

A Guide to Amphibians and Reptiles in Burial Grounds



THE PRINCE OF WALES'S
CHARITABLE FUND

Amphibians and Reptiles in Burial Grounds



INTRODUCTION

Amphibians and reptiles have a special place in the hearts of nature lovers – perhaps stemming from fond childhood memories of collecting tadpoles in jars, or the thrill of catching a glimpse of a lizard as it disappears into a stone wall. What could beat following the remarkable transformation of a clump of jelly-like frogspawn into tiny tadpoles which then sprout legs to become froglets?

Burial grounds are perhaps not an obvious place to find amphibians and reptiles, but the combination of tussocky grassland, sunny areas and old stonework makes them an ideal place for these shy creatures to feed, bask and shelter. They will often spend the winter hibernating or hiding in nooks, crannies and even old mouseholes around the site.

Reptiles may be present all year round, whereas amphibians need water in the spring in which to spawn. Burial grounds are rarely suitable places for a pond but there is likely to be a nearby garden or farm pond which the amphibians will visit in the spring to breed before returning to the sanctuary of the burial ground.

Sadly, populations of all of our amphibian and reptile species have declined since the 1960's. This is mainly due to habitat loss through drainage, pollution, urban development, and agricultural intensification. The churchyard, however, has often escaped these changes and, with good management, will continue to provide them with a haven and ready food supply.

Amphibians and reptiles tend to be very secretive but your churchyard, or other burial ground, could well be home to these intriguing animals. You may come across them whilst carrying out maintenance on stonework, cutting grassland or accidentally uncover them on a compost heap. Here we provide information on the different species you may find together with help on their identification and an outline of their lifestyles. We explain how to look after and enhance the burial ground habitats for them and explore their links to Christianity, literature, and folklore. Finally, we will share ideas of how to celebrate these often-overlooked creatures with your parishioners and visitors.

If you wish to find out more, the following resources and links are packed with more information and advice on amphibians and reptiles.

Organisations and Websites:

- **Caring for God's Acre** works nationally to support groups and individuals to investigate, care for, and enjoy burial grounds and graveyards. Our website has links to downloadable action packs including

'Slow-worms and Other Reptiles and Amphibians' as well as education packs which include activities around slow-worms. www.caringforgodsacre.org.uk

- **Froglife** is a national wildlife charity committed to the conservation of frogs, toads, newts, snakes, and lizards - and saving the habitats they depend on. As well as running campaigns, they provide a wealth of information on managing habitats, research, training, and education. <https://www.froglife.org/>
- **Amphibian and Reptile Conservation (ARC)** promotes and advances the conservation and amphibians through a range of means including working with academic institutions as well as owning or managing nature reserves. <https://www.arc-trust.org/> They also lead the 'National Amphibian & Reptile Recording Scheme' which guides you through how to survey, monitor and record the UK's amphibians and reptiles. <http://www.narrs.org.uk/>
- **ARG UK** promotes the conservation of our native amphibians and reptiles and their environment by supporting a network of independent amphibian and reptile groups. As well as a range of identification guides, you can find out about what is going on in your local area or even set up your own local group or project. <https://www.arguk.org/>
- **The Wildlife Trusts** is an umbrella organisation of local Wildlife Trusts. No matter where you are in the UK, there is a Wildlife Trust inspiring people about nature and standing-up for wildlife and wild places. Each Wildlife Trust is an independent charity formed by people getting together to make a positive difference to wildlife, climate, and future generations. To find your local Wildlife Trust and to see how they may be able to help you, visit: www.wildlifetrusts.org/

Books:

- **Britain's Reptiles and Amphibians** by Howard Inns
- **God's Acre: The Flowers and Animals of the Parish Churchyard** by Francesca Greenoak
- **Reptiles and Amphibians of Britain and Ireland** – Field Studies Council fold-out chart



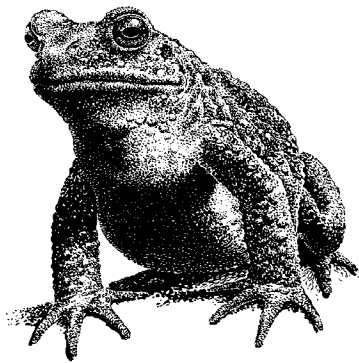
Marsh Frog

Amphibians and Reptiles in Burial Grounds

DISCOVERING MORE ABOUT AMPHIBIANS AND REPTILES

Amphibians and Reptiles are collectively called Herptiles – a derivation from the Greek *herpeton* which means 'crawling thing'. They are cold-blooded vertebrates which rely on heat from the environment, which means that their body temperature goes up and down depending on the temperature of their surroundings. They spend some, or all their life on land, hibernating, or hiding away in cold weather. However, amphibians and reptiles have very different lifestyles.

Amphibians are dependent on water for breeding, but it is a common misconception that they live in water all year round as much of their adult life is spent on land. Indeed, the term 'amphibian' stems from the Greek *amphi-bios* meaning double life. There are six native



Common Toad

amphibians found in Britain, three newts, one frog and two toads. An additional native species, the pool frog, was believed extinct in the UK by the mid-1990s but has since been re-introduced to a site in Norfolk. All amphibians have a similar life cycle. In the spring they gather in water to mate and spawn. Toads are well known for mass migrations to their breeding ponds. As they are stubbornly loyal to a particular pond, this often involves the increasingly risky business of crossing roads. To try and reduce fatalities 'toad crossing' warning signs have been put up on some roads, and toad-friendly underpasses installed. In many places volunteers will often go out on spring nights on 'toad patrol' to help carry the toads safely across the road.

Once the amphibians have reached their pond, mating takes place. In the case of both frogs and toads the males tightly grip onto the females for long periods, often many together in large writhing masses. Their courting calls can be heard on spring evenings – the deep purring croak of the common frog first, and slightly later in the spring, the more high-pitched squeaky call of the common toad. Newts have a different courting ritual which takes place underwater – the male carrying out an elaborated display around the female, involving waving, whipping, and fanning his tail. Male newts, particularly the smooth and great crested newts, also take on a striking appearance

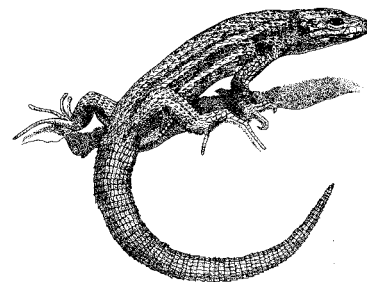
during courting, developing bolder markings and a more distinctive crest.

Eggs (or spawn) are laid in water. In the case of frogs, these take the form of large clumps of 1000 to 2000 eggs – appearing as black dots, each protected by a globule of jelly which swells when in contact with the water. Several clumps often merge creating large floating masses. Toads lay similar eggs, but in long rows rather than in clumps. These jelly-covered strings of eggs can be up to 3m long and are wrapped around vegetation. Newts lay eggs singly, wrapping each whitish-coloured egg individually between leaves of water plants which they stick together for protection. They usually lay around 250 each season.

Soon after laying, the eggs start to change shape with a head, body and tail buds becoming apparent. Within a few weeks the larvae hatch. Initially they are weak swimmers and often remain attached to the jelly, but soon they become active swimmers, breathing through gills, and feeding on algae. As they develop, they lose their gills, and breathing is carried out through their lungs and skin. Small invertebrates, such as water fleas, become part of their diet. They also grow legs allowing them to walk on land. Frog and toad tadpoles, speckled brown or black respectively, absorb their tails as they develop. Newt tadpoles are see-through (like fish fry) and retain their tails. In the summer, when their legs are fully formed, all amphibians will move away from pond to look for shelter and a place to overwinter, although their ability to breathe through their skin means that they can still spend long periods of time under water.

Amphibians have moist skin which must not dry out, so they need to avoid sun and are generally nocturnal. In the daytime, frogs shelter in moist vegetation on the surface of the ground, whereas toads, which can tolerate drier conditions, live in burrows, crevices and holes (often under wood). Newts can be found amongst long grass, under wood or in cracks and crevices. All prefer to venture out at night, particularly in warm damp weather, when they feed on slugs, snails, worms and insects. It is not uncommon for amphibians to live up to 10 years in the wild, and often much longer in captivity.

Amphibians, both as larvae and adults, make a tasty snack for a range of animals. Fish, dragonfly larvae and even some water beetles will feed on tadpoles, and a range of animals including



Common Lizard

Amphibians and Reptiles in Burial Grounds



Great-Crested Newt

herons, buzzards, foxes, badgers, otters, and grass snakes have adult amphibians on their menu. Toads and great crested newts have developed a way of avoiding predation as their warty skin contains powerful toxins which are released in moments of danger. These toxins not only taste disgusting but are also poisonous, and mammals such as foxes soon become wise and tend to avoid them.

Loss of habitat, in particular loss or pollution of breeding ponds, is the main reason for declines in our amphibian populations in the UK. In addition, there is increasing concern about infectious diseases such as *Chytrid* fungus and *Ranavirus*. Although the impact of these diseases in the UK is not fully understood, they have led to mass die-offs of amphibians overseas.

Reptiles, unlike amphibians, are fully terrestrial animals and do not need water to breed, although some, such as the grass snake, do swim well. They are more difficult to find than amphibians as they do not assemble in one place to breed, and they are very secretive and well camouflaged. There are six native reptiles in Britain (3 snakes and 3 lizards).

Reptiles all have dry skin covered in tough overlapping scales that are smooth to the touch, and unlike amphibians, they often bask in the sun during the day to warm-up. They also breed and give birth on land. The grass snake and sand lizard lay clutches of eggs which are left to incubate for several months before they hatch. The hatchling escapes the egg by using a shaped egg-tooth to cut through the flimsy shell. By contrast, the smooth snake, adder, slow-worm and common lizard develop inside the mother, but still within a yolk-filled egg-capsule. Although they are born within this capsule, they immediately wriggle free.

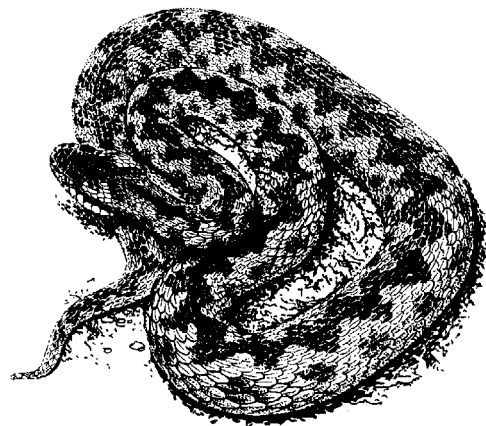
Once hatched they grow rapidly, soon becoming too big for their scaly skin. They get round this by growing a new skin and sloughing-off the old, this act being repeated many times throughout their lives. Snakes shed their skin in its entirety and these papery skins can sometimes be found. Lizards however slough them off in fragments. All reptiles take several years to reach maturity and they often live for 10 years or more in the

wild. Snakes and lizards generally hibernate between November and March.

Snakes feed on small mammals, chicks, lizards and in the case of grass snakes, amphibians, and fish. The lizards prefer invertebrates, particularly insects and spiders, or in the case of slow-worms (which are not so agile) slugs and snails. They will also sometimes also eat ripe fruit or berries.

