## EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

## Citation for Special Area of Conservation (SAC)

Name: The Lizard Unitary Authority/County: Cornwall

**SAC status:** Designated on 1 April 2005

Grid reference: SW690174
SAC EU code: UK0012799
Area (ha): 3087.58

**Component SSSI:** Baulk Head to Mullion SSSI, Caerthillian to Kennack SSSI,

Coverack to Porthoustock SSSI, East Lizard Heathlands SSSI, Goonhilly Downs SSSI, Kennack to Coverack SSSI, Mullion

Cliffs to Predannack Cliff SSSI. West Lizard SSSI

## **Site description:**

The Lizard, at the extreme southern tip of England, has been selected for its unusual range of heathland vegetation types and associated habitats. The combination of its complex geology and a southern location has resulted in the diverse nature of the plants and plant communities found here, many of which are particularly species-rich and some of which are rare in the UK. The site includes a typical sequence of cliff vegetation, with a variety of truly maritime plants, which grades into grazed and ungrazed communities on exposed cliffs with dense red fescue *Festuca rubra* and wild asparagus *Asparagus officinalis* ssp. *prostratus*.

There are also transitions to heathland, normally dominated by heather *Calluna vulgaris* and bell heather *Erica cinerea*, though in addition the Lizard has extensive heath rich in the rare Cornish heath *Erica vagans*. This habitat occurs on poorly-drained soils derived from ultrabasic serpentine and gabbro. It contains unusual mixtures of species characteristic of acid soils growing with species typical of base-rich soils, ranging from cliff-top heaths rich in maritime species, such as spring squill *Scilla verna*, to more inland heaths containing abundant bristle bent *Agrostis curtisii*. More typical is the inland, dry heathland, sometimes called 'short heath'. These heathlands are dominated by heather and bell heather. Western gorse *Ulex gallii*, cross-leaved heath *Erica tetralix*, purple moor-grass *Molinia caerulea* and bristle bent can be locally dominant. Good stands of this vegetation type are found on extensive loess deposits.

The site supports a nationally unique series of oligo-mesotrophic (nutrient-poor to moderate nutrient status) waterbodies in which high base-status is, unusually, due to its igneous geology rather than limestone or shell-sand. The Lizard is partly underlain by igneous serpentine rock which gives rise to calcium-deficient ground waters that are rich in magnesium. Groundwater drains from adjoining wet and dry serpentine heaths to feed the oligo-mesotrophic waterbodies in which another unusual feature is the occurrence of stoneworts *Chara* species typical of calcareous lakes, together with species normally associated with acid conditions, such as bog pondweed *Potamogeton polygonifolius*.

There are widespread examples of the serpentine variant of Mediterranean temporary ponds on the Lizard heaths. A number of rare species, including chives *Allium schoenoprasum*, dwarf rush *Juncus capitatus* and land quillwort *Isoetes histrix*, occur in this habitat type. The acid pool type is the main locality on the Lizard for an important assemblage of rare species, including pigmy rush *Juncus pygmaeus*, three-lobed crowfoot *Ranunculus tripartitus* and



yellow centaury *Cicendia filiformis*. A number of these pools support important invertebrate populations, including the water beetles *Graptodytes flavipes* and *Dryops striatellus*.

**Qualifying habitats:** The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Dry Atlantic coastal heaths with Erica vagans. (Dry coastal heaths with Cornish heath)\*
- European dry heaths
- Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. (Calcium-rich nutrient-poor lakes, lochs and pools)
- Mediterranean temporary ponds\*
- Northern Atlantic wet heaths with *Erica tetralix*. (Wet heathland with cross-leaved heath)
- Vegetated sea cliffs of the Atlantic and Baltic coasts

Annex I priority habitats are denoted by an asterisk (\*).

This citation relates to a site entered in the Register of European Sites for Great Britain.

Register reference number: UK0012799

Date of registration: 14 June 2005

Signed: Trew Salam

On behalf of the Secretary of State for Environment,

Food and Rural Affairs

