Amphibian Identification

Common frog

Adults 6-7 cm. Smooth skin, which appears moist.

Coloration variable, includes brown, yellow and orange. Some females have red markings on lower body.

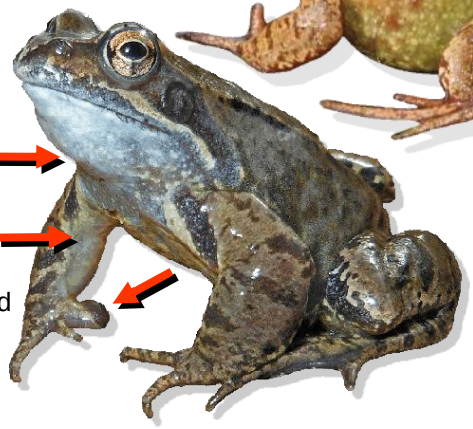
Usually has a dark 'mask' marking behind the eye.

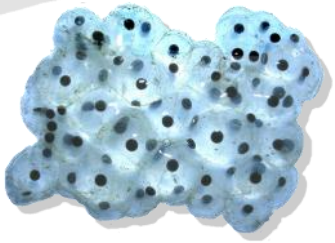
Breeding male

Grey/pale blue throat.

Thick front legs.

Dark (nuptial) pad on inner toes of the front feet.





Spawn is laid in gelatinous clumps.

Markings also variable, including varying amounts of black spots and stripes.

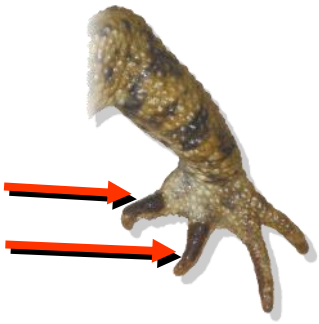
Young froglets look like smaller versions of the adults.

Common toad

Adults 5-9 cm. Rough skin. Brown with darker markings. Less commonly, some individuals are very dark, almost black, others are brick-red.

Breeding pair

Makes small hops rather than jumps of common frog.



Males smaller than females. Breeding males can also be distinguished by dark (nuptial) pads on innermost two toes of the front feet.

Toad spawn is laid in gelatinous strings, wrapped around vegetation. Less conspicuous than common frog spawn.

Toadlets transforming from the tadpole stage are often very dark in colour.

Juveniles are similar colours to adults, including brick-red.

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Natterjack toad

Similar in size and appearance to common toad, but with a pale stripe running along the back.

Strictly protected species, requiring a licence to handle or disturb.

This is a rare species, unlikely to be found outside specific dune and heathland habitats.

Tadpoles

On hatching common frog and toad tadpoles are black. As they develop, common frog tadpoles become mottled with bronze, whereas toad tadpoles remain uniformly dark until the last stages of development.

Common frog and toad tadpoles generally complete development in the summer, but development rates are variable; some tadpoles may not transform until later in the year, or they may even remain as tadpoles over winter, becoming much larger than normal.

Tadpoles of water/green frogs grow larger than native frog and toad tadpoles. There are usually mottled markings on the base of the tail and the belly is usually white.

