County: Cornwall Site Name East Lizard Heathlands

District: Kerrier

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and

Countryside Act, 1981, as amended.

Local Planning Authority: Kerrier District Council

National Grid Reference: SW 775192 Area: 287.36 (ha) 710.07 (ac)

Ordnance Survey Sheet 1:50,000: 204 **1:10,000:** SW 71 NE, SW 72 SE

Date Notified (Under 1949 Act): 1951 Date of Last Revision: 1973, 1976

Date Notified (Under 1981 Act): 1981, 1986, Date of Last Revision: -

1988, 1995

Other Information:

The site is partly a Biogenetic Reserve. The site is a Nature Conservation Site. The site is in Cornwall Area of Outstanding Natural Beauty. The site is partly within the Lizard National Nature Reserve. The boundary has been amended by extensions and to amalgamate Crousa Downs, Polcoverack and Main Dale SSSIs. *These plants and insects are included in the Red Data Book listing of rare and endangered species.

Description and Reasons for Notification:

East Lizard Heathlands are situated in the east of the Lizard Peninsula, 1 km west of Coverack and 14 km south-east of Helston. The site is mainly underlain by gabbro, although a small area in the south-east lies at the boundary with serpentinite. The area is overlain by a complex of superficial deposits laid down in periglacial conditions associated with the last Ice Age. These comprise a fine windblown deposit (loess), quartzite pebbles (Crousa Gravels) and in places the surface is strewn with large gabbro boulders (Crusairs). Gabbro, a coarsely crystalline rock, weathers deeply to form base rich humic and stagnogley soils. Serpentinite forms shallower infertile cambic gley soils. The loess and Crