

# Reptile Identification

amphibian and reptile  
conservation



## Viviparous lizard

Adults 13-15 cm. Coloration and markings variable. Background colour generally brown.

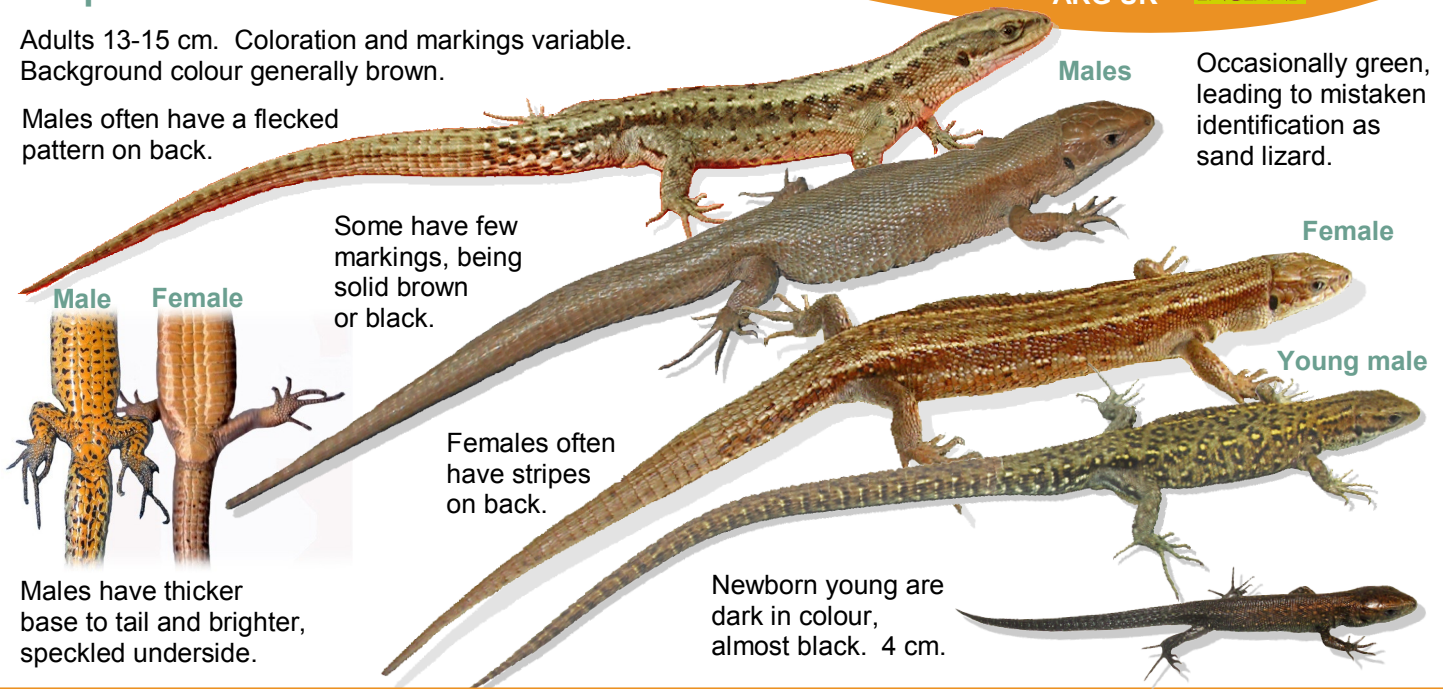
Males often have a flecked pattern on back.

Some have few markings, being solid brown or black.

Females often have stripes on back.

Males have thicker base to tail and brighter, speckled underside.

Newborn young are dark in colour, almost black. 4 cm.



Occasionally green, leading to mistaken identification as sand lizard.