Frog

Toad

Water frog

Water/green frogs

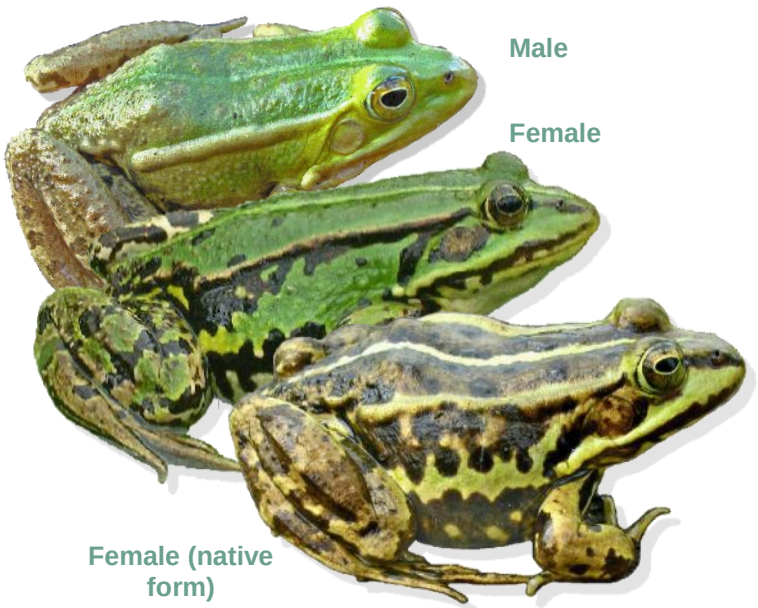
This is a group of non-native frogs, including pool, edible and marsh frogs (although there is one population of pool frogs which is native). There is considerable variation in colour and markings within each species, so identification by eye can be difficult. Water frogs breed in late spring/early summer. Males call loudly at this time and sporadically later in the summer. The calls are a useful way of distinguishing the species and can be heard on the *Alien Encounters* website (www.alienencounters.org.uk).

Calling marsh frog **Calling pool frog**

Calling male water frogs inflate a pair of balloon-like vocal sacs, one either side of the head. These sacs are dark grey in marsh frogs, white in pool frogs and pale grey in edible frogs.

Pool frog

Pool frogs are similar in size to the common frog.



Male

Female

Female (native form)

Edible frog

Grows to a little larger than the common frog.

Marsh frog

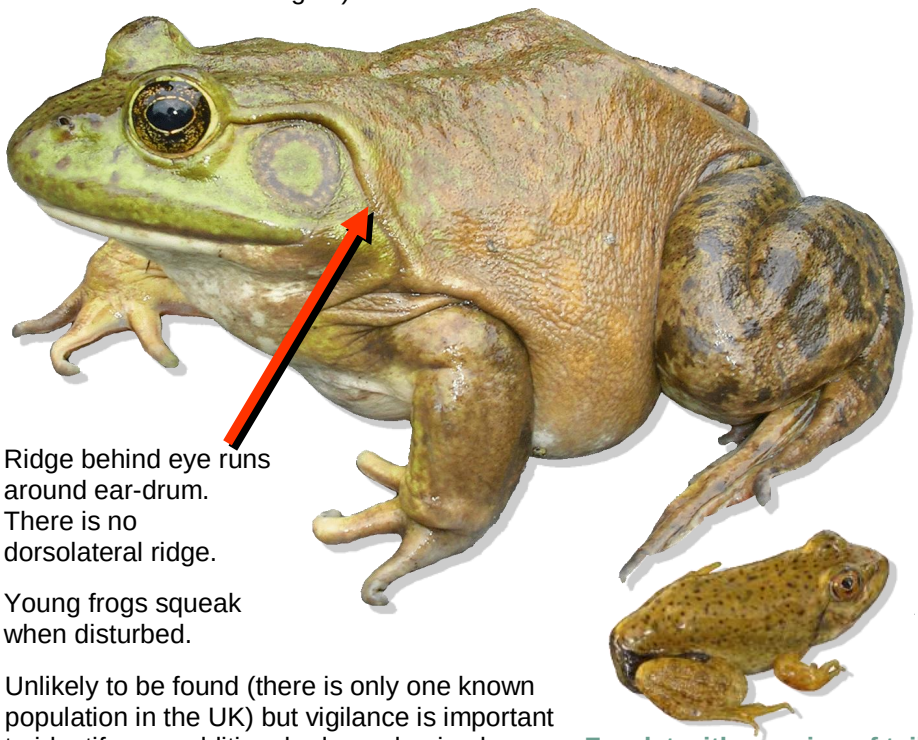
A large frog growing to 13 cm (much larger than the common frog). Variable coloration and markings. May, or may not, have pale dorsal stripe. Marsh frogs usually have some vivid green coloration, but some can be predominantly brown.

Sometimes mistaken for North American bullfrog, but marsh frogs have dorsolateral ridges and calling males have paired vocal sacs, either side of the head (both features absent in bullfrogs).