Reptiles are themselves food for a variety of birds and mammals, including birds of prey, foxes, pheasants, chickens, and domestic cats. Their effective camouflage, good speed and agility help them to avoid becoming a tasty snack, but some also have other escape strategies. Lizards have developed the alarming practice of shedding their tails when threatened. This not only allows them to escape the grasp of a predator, but more commonly, the disembodied wriggling tails acts as a distraction, allowing the lizard to make its getaway. A stunted version of the tail will, over time, grow back. The adder is the only venomous snake in the UK, and as well as using venom to kill prey, it will also use it defensively. If threatened the adder will hiss, draw back its head and neck, striking rapidly to inject poison through its hollow fangs. The poison quickly takes effect, disabling or even killing the predator. The chances of a human being bitten by an adder are extremely low, and although the effects are unpleasant and potentially serious, they can be easily treated. Grass snakes, although not venomous, will hiss and release a foul-smelling liquid as a deterrent and sometimes even 'play dead'.

As with amphibians, habitat loss is the main reason for declines in UK reptile populations, but they have also been impacted by deliberate persecution which is still in evidence today.



Adder

Amphibians and Reptiles in Burial Grounds

AMPHIBIANS

Name	Description	Habitat and distribution
Smooth (or common) newt	A small, smooth skinned newt rarely longer than 10cm. Breeding males are highly spotted with an obvious wavy edged continuous crest along the body and tail. The females are pale brown with a white spotted throat. The underside of both sexes has dark spots and a bright orange streak.	Found across the UK in a variety of lowland habitats, breeding in small fish-free ponds.
Palmate newt	The smallest newt – rarely longer than 9cm. Males are best recognised in the breeding season by their webbed, paddle-like back feet and thin hair-like filament at the end of the tail. They also have spotted flanks, an inconspicuous crest, and a yellowy-orange streak beneath. The females are like those of the smooth newt but have a pinkish, unspotted throat.	Found across the UK (except Ireland), often in upland or heathland areas where their breeding pools are more acidic in nature. Like the smooth newt they favour small, fish-free ponds.
Great crested newt	A large newt – up to 16cm long with warty, very dark coloured skin. Breeding males have a striking ragged crest with a break between the body and tail. The underside of both sexes is bright orangey-yellow with irregular black blotches.	A lowland species found across the UK (except Ireland) in a variety of habitats. Prefers to breed in larger ponds or flooded quarries.
Common frog	Up to about 9cm long. Smooth damp skin, greenish brown to olive in colour with black blotches. Long back legs and moves by jumping rather than walking.	Found across the UK in a variety of damp habitats and breeds in ponds, ditches and even puddles.
Common toad	Up to about 9cm long. Rough warty dry-looking skin which is browner in colour than that of a frog. Relatively short back legs and tends to walk rather than hop (unless alarmed). Striking copper-coloured eyes.	Found across the UK (except Ireland) in a range of habitats including open woodland and gardens. Breeds in lakes or large ponds.
Natterjack toad	Smaller than the common frog and toad – up to 7.5cm long. Has a distinct thin yellow stripe down its back.	Found in sand dunes and occasionally heathlands but very rare and unlikely to be found in burial grounds.

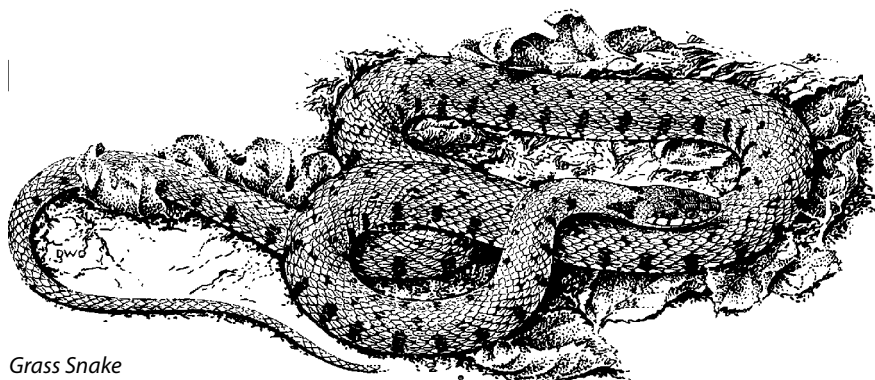


Slow Worm

Amphibians and Reptiles in Burial Grounds

REPTILES

Name	Description	Habitat and distribution
Adder	Rarely longer than 60cm. Brown or greyish with a distinct zigzag pattern down its back and spots on the flanks.	Found on heaths and open habitats across the UK (except Ireland) but rare and unlikely to be found in burial grounds.
Grass snake	Often up to 100cm long. Olive body with dark spots or streaks along its flanks. A distinct yellow and black collar behind its head.	Found across lowland England and Wales. It feeds in lakes and ponds but breeds in a range of habitats including compost heaps.
Smooth snake	Rarely longer than 55cm. Grey-brown with a black heart shape mark on the head and a dark eye stripe.	Very rare and known from just a few heaths on the south.
Slow-worm	A legless lizard, reaching about 35cm long or more. Often confused with a snake, but has a much smoother, almost shiny, skin. It appears a uniform grey (male) or brown (female). On closer inspection the males can be seen to have small blue spots on their flank, and females a black line down their back. Unlike snakes they also have eyelids and can blink.	Found across the UK (except Ireland), in many habitats including gardens and churchyards.
Common lizard	Slim and up to 15cm long. Brown or dull green with darker flecks – the females often with dark stripes down the back. Melanistic (all dark) forms are common.	Found across the UK in open undisturbed habitats where they can bask in the sun.
Sand lizard	A robust, larger lizard with bold 'eye-spots' (dark brown blotches with cream centres). Females have bright green flanks in the spring.	Very rare and restricted to a handful of lowland heaths and coastal dunes. Unlikely to be found in burial grounds.



