

In warm weather, natterjack spawn hatches within a week and the tadpoles develop and metamorphose within two months. In good years, huge numbers of juveniles may emerge successfully. However, in dry years, water levels can drop rapidly resulting in mass mortality of the tadpoles. One successful year every two or three years is usually enough to maintain a population.



Natterjacks lay a string of black eggs

The young toadlets are only 10mm long when they first venture onto land, although the distinctive yellow stripe along the back is already visible. The juveniles grow rapidly, feeding on small insects, snails and spiders and are usually ready to breed after two years. Natterjack's eggs and tadpoles contain a noxious chemical that largely protects them from predation, but dragonfly and beetle larvae will eat them. Foxes, otters and herons occasionally eat adults, but if they escape predation, natterjacks can live to 6 or 7 years in the wild.

Where are they found?

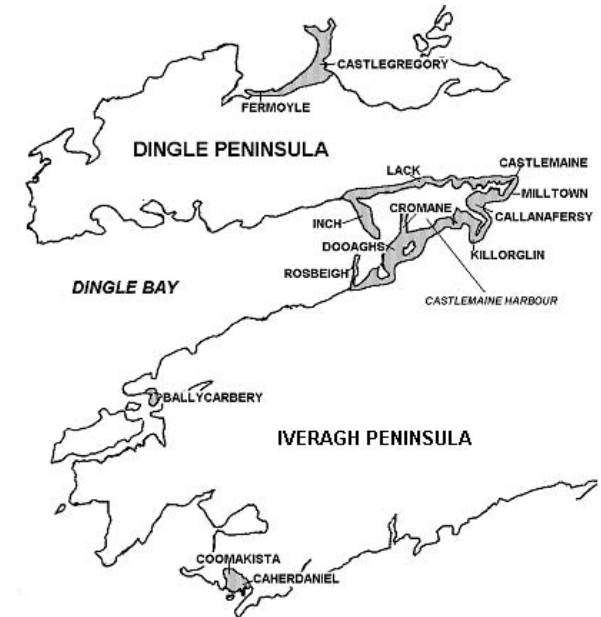
The natural range of the natterjack toad in Ireland is confined to a small number of coastal sites on the Dingle and Iveragh peninsulas in Co. Kerry. But it

was once more widespread in Kerry. There is evidence that during the period 1800-1970, the range of natterjack toads in Ireland decreased substantially (perhaps by half). The most significant loss in range occurred around Castlemaine Harbour. It seems clear from historic records that the species has previously been found right around this coastal strip.

The toad's range has not changed much since the 1970s. But despite the present stability, some toad populations are now isolated. Such isolation can lead to reduced genetic diversity, local inbreeding and, eventually, population extinctions. This can be avoided by establishing new networks of ponds in strategic areas to allow for migration between breeding sites. Some work to this end has already begun and both the National Parks and Wildlife Service (NPWS) and the Heritage Council have funded pond creation for natterjacks in recent years.

Young natterjacks are always on the look out for new breeding sites; new ponds, when carefully located and suitably designed, can be rapidly colonised by natterjacks.

Grazing around the ponds is vital to keep the grass low.



Historical distribution of Natterjack toad in Kerry

What do they need ?

Natterjacks breed in warm, shallow ponds that are relatively free of vegetation. Ponds that dry up in hot summers are ideal as they tend to support fewer predators (e.g. dragonfly and beetle larvae) of toad eggs and tadpoles.

The habitat around the pond is also important. Dense scrub or rank vegetation is not suitable; open areas of low sward provide ideal foraging areas for adult toads. Adults usually stay within 200m of breeding ponds, but are known to occasionally undertake migrations of 1km or more. Stone walls, old logs and piles of stones adjacent to ponds can provide valuable hiding and hibernating places for toads.

What can I do ?

The continued survival of the natterjack toad in Kerry is dependent on the local farming community. New ponds for the toads to breed in are essential. It is also vital that the land around these ponds is well grazed as the toads require a low sward to forage in and move through.



A new pond being dug for toads near Castlemaine

NPWS have worked with the Department of Agriculture and Food to develop a scheme to reinstate the natterjack toad around Castlemaine Harbour and along the coastal strip at Fermoy. In brief, the scheme will pay farmers to dig ponds and to maintain them, and the surrounding land, over the 5 years of their REPS plan. The scheme will be available to farmers entering REPS 4; farmers in REPS 3 may also apply to enter. A parallel measure within the NPWS farm plan process will also be available.

See *Details of the REPS 4 Toads Option* or contact your local conservation ranger or farm planner for further information.

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THE NATTERJACK TOAD – living on the edge

What is a Natterjack Toad ?

The natterjack toad is one of only three amphibians found in Ireland – the other two are the common frog and the smooth newt. Adult toads may grow to 80mm and although colour varies from pale green to black above there is always a yellow stripe down the middle of the back. Natterjacks are nocturnal and during the day they hide under logs and stones. Over



winter, natterjacks hibernate in burrows that they dig themselves in sandy soils, or in piles of rocks or dry-stone walls. It is normally mid-April before the natterjacks become active and the distinctive croaking of the male is heard at the breeding ponds. Toad spawn is laid as an egg string approximately 1.5m long; it may contain 2-3,000 eggs. This is wound around the aquatic vegetation in the shallows of the pond. The black embryos look like beads in a necklace.