North American bullfrog

A very large, non-native frog growing to 15 cm. Calls loudly and breeds during the summer (call can be heard on the *Alien Encounters* website www.alienencounters.org.uk).

Black spots on body of tadpole. The tadpole stage can last several years and tadpoles grow to a large size, exceeding 10 cm.



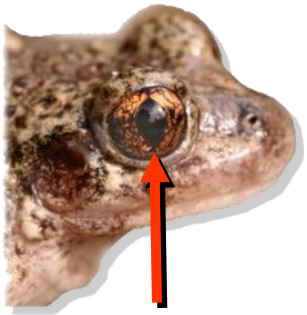
Ridge behind eye runs around ear-drum. There is no dorsolateral ridge.

Young frogs squeak when disturbed.

Unlikely to be found (there is only one known population in the UK) but vigilance is important to identify any additional released animals.

Froglet with remains of tail

Midwife toad



A small non-native species, growing up to 5 cm. Rough skin, so potentially mistaken for a juvenile common toad. Midwife toads, however, have vertical pupils (horizontal in common toad) and males carry the eggs.

Few established populations, which are usually associated with gardens.

Secretive, but has a distinctive call, a single, repeated tone, like an electronic bleep, given on warm summer evenings (can be heard on www.alienencounters.org.uk).

Male carrying eggs

Smooth newt

A widespread species which breeds in a variety of water bodies. Often found in garden ponds.

Male Female

Both sexes have an orange or yellow belly stripe and rounded spots, which are larger in the male.

Male

Female

Grows to about 10 cm. Breeding male has an undulating crest running from head to tail tip.

Non-breeding male

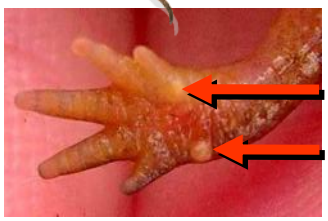
Non-breeding adults live mostly on land. Juveniles live entirely on land.

Juvenile (eft)

Palmate newt

Grows to 9 cm. Breeding male has a ridge running along the back, rather than a crest. Dark, webbed hind feet, and tail ends in filament.

Non-breeding male

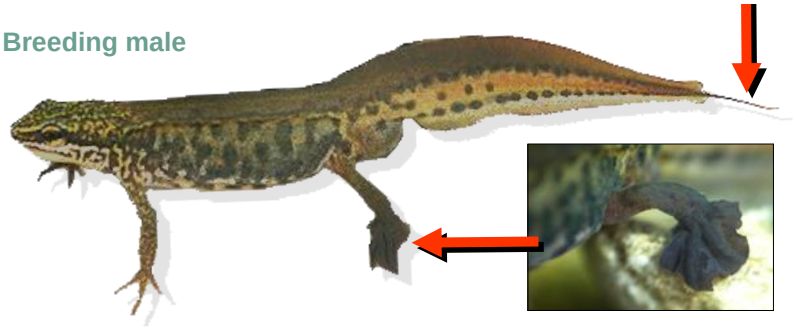


There are two pale coloured nodules on the underside of the hind feet of the female.

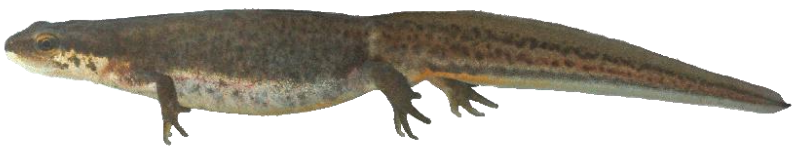
Palmate

Smooth

Throat of palmate newt has no pigment (looks pink). Throat of smooth newt is off-white and usually spotted.



Breeding male



Female

Female looks similar to smooth newt.

Underside (male)

Juvenile (eft)

Juveniles live on land.