Grass Snake

Amphibians and Reptiles in Burial Grounds

AMPHIBIANS AND REPTILES IN BURIAL GROUNDS

Many burial grounds have a mosaic of habitats that are ideal for amphibians and reptiles. A mix of both short and tussocky grassland, hedgerows, piles of dead leaves, compost heaps, and old stonework provides the perfect home. Of the 12 native species of amphibian and reptile, there is a good chance that you will have several of them in your burial ground.

The most likely reptile that you will encounter, even in urban burial grounds, is the slow-worm – the sleek legless lizard that is sometimes known as a blindworm. It is not as fast moving as other reptiles, so tends to feed on prey like slugs and caterpillars. Instead of basking in the sun, slow-worms prefer to hide under objects that will be warmed by the sun or will create their own warmth such as compost heaps or dead wood. They are often found along hedgerows or the base of walls, especially if there is tussocky grass alongside them.

The common lizard is often found in more rural burial grounds where, unlike the slow-worm, it can be spotted basking on old walls or sunny tombstones. It is timid and lightning quick - disappearing in flash into crevices in the wall or tall vegetation. It never ventures far from cover and sticks to its favourite basking spot, so if you catch a glimpse of one retreating, sit quietly and it may reappear.

The other reptile that you may well come across in lowland burial grounds, especially those near large ponds or lakes, is the grass snake. Although it hunts around water, it may well use the burial ground to breed – particularly compost heaps or piles of leaves. Grass snakes lay eggs in moist warm places, so keep an eye on your compost heaps for clutches of white, leathery eggs about 3cm long. They are laid in June or

July, hatching in late summer, so you are likely to find the old eggshells if you empty compost heaps in the autumn

Ponds are not appropriate in burial grounds, but this does not stop amphibians using the site to shelter and forage. Perhaps the most frequently seen is the common toad. Away from their breeding ponds, toadlets and adults spend much of their time under compost heaps stones or dead wood where they hollow out a small burrow in the soil. If you uncover them, you will often just see a head poking out which is where the expression 'toad-in-the hole' comes from. They forage at night in mild weather for slugs, spiders, and insects. Occasionally they may be seen in the daytime making the most of insect gluts, such as ant swarms, which they catch on their long sticky tongues.

Frogs tend to stay closer to ponds than toads, but still may be found in damp areas of burial grounds as they feed or try to cool-off in hot weather. They may also overwinter under stonework, woodpiles or in compost heaps.

All three species of British newts may be found in burial grounds, particularly in the autumn and winter when, as newtlets or adults, they hide away in the stonework of buildings or under tombstones or deadwood piles. The most likely newt you will find is the common newt, but great crested newts are known for coming into dark, damp areas of buildings, such as cellars (or in the case of churches, crypts and within chest tombs if there is a gap where they can enter). When newts are found in the winter, they are often hard to identify as their skin takes on a dark velvety appearance and they are sometimes mistaken for lizards. However, their sluggish movements, and lack of scales, should help to distinguish them.



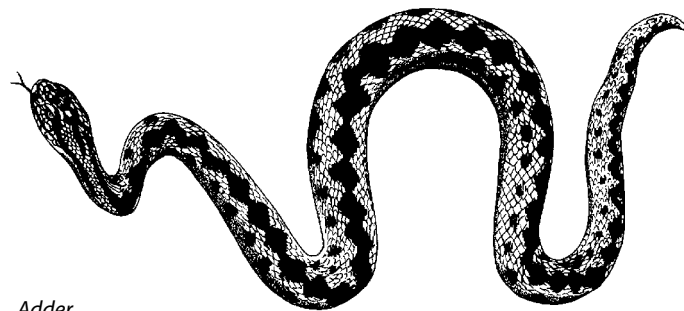
Marsh Frog

Amphibians and Reptiles in Burial Grounds

MANAGING BURIAL GROUNDS FOR AMPHIBIANS AND REPTILES

There are many simple ways that you can encourage amphibians and reptiles into your burial ground and to make sure that they have the food and safe shelter that they need.

- Leave some longer tussocky grass around tombstones and monuments, as well as a strip along the walls or hedges of the churchyard. This long grass habitat provides great places for reptiles and amphibians to hide and shelter.
- Maintain some open sunny areas with longer grass or grass tussock. Reptiles need warmth to be active, but they will stay amongst or very near the taller grass for protection.
- Have a variety of habitats such as different lengths of grass, nettles, brambles, scrub, hedges, and stone walls (especially drystone).
- Have a compost heap, preferably in a sunny situation. It may be used by both amphibians and reptiles for sheltering and, in the case of reptiles, basking. It attracts slugs, worms and snails which are a good food source. If you know grass snakes are in your area do not empty the compost heap until October as it may be used as a place for them to lay their eggs.
- Make a deadwood pile in long or tussocky grass. Slow-worms, frogs, toads, and newts hibernate and hunt here. As the wood rots away the amount of food increases. A pile of stones can also provide hibernating and resting places.
- Monuments are often home to reptiles and amphibians. Walls and chest tombs make good shelters as well as an ideal place for lizards to bask. Tussocky grass next to stonework, ideally linked to other areas of long grass, helps them to move around safely.
- When cutting long grass check the area is clear before beginning. If you disturb an amphibian or reptile, make sure it is safely out of the way before continuing. Using a scythe, rather than a rotary mower or strimmer, is far less likely to harm sheltering animals as are you more likely to spot them.
- Avoid using slug pellets and insecticides, as slugs, snails and insects are essential food for a range of wildlife, including amphibians and reptiles.
- Take care when moving, stones and damp herbage during autumn and winter as amphibians and reptiles may be hibernating. Also check before repointing wall bases or filling voids in stone structures.