## Sand lizard

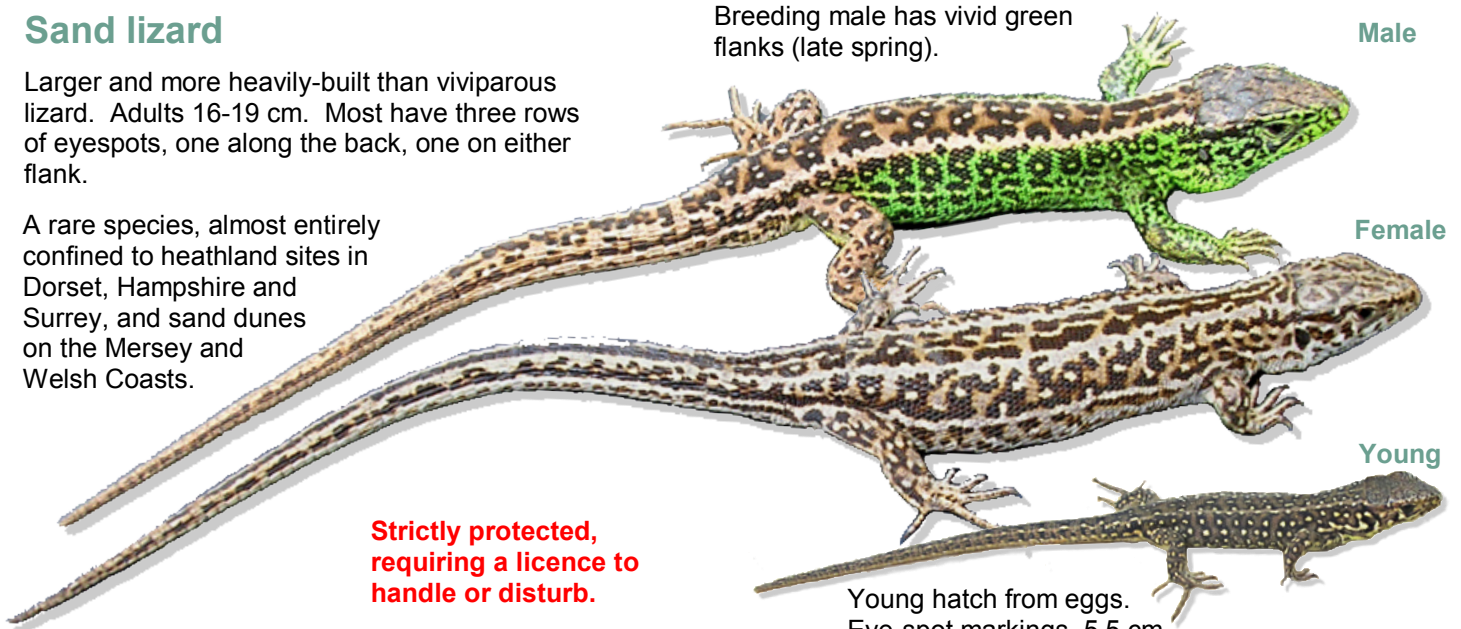
Larger and more heavily-built than viviparous lizard. Adults 16-19 cm. Most have three rows of eyespots, one along the back, one on either flank.

A rare species, almost entirely confined to heathland sites in Dorset, Hampshire and Surrey, and sand dunes on the Mersey and Welsh Coasts.

Breeding male has vivid green flanks (late spring).

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

Young hatch from eggs. Eye-spot markings. 5.5 cm.



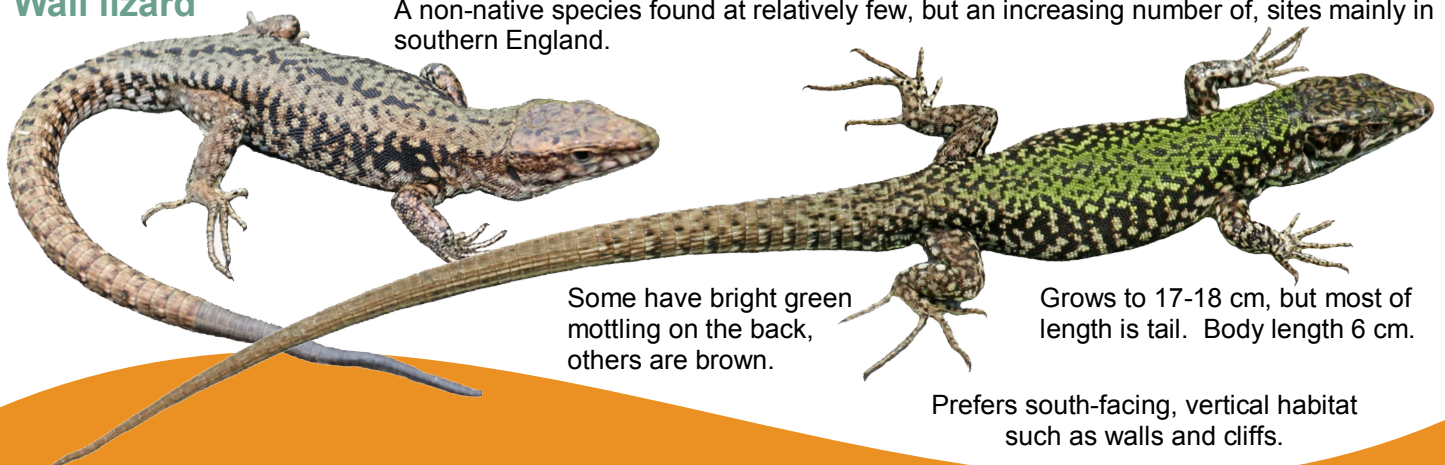
## Wall lizard

A non-native species found at relatively few, but an increasing number of, sites mainly in southern England.