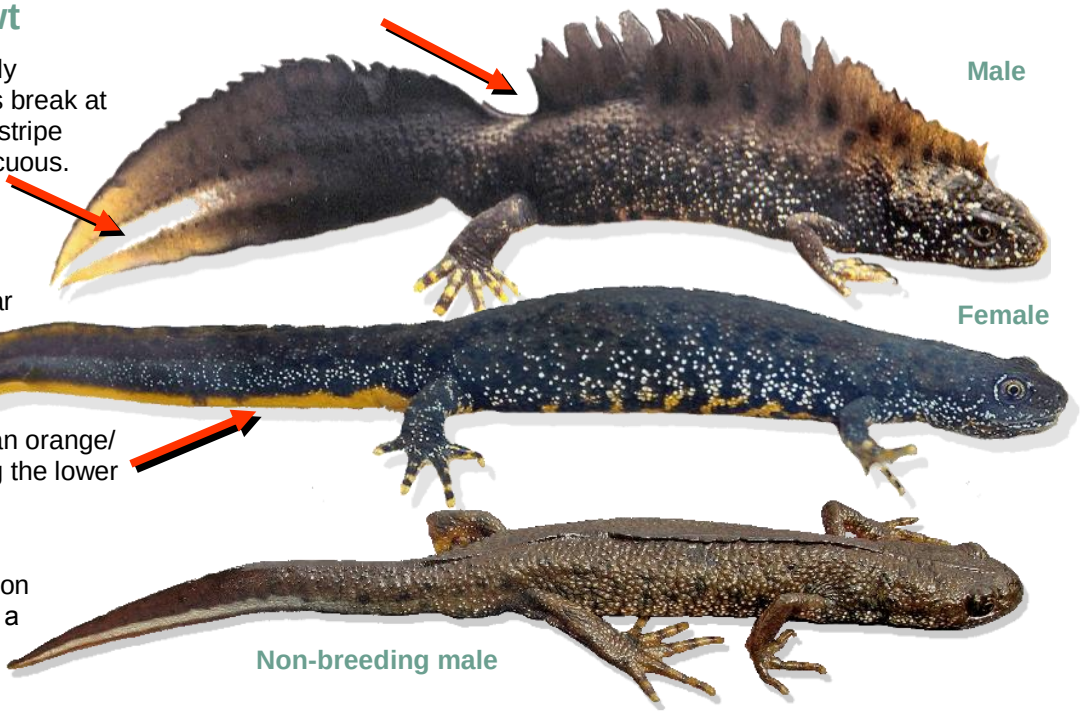
Great crested newt

Grows to 16 cm, but usually smaller. Crest in male has break at base of tail. Silvery-white stripe towards rear of tail conspicuous.

Both sexes have rough, granular skins and yellow/ orange bellies with irregular black spots.

Female has no crest and an orange/ yellow stripe running along the lower edge of the tail.

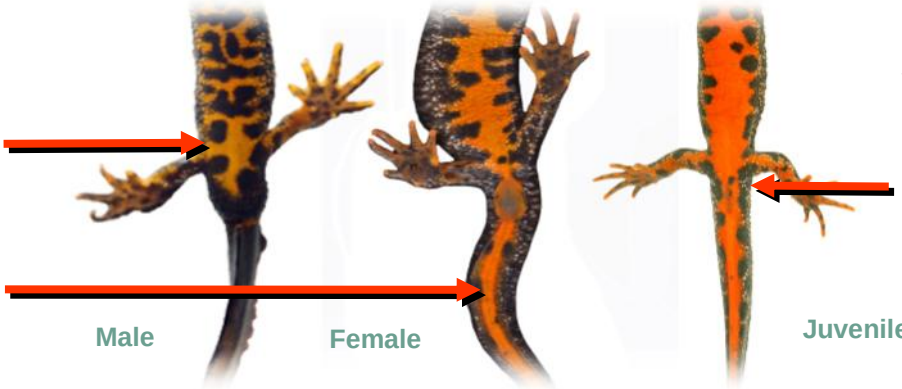
Outside the breeding season the male's crest shrinks to a ridge along the back.



Juveniles look like smaller versions of the female and may live on land or in the water.

Strictly protected species, requiring a licence to handle or disturb.

Orange/yellow coloration on underside extends to flanks (not confined to central stripe). This continues along lower edge of tail in females.



