptiles. Because these embankments are often at an incline this provides lots of opportunities for basking. Reptiles tend to use railway embankments as corridors between sites. Railway embankments, like allotments, have often been present for more than a century meaning that reptile populations locally may have stayed relatively untouched as the countryside has changed around them.

If your allotment, garden or local nature reserve has a railway embankment nearby it might turn out to be a reptile hotspot.



Try some of these ideas if you want to get even closer to amphibians and reptiles...



BECOME A DRAGON FINDER

Whether you spot amphibians and reptiles when you are out and about or discover them in your garden, let us know what you see. Sharing your sightings can helps us to understand the impact that invasive species and diseases may be having on native wildlife. Download our free app on Android and iPhone or use our mobile website at : www.froglife.org

DISCOVER POND LIFE

Pond dipping is a great way to introduce you to amphibians and the other creatures that live under the surface of the water. Check out our website for events, and local nature reserves as well as organisations like the Wildfowl and Wetlands Trust (WWT) and The Wildlife Trusts often run pond dipping sessions.

FROGSPAWN: THE CIRCLE OF LIFE

Visit a local pond in early spring and you could witness a frenzy of activity as frogs and toads get ready to lay their spawn. Keep visiting and you'll see the spawn appear and develop from eggs to tadpoles.

BECOME A CITIZEN SCIENTIST

Froglife is part of the Garden Wildlife Health project in partnership with the Zoological Society of London (ZSL), the British Trust for Ornithology (BTO) and the Royal Society for the Protection of Birds (RSPB). If you find unhealthy or dead amphibians, reptiles, birds or hedgehogs in your garden, please let us know. Find our more at: www. gardenwildlifehealth.org

CLEAN A POND!

It's a messy job, but most ponds need a bit of cleaning out and the results are immensely satisfying. Opportunities exist all over the UK - ask your local nature reserve or contact The Conservation Volunteers (TCV) to get started. Froglife runs a number of volunteer activities: www.froglife.org/ volunteer

Froglife is a national wildlife charity, founded in 1989, committed to the conservation of amphibians and reptiles - frogs, toads, newts, snakes and lizards - and saving the habitats they depend on. We want all audiences to appreciate and learn more about amphibians and reptiles, and how to conserve them...



Froglife's work is made up of three main strands:

- ★ On the ground conservation: this includes building ponds (particularly in urban areas), coordinating the national Toads on Roads project and managing a nature reserve that is home to Europe's largest colony of great crested newts!
- Environmental education: we specialise in working with socially excluded and hard to reach groups. This means that our education team works closely with a range of education providers, from the traditional (schools) to more nontraditional education providers, such as community groups, special schools and non-wildlife sector organisations like the YMCA.
- Providing advice: our website contains pages of advice and tips about amphibians and reptiles in the UK. We also produce a range of publications to help families, farmers, gardeners and landowners support the animals.

Find out more at www.froglife.org

OTHER WAYS TO HELP AMPHIBIANS:

- Get Toad Patrolling: Each spring thousands of toads migrate back to their ancestral breeding ponds. At many sites this will involve crossing busy roads. Froglife coordinate toad crossings at over 800 sites nationally, where volunteers help toads across roads while recording important information. Take action locally: www.froglife.org
- **2.** Become a Froglife Friend: Help Froglife give a voice to amphibians and reptiles by becoming a Froglife Friend. Your support helps us conserve the UK's amphibians and reptiles. For more information turn overleaf. www.froglife.org
- Ake a Donation: Every penny helps us continue our work protecting amphibians and reptiles. There are so many ways to help fundraise for us, collect your small change, undertake a sponsored challenge or text a donation of up to £10 by sending the word NEWT13 plus the amount donated to 70070. Discover what you can do at: www. froglife.org

Froglife is a UK wildlife charity committed to the conservation of amphibians and reptiles - working with people, enhancing lives together for a healthier planet.

Froglife 1 Loxley, Werrington, Peterborough, Cambridgeshire, PE4 5BW

Email: info@froglife.org www.froglife.org



If you would like to become a Froglife Friend please fill in this form, detach and post it to: Froglife, 1 Loxley, Werrington, Peterborough, Cambridgeshire, PE4 5BW

Name	
Address	
	Postcode
Contact Tel.	
Email	
Level of Friendship:	£18 (single) £36 (joint)
I am a UK taxpayer. Froglife (registered charity no. 1093372) can benefit from Gift Aid on my donation.	
Signed	Date
I would like to pay by:	Cheque Card (see below)
Card No. (long number on front)	
Start Date	Expiry Date
Issue No. (if present)	

(last three digits on Name on card

Address (if different from above)

GET FROG-FRIENDLY... BECOME A FROGLIFE FRIEND

Join Froglife today and help us to save the UK's frogs, toads, newts, snakes and lizards, and their disappearing habitats.

For as little as £18 we give you regular newsletter updates, exclusive invites to Froglife events and special offers for Frogalogue merchandise.

THREE WAYS TO JOIN:

- Transformation of the second s
- ☆ By post: add your details to the left, including your cheque or card details, detach and post it back to us.

Give Froglife Friendship as a gift: www.froglife.org