Some have bright green mottling on the back, others are brown.

Grows to 17-18 cm, but most of length is tail. Body length 6 cm.

Prefers south-facing, vertical habitat such as walls and cliffs.

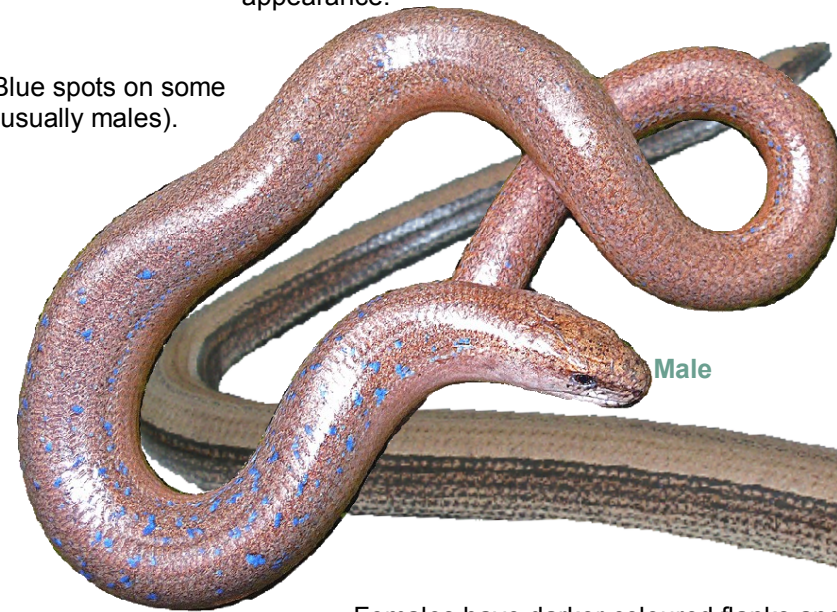




## Slow-worm

Adults 35-40 cm. Generally grey or brown, very rarely black. Small, shiny scales, giving a metallic appearance.

Blue spots on some (usually males).



Male

Female

Females have darker coloured flanks and often a black line running along the back.

The most common reptile in the UK, found in a variety of habitats, including gardens. Spends most of its time underground or in vegetation litter. Most likely to be found underneath objects lying on the ground, or in compost heaps.

Young have similar markings to the females, but better defined.



New-born 7-10 cm, usually with a black spot on the head.

## Grass snake

Adults 70-100 cm, occasionally some females growing larger.



Body colour ranges from bright green to dark olive, but mostly the latter. Darker specimens can appear black from a distance. Truly black grass snakes are rare.

Cream, yellow or white collar behind the head, bordered to the rear by black marks.

Most have black bars on the flanks, some also have black spots on the back.



May pretend to be dead as defensive behaviour.

Note chequered black markings on pale underside.



Eggs 2.5 cm long, in clutches of 10-40, usually stuck together. Several clutches may be laid together (usually in decomposing material such as a compost or manure heap).



Hatched egg shells. These are very persistent and may remain up to a year after hatching.

Hatchlings (here with 2p coin) 16-20 cm with similar markings to adults. Appear late August to September.





**Smooth snake** Grows to 45-55 cm, slender.

Males predominately brown, females grey. Dark butterfly shape on top of head. Pairs of spots, sometimes fused as bars, running along back. Black line running through eye.

Female



**Young** 14-16 cm, resemble adults but with better defined markings.



Male



Restricted to heathlands in Dorset, Hampshire and Surrey. **Strictly protected, requiring a licence to handle or disturb.**

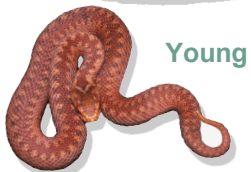
**Adder** A stocky snake, adults 40-70 cm.

Males typically grey with a black zigzag stripe, females generally brown with a dark brown zigzag stripe.