Adder

Amphibians and Reptiles in Burial Grounds

RELIGION, FOLKLORE, & LITERATURE

Throughout history people have associated reptiles and amphibians with myths and magic, but much of the folklore and literature that surrounds them is negative. Even in Christianity, amphibians and reptiles get rather a bad press.

The role of the snake is well known in the story of Adam and Eve where a serpent, described as 'more crafty' than the other wild animals, tempts Eve to eat the forbidden fruit, bringing about the fall of man.

"Then the Lord God said to the woman, "What is this you have done?" The woman said, "The serpent deceived me, and I ate." So, the Lord God said to the serpent, "Because you have done this, cursed are you above all livestock and all wild animals! You will crawl on your belly, and you will eat dust all the days of your life. And I will put enmity between you and the woman, and between your offspring and hers; he will crush your head, and you will strike his heel." Genesis 1: 13-14.

There are no snakes in Ireland and according to legend, St Patrick, the patron saint, chased them into the sea after they began attacking him during a 40-day fast he undertook on top of Croagh Patrick. Although geographical isolation, possibly resulting from post-glacial sea level rise, is a more likely explanation, Ireland is one of only a handful of places, along with New Zealand, Iceland, Greenland, and Antarctica, where snakes are not found.

Frogs don't fare much better, being listed as one of the plagues of Egypt inflicted by the God of Israel to convince Pharaoh to release the Israelites from slavery.

"If you refuse to let them go, I will plague your whole country with frogs. The Nile will teem with frogs. They will come up into your palace and your bedroom and onto your bed, into the houses of your officials and on your people, and into your ovens and kneading troughs. The frogs will go up on you and your people and all your officials". Exodus 8 :1-4.

In ancient Egyptian culture, however, frogs and snakes were seen in a more positive light. The rearing cobra, Uraeus, was used a symbol of deity or sovereignty, and worn as a head ornament by the pharaoh. The

Egyptian goddess of fertility and childbirth, known as 'Heqet', was often depicted with a frog's head, and frogs were so important to the early Egyptians that they were often embalmed upon death. More recently, some masonic rituals refer to 'Jahbulon' a composite deity with three heads, one of which is a frog.

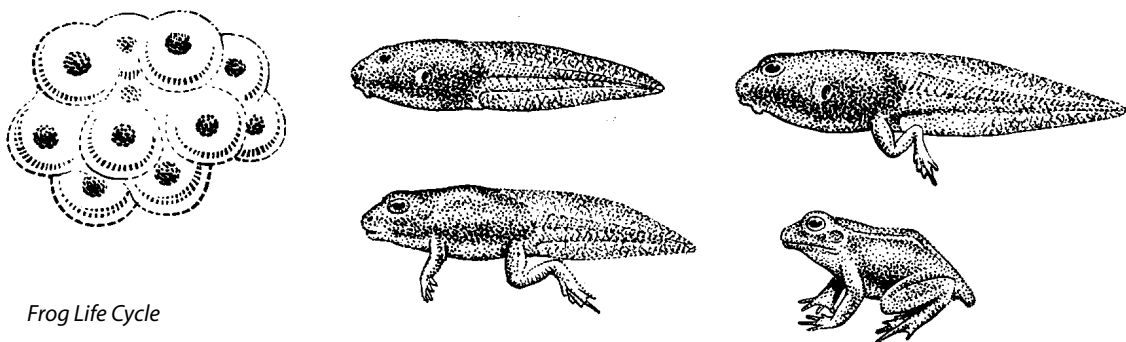
Snakes are powerful symbols in many cultures. For example, the Hopi people of North America perform a snake dance to bring rain to renew the fertility of the land, and in Australian indigenous culture, snakes feature strongly in traditional stories and artwork. The rainbow serpent represents a deity, seen as the protector, giver of life, and watchman over nature and humanity. But it also has a dark side, sending storms and floods as punishment, when appropriate.

Amphibians and reptiles have deep rooted ties to ancient mythology and are often linked to mysticism and magic. Toads, in particular, have been feared and reviled for many centuries, being considered creatures of the Devil or witches familiars. Indeed, in medieval times toads were said to spit poison and fire and were used as instruments of torture. Snakes too were considered a very bad omen, especially if found on your doorstep, although the Anglo-Saxons believed that saying the word 'faul' would cure you of an adder's bite.

Up until the Middle Ages, amphibians were widely regarded as possessing medicinal or magical properties, with frog potions being used in aphrodisiacs, infertility prevention, contraceptives, and more.

The toad was believed to carry a gemstone in its head known as the 'toadstone'. This was supposed to provide an antidote to poison and was given this credence in 'De Proprietatibus Rerum', a 13th-century encyclopaedia by a Franciscan cleric. Toadstones remained in use until the 18th century, often mounted as an amulet or in a ring, but were actually the button-like fossilised teeth of *Lepidotes*, an extinct ray-like fish from the Jurassic period.