Juveniles are similar to females but without any cloacal swelling..

Alpine newt

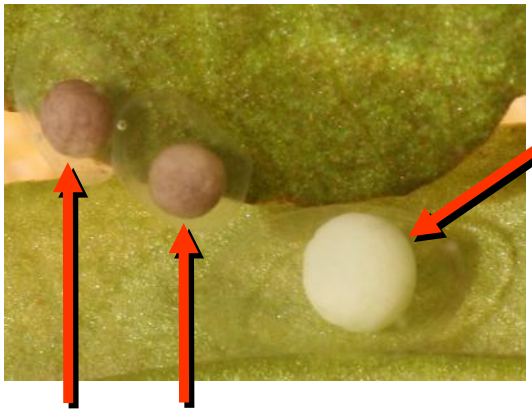
Adults 8-11 cm, females often much larger than males. A non-native species restricted to few sites, but becoming increasingly common. Most likely to be found in garden ponds, or ponds near to gardens.

Females have a marbled pattern on the back.

Underside is bright orange, without spots (although there may be black spots on the throat in some cases).

Newt eggs

Newt eggs are usually wrapped, singly, in vegetation. Leaves folded around great crested newt eggs are particularly conspicuous. To identify, unfold the leaf. Identification of undeveloped eggs is easiest.



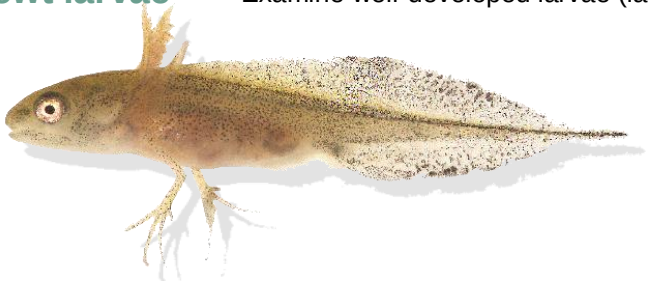
Great crested newt eggs are white, sometimes with a tint of green or orange (jelly capsule 5 mm).

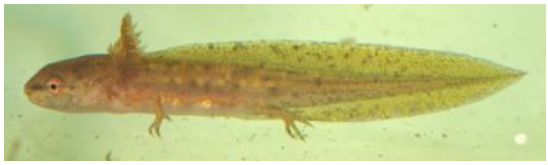
Eggs of smooth and palmate newts cannot be distinguished by eye, but they are smaller (jelly capsule 3 mm) than great crested newt eggs and are grey or beige when newly laid.

Several great crested newt eggs folded into a single blade of flote grass, giving a 'concertina' effect.

Newt larvae

Examine well-developed larvae (late May to July, or to August for great crested newts).





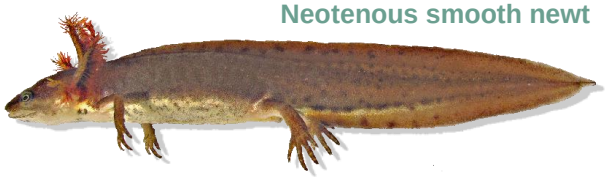
Great crested newt larvae (above) have long toes and blotches of dark pigmentation on tail fins. Grow to approximately 5 cm.

Palmate and smooth newt larvae (above) are indistinguishable in the field—but do not have the long toes or spotted tail fins of great crested newt larvae. Grow to approximately 3 cm.

Overwintering and neoteny

Young newts usually leave the water in late summer or autumn, although sometimes they remain as larvae over the winter (e.g. smooth newt, right).

Neotenous smooth newt



Exceptionally newt larvae grow to adult size, able to breed, but retaining their gills.

Further information Howard Inns (2009, reprinted 2011). *Britain's Reptiles and Amphibians*. WILDGuides.

Amphibian and Reptile Conservation & Fred Holmes (2014)

Additional photographs courtesy of Jon Cranfield, Ray Cranfield, Chris Gleed-Owen, Howard Inns, Mark Jones, Phyl King, Liam Russell, Duncan Sweeting and Rose Tichiner.

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