Female



Male



Young

New-born 16 cm. Some young are brick-red, others have similar coloration to adults.

Coloration is variable. Black adders are found in some areas.

Males often have a brown background colour in early spring.

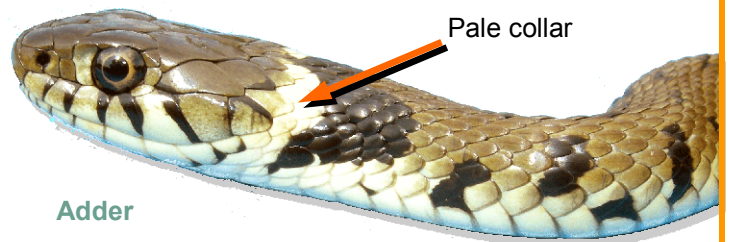
Wide distribution, but restricted to specific habitats (heathland, down, scrub, woodland edge and road, rail and flood defence embankments).

**Head profiles**

Slow-worm



Grass snake



Pale collar

Smooth snake



Line through eye

Adder



Vertical pupil



## Non-native snakes

Non-native grass snakes, with two yellow stripes along the back, are established in a few places.



Many species are kept as pets. Escaped or released snakes are occasionally encountered. Expert identification may be needed.



Milk snake

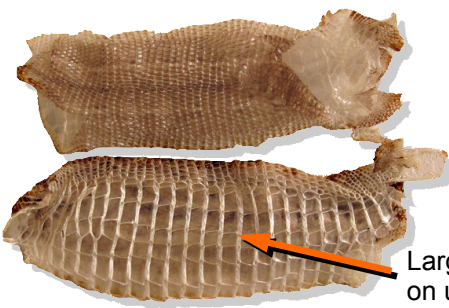
Corn snake

## Reptile sloughs

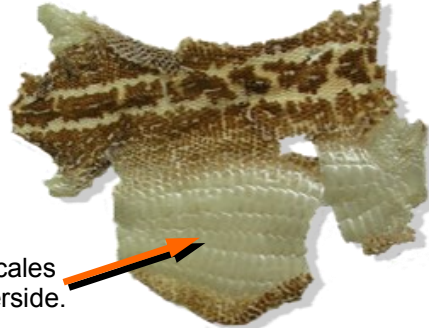
Reptiles periodically shed (slough) their skins, to allow for growth and to replace ageing tissue. The shed (sloughed) skins can be useful in identifying species.

### Lizards

Skin sloughed in fragments, often much smaller than shown here.



Large scales on underside.



### Slow-worm

Fragments of skin may be rolled up, like a removed sock.



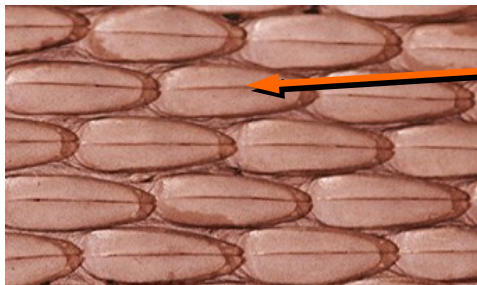
Uniformly sized scales on dorsal and ventral surfaces.

### Viviparous lizard (left) Sand lizard (right)

Dorsal (back) patterning evident. Small, bead-like scales on back. Large scales on ventral surface (underside) – but single scales not spanning the width of the body.

## Snakes

Large ventral scales spanning the width of the body.



### Grass snake

- Keel on dorsal scales.
- Divided anal/pre-anal scale.
- Large plates on head (e.g. behind eye).



### Adder

- Dorsal zigzag pattern usually visible, especially against a light background.
- Keel on dorsal scales.
- Large plates, but also small scales, on head (e.g. behind eye).
- Undivided anal/pre-anal scale.



### Smooth snake

- No obvious markings on slough and no keel on dorsal scales.



Grass snake



Adder

**Sexing snakes** Male snakes have relatively longer tails than do females – hence males have more ventral tail (sub-caudal) scales. These can be counted on sloughed skins.

#### Adder

Male	Female
32-46	24-38

#### Grass snake

Male	Female
61-73	49-64

#### Smooth snake

Male	Female
50-64	43-57

Source: Beebee, TJC and Griffiths, RA (2000). *Amphibians and Reptiles. A Natural History of the British Herpetofauna.* The New Naturalist Library.

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

### Amphibian and Reptile Conservation & Fred Holmes (2016)

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