Rubbing toads on your body was said to cure cancer, a live toad in your mouth could apparently cure skin infections and Cambridgeshire 'toadmen' used toads to



Frog Life Cycle

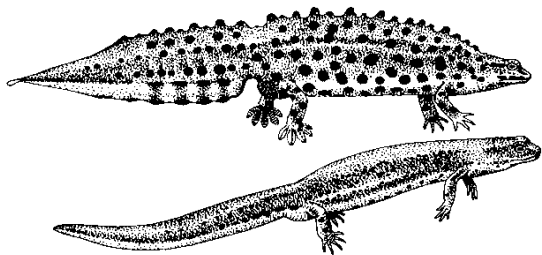
Amphibians and Reptiles in Burial Grounds

gain control over horses. In the 17th-century 'toad-eaters' were a sideshow attraction at village fairs. The trickster's assistant, the 'toadie', would eat (or pretend to eat) poisonous toads and fall writhing to the floor. The trickster would then intervene to 'save' him and in doing so promote the curative potion he was peddling.

Links to such practices probably stem from the fact that some amphibians, including the common toad and great crested newt, do have a range of toxic chemicals in their warty skins that can cause hallucinations, convulsions and slow, or even stop, the heart.

Amphibians and reptiles are not particularly common in works of literature, but snakes feature most prominently, -often playing the 'baddy'.

In J.K. Rowling's Harry Potter books the terrifying giant snake 'Nagini' is tightly linked to the evil Lord Voldemort and in film adaptations of Kipling's Jungle book, the



Smooth Newt

snake 'Kaa', originally depicted as a mentor to the boy Mowgli, is now more often depicted as a villain, who uses his powers of hypnotism and constriction to try and kill Mowgli.

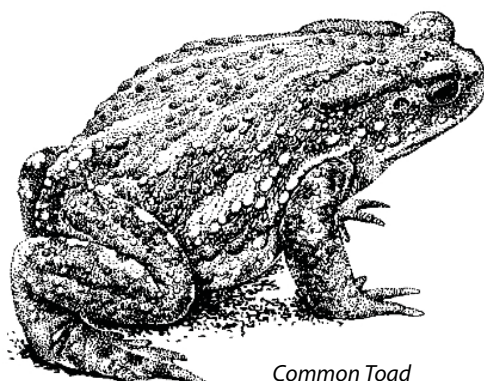
In older literature, amphibians reflect the feelings of the time by often being linked to evil. In Milton's Paradise Lost, Satan masquerades as a toad, and Shakespeare maligns amphibians in many of his works, often linking them to witchcraft. In Macbeth the witches brew a potion:

'Fillet of a fenny snake,
In the cauldron boil and bake;
Eye of newt, and toe of frog,
Wool of bat, and tongue of dog,
Adder's fork, and blind-worm's sting,
Lizard's leg, and howlet's wing,
For a charm of powerful trouble,
Like a hell-broth boil and bubble.'

Although amphibians and reptiles feature strongly in the brew, many of the ingredients are thought to refer to plant names: 'eye of newt' - mustard seeds, 'toe of frog' - buttercup, 'lizard's leg' - ivy, and 'adder's fork' possibly adder's-tongue fern. Others are less well understood, so blind worm's sting probably does refer to a slow-worm's tail, and fenny snake to a snake found in wet grassland. Using these alternative names was commonplace amongst folk healers at the time, thought to make them sound more magical as well as preventing customers making their own potions.

In more recent literature and television, amphibians start to be portrayed more positively. In Grahame's 'Wind in the Willows', Mr Toad is a charming, albeit rather arrogant and badly behaved character, and Henson's muppet, Kermit the Frog, was ahead of his time in declaring "It's not easy being green."

But it is the naturalist and author Beatrix Potter who most clearly shows a genuine fondness for amphibians. Her Tale of Jeremy Fisher describes a lovable frog who lives in a little damp house amongst the buttercups, likes getting his feet wet, and attempts, but fails, to catch a fish. He makes dinner for his friend - Sir Isaac Newton - a newt, who wears a 'black and gold waistcoat' which is beautifully illustrated and can be seen to be the characteristic pattern of the underside of a male great crested newt.

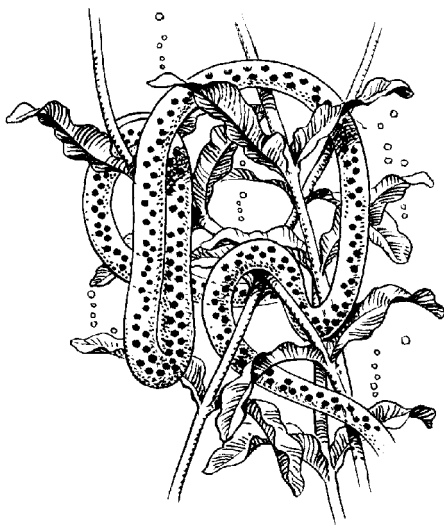


Common Toad

Amphibians and Reptiles in Burial Grounds

FINDING OUT ABOUT YOUR BURIAL GROUND AMPHIBIANS AND REPTILES AND LETTING PEOPLE KNOW

Whilst you don't need to know exactly which amphibians and reptiles are using your burial ground to manage it well, it can be extremely enjoyable and rewarding to discover what's there and learn about which areas they may be using.



Toad Spawn

So how do you know if you have reptiles or amphibians? Check in compost heaps and under stones and logs for sheltering amphibians and reptiles, or even grass snake eggshells in a compost heap. Always be careful to cover them back up again. Look for lizards basking on sunny pathways next to longer grass, or on walls or stonework.

You can build dead-wood piles, or even leave out some artificial shelters such as carpet tiles or roofing tiles. These provide protection from predators as well as a place for reptiles to warm-up. They should be placed away from potential disturbance, ideally amongst tall vegetation or near a hedge or tree. They are particularly attractive to reptiles if they are placed where they catch the morning or evening sun, but it is important not to disturb the shelters too often otherwise the reptiles may abandon them.

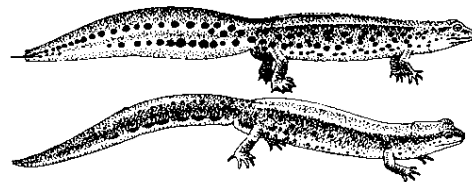
We would love to hear about which amphibians and reptiles are using your burial ground, so why not make some biological records? A 'biological record' is a recorded sighting of wildlife, plant, or animal, however rare or common - so have a go. Recognising and recording the wildlife you see is really useful in deciding how best to manage your burial ground. It also helps a range of people who have an interest in understanding

the amount and spread of different species across the UK. These could include burial ground managers, town planners, archaeologists, researchers, ecologists, other specialists, and local wildlife groups.

For recording what you see in burial grounds we would like you to use our 'iNaturalist' form. This can be accessed via the 'Share Your Records' page on our website (<https://www.caringforgodsacre.org.uk/get-involved/recording-2/share-your-records/>). It is easy to do and there is a video and instructions to guide you through it. There are also identification tips and illustrations for species that you may have in your burial ground. All data gathered through 'iNaturalist', including the records you submit, will appear on the 'National Biodiversity Network Atlas', a national system which is free and available to all. Take a look at the 'Beautiful Burial Ground' section of the atlas to see what other people may have found in your churchyard or cemetery (<https://burialgrounds.nbnatlas.org/>).

If you do not want to use the online form and would rather send us your records, please post, or email them to Caring for God's Acre (wildlife@cfga.org.uk) including

- Who – we need your name, and how you can be contacted
- When – include the date you saw the species
- Where – please give precise details - postcodes or grid references are helpful (there are lots of St Marys!)
- What you have seen – the most important bit!



Palmated Newt

All amphibians and reptiles receive some legal protection in the UK, although the extent to which each species is protected varies. All are protected from being sold or traded and all reptiles are protected from being deliberately killed or injured. The great crested newt is protected at all stages of its life, and its habitat is also protected. If great crested newts are known to use your burial ground, you should seek advice before carrying out works that will disturb them as a licence may be required.

Amphibians and Reptiles in Burial Grounds

TELLING THE STORY OF YOUR AMPHIBIANS AND REPTILES

Telling the story of your amphibians and reptiles may take many forms and can be an important way of communicating their significance to the wider community. This can inspire people to be more involved and can certainly help in the care and protection of these amazing animals.

Here are some practical guidelines for you to consider which may help in creating a plan for telling their story:

Who are you telling the story to?

Your church and burial ground is likely to be at the very heart of your community, visited by people for worship, celebration, funerals, and remembrance. Burial grounds are often used as places of peace and solitude in an ever increasingly busy world; locals can walk there; children can play; and they are often the only local greenspace available for people to enjoy without driving or using public transport. Nature and wildlife are now recognised as playing a vital role in health and wellbeing, so the importance of this greenspace is better understood than perhaps it was previously. Your church and churchyard can also be an important visitor destination, attracting tourists who are seeking the unique architecture of your church and monuments or ancient trees. Indeed, research carried out by 'VisitEngland' recently reported that 55% of day trips include a visit to church or cathedral and 83% of people in the UK believe churches are an important part of the UK heritage. There is clearly an opportunity to encourage all these different groups of visitors to think about the wild animals that make their home here.

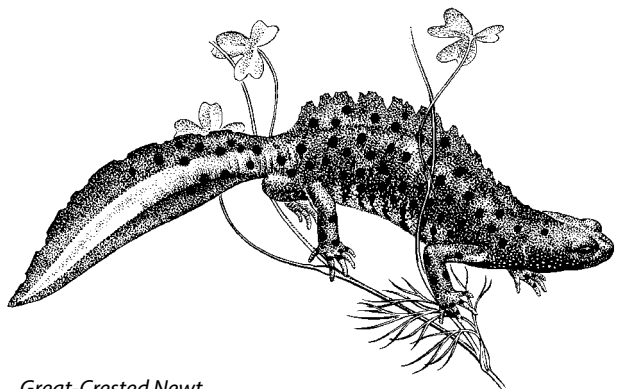
Why are you telling the story?

Children never fail to be entranced by these fascinating creatures, but many adults have forgotten their charm and may overlook them. They do, however, have an inspiring story to tell, one which explains their significance in time and place, and roots them in the context of our own experiences.

By telling the story of amphibians and reptiles, we are helping to conserve them for future generations. Any interpretation that you consider regarding these shy and threatened creatures might want to inspire people to view them in a more positive light think about ways in which they can provide a safe haven for them.

What to say?

In general terms, interpretation for the wider public should be short and relevant, focusing on some key themes. Some of these themes have already been touched upon in this document such as their lifestyles, identification and their links to folklore and religion. These should be sufficient to give people a pretty good



Great-Crested Newt

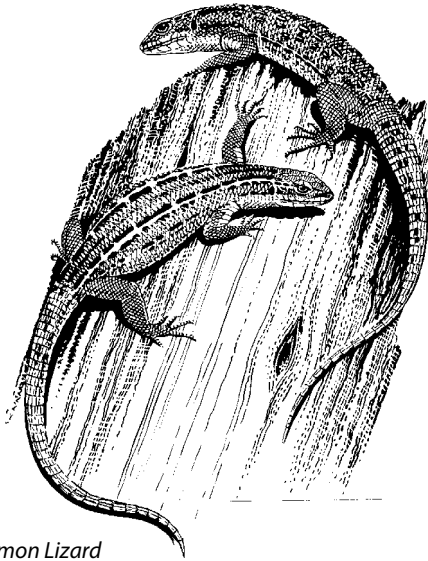
understanding of how special they are. If you have any local knowledge relating to these animals, it is always worth including this, as this will help connect them to people in a slightly more personal way. What you say depends on where you will be saying it. For example, our website (www.caringforgodsacre.org.uk/) has lots to say, as we are the national charity for burial grounds. You will notice however that many of our pages have basic information on key themes and we direct people to different resources for in-depth information. This includes toolkits, minifilms and factsheets. Different groups of people will want different levels of information. A student for example, may wish to know absolutely everything that there is to know about your lichens, whilst a casual tourist might only have a couple of minutes to read your interpretation. As a rule of thumb, 'less is more', resist the temptation to include everything you know!

Where to say it?

Interpretation boards are an excellent way to engage the public, but there are also many other ideas that can be used to raise the profile of amphibians and reptiles. Have you considered the following?

- How about a leaflet? This can go in your church or chapel, in a special leaflet dispenser on your churchyard notice board or in the porch. Leaflets can be distributed locally and can be sent to other heritage related visitor attractions. They can also go onto websites, be available to download, and can be updated and reproduced cheaply and quickly, particularly if your leaflet can be printed on a home computer.
- Posters are a good way of conveying information. Posters can again be displayed in your church and on noticeboards. Like leaflets, posters can easily be updated and sent electronically to others to share.
- Social media (Facebook, Twitter etc.) is a fast and free way to reach people all over the world as well

Amphibians and Reptiles in Burial Grounds



Common Lizard

as within your local community. Social media posts can be easily updated on a regular basis, and you can link into national campaigns to help get your message across. You may feel as though you don't have the skills or knowledge to develop a social media presence – if that is the case, put the word out through your congregation and perhaps someone will come forward who can help you. It is important to note that if you do create a social media presence, it is most effective when it is updated on a regular basis so that you can maintain interest. This does need an on-going commitment.

- If you are feeling particularly media savvy, you may wish to contact your local BBC or independent radio station who might then come and produce a short broadcast feature on the biodiversity of your churchyard, including of course your amphibians and reptiles!
- You could help to set up, or join in with, an existing local amphibian and reptile recording group under the guidance of 'ARG UK' (<https://www.arguk.org/>). You may want to do a project on burial grounds, or even on a specific species, such as the slow-worm.

How to say it?

There are many ways to tell the story of amphibians and reptiles and some ideas include:

- Consider using images, drawings, or illustrations. We have some excellent illustrations that you can download from our resources page.
- Text should remain the main method of conveying information, but keep it simple and brief.
- Keep your interpretation relatively basic but include

ways in which people can find further information, such as links to your social media sites, QR codes *, or by including links to national organisations.

- If you or any of your congregation (including young people?) have the skills to produce and edit a short film, this can be a really nice way of conveying information – and it can also be hosted on your website or on social media sites.
- Perhaps the most important, tell people about them face-to-face. If you meet visitors, point out the habitats that amphibians and reptiles may be using. Could someone lead a walk around the churchyard looking at the variety of plants and animals that use the site? These are often the moments and messages that we remember the most.

* *This is a machine-readable code consisting of an array of black and white squares, typically used for storing URLs or other information for reading by the camera on a smartphone.*

Getting creative with your amphibians and reptiles.

Exploring wildlife is a great way to involve people in your burial ground – on biodiversity discovery days for example. These events and activities could be open to all ages and abilities and could include:

- Launching a photography competition focusing on 'homes for wildlife'. A competition does take some time to organise as it involves judges and perhaps prizes, but it will be popular. It might result in a slideshow of all images submitted which could go onto your website or social media platform. The competition could generate some interesting shots which might include macro shots (the tiny things) and active shots (for example swallows nesting around the buildings, amphibians or minibeasts under logs, cosy hollows in trees or mason bees in the stonework).
- Have a craft event. You could make origami frogs, slow-worm paperchains or how about a decorated toad abode from an old terracotta flowerpot?
- Contact your local school to see if they would like to come and undertake a study topic on your burial ground wildlife (including reptiles and amphibians) and its habitats. Many areas of the curriculum could be covered, and any work undertaken by pupils could be displayed in the church.
- Hold a Story Telling session which includes a story on amphibians and reptiles. Storytelling is a popular and creative activity and there is likely to be a local storyteller who will run it for you.
- Run a guided walk with habitats for amphibians and reptiles as a feature.

Amphibians and Reptiles in Burial Grounds

- Hold a 'nature explorer' family activity event. Go on a minibeast hunt and include things like looking under logs and stones to see what is there. How do the slugs and snails you find fit into in the food chain (especially regarding amphibians and reptiles)? Where may amphibians and reptiles hide? Build a dead wood pile or 'bug hotel' to attract amphibians and reptiles and the food that they eat.
- Some of these activities can be organised as 'stand-alone' events, but you could also consider dovetailing into national campaigns and initiatives such as World Environment Day www.un.org/en/observances/environment-day (June) or Earth Day www.earthday.org/ (April).

Resources

Caring for God's Acre has some fantastic resources for family and school activities, all within the Resources section of our website (www.caringforgodsacre.org.uk/resources/). Many of these resources are relevant for amphibians and reptiles and include links to both English and Welsh national curricula. Other resources can be found through 'Froglife' (<https://www.froglife.org/>) 'Amphibian and Reptile Conservation' (<https://www.arc-trust.org/>) and 'ARG UK' (<https://www.arguk.org/>).

And finally, amphibians and reptiles in churchyards need help. Caring for God's Acre is a member-based charity, and we are reliant on donations to make a difference. Please consider becoming a member – more information on becoming a member can be found on our website: <https://www.caringforgodsacre.org.uk>.



Common Frog



THE PRINCE OF WALES'S
CHARITABLE FUND