



Moles in Gardens

Moles are found throughout lowland Britain and are widespread in Cornwall within suitable habitat. Rarely seen, most people will be more familiar with mole 'hills' rather than the creature itself and sadly more is known about trapping and killing moles than about their secretive, solitary lifestyle. In gardens and amenity areas the results of their tunnelling can be a significant nuisance. However, a little knowledge of the natural history of these subterranean creatures may help you understand some of the reasons moles visit gardens and can also be used to discourage unwanted activity.

Moles...did you know?

- Inhabit deciduous woodland, grassland and farmland - wherever suitable soil is deep enough for tunnelling and sufficient food is available.
- Spend almost all their lives underground in an extensive and complex system of tunnels, with spherical nest chambers used for sleeping and raising young.
- Remain active throughout the year, insulated from cold weather, with four-hourly cycles of activity and rest.
- Regularly patrol their tunnels collecting soil invertebrate prey; earthworms are the staple diet and an adult mole will eat 70-100% of its body weight per day!
- Specialised for a subterranean way of life with broad, spade-like forelimbs for digging and moving earth, short water-repellent fur, a highly sensory snout and an ability to survive with only a third of the oxygen available at the surface.
- Although not blind, their eyes are very small and hidden in fur, probably only useful to distinguish light and dark.
- Grow to a length of around 15cm and weigh approximately 70 to 130g.
- Highly territorial and tend to lead solitary lives, except for a brief spell in the mating season (February-March).
- Young, average of 4 in a litter, are born in the spring, weaned after one month and disperse soon afterwards.

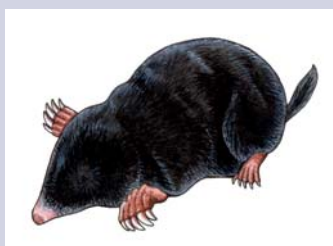


Illustration: Sarah McCartney

system. This will vary greatly in depth and extent depending on a number of factors such as soil type, height of the local water table and food availability. Surface tunnels are usually short-lived and occur where prey is concentrated just below the surface. More usual is a network of permanent deep burrows used repeatedly for feeding over long periods of time, sometimes by several generations. Moles may have to tunnel a little deeper during periods of cold weather or hot dry spells, when earthworms move further underground. In damper ground a large 'fortress' hill may be built containing nests, tunnels and food stores, which acts as a refuge in times of flooding.

A pain in the grass!

One mole can tunnel up to 20m per day and produce a considerable number of hills, particularly where food is in short supply. Moles in your garden are not harmful as such but this activity is understandably very frustrating if you're trying to maintain a neatly manicured lawn. In agriculture, mole hills can also damage farm machinery or contaminate grass used to make silage, and surface tunnelling may affect crop growth.



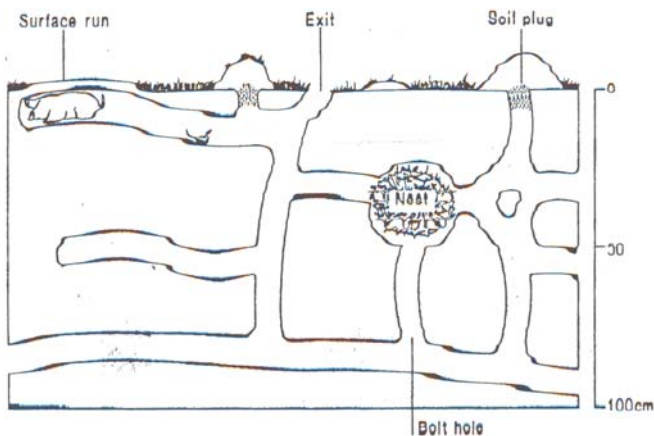
Mole hills. Photo: Tamara Weeks

Tunnelling activity

Moles are attracted to gardens because of their easily dug, light and well-drained soil, rich in organic matter, earthworms and insect larvae. Once a mole moves into an area it will tunnel out a series of runs, creating mounds of earth - mole hills - as it repairs and extends its tunnel

Making a mountain out of a mole hill?

Tunnelling activity usually only lasts for a few days while the mole completes its network of tunnels and chambers. After that there may be little evidence above ground of its presence. The only other occasions you may see mole hills are when the mole is doing repairs or during times when the soil is frozen or very dry and they have to dig a bit deeper to find food. Therefore as mole activity is largely a seasonal problem, tolerating a few mole hills may be all you have to do. Leaving moles undisturbed also means that they are less likely to dig new tunnels.



Schematic of mole tunnel system (Cornwall Wildlife Trust)

The gardeners' friend

In fact, moles can be beneficial, preying on many garden pests such as cockchafer, leatherjackets, cutworms, carrot fly larvae and slugs. Their tunnels help to drain and aerate heavy soils and mole hills also provide a source of good quality potting material, with each mound containing up to 5 litres of earth.

Problems facing moles

Moles were once trapped for their fur and have long been treated as pests by many farmers, landowners and gardeners. Many are also killed on the roads or caught by cats and dogs. Natural predators include foxes, rats, badgers, stoats, weasels and birds of prey.



Illustration: Sarah McCartney.

Discouraging moles

If you feel some form of action is necessary to discourage mole activity in your garden, several different methods have been suggested. However, be aware there is little evidence that any of these techniques work and trying to deter moles from an area they find attractive is likely to prove unsuccessful. The only safe haven for lovers of perfect lawns is Ireland as no moles live there at all!

- Noise or vibrations that are said to drive out moles include makeshift devices such as buried empty bottles or a child's toy windmill, although moles rapidly acclimatise to new sounds and are likely to return if the soil suits them.
- One method favoured by some is to place the faeces of a possible predator such as a cat or dog in one of the entrances to the tunnels, which may cause the mole to move away from that area.
- Try altering the management of some of your grassy areas by increasing the height and reducing the number of cuts, disguising mole runs and hills whilst also encouraging wildflowers and associated wildlife.



Wildflower meadow area. Photo: Nic Harrison-White

- Plants said to have mole repellent properties include caper spurge or 'mole plant' (*Euphorbia lathyris*), crown imperial (*Fritillaria imperialis*) and plants from the Allium family which includes garlic, onions, leeks and chives. Take care not to release non-native plants into the wider countryside.

Although moles can be legally poisoned or trapped by suitable professionals, neither method is very humane and are unlikely to prove effective. They are not really a long-term solution as the job will have to be repeated every year or so. Often a neighbouring mole will soon move into the vacated territory and even more mole hills may result as runs smelling of the old occupant are blocked off.

For further information and advice:

Wildlife Information Service
Environmental Records Centre for Cornwall
and the Isles of Scilly (ERCCIS)
Five Acres, Allet, Truro, Cornwall TR4 9DJ

Tel: (01872) 240777 ext 250
Email: wis@cornwallwildlifetrust.org.uk
Web: www.ercis.co.uk

Other useful contacts:

- The Mammal Society:
www.mammal.org.uk, tel: 02380 237874
- Cornwall Mammal Group:
www.cornwallmammalgroup.co.uk,
enquiries@cornwallmammalgroup.co.uk
- Natural England's Wildlife and Licensing
Service: www.naturalengland.org.uk,
tel: 0845 6014523

Get involved:

Submit your mole and other wildlife records
at www.ercis.co.uk/wildlife_recording

Become a member of Cornwall Wildlife
Trust at www.cornwallwildlifetrust.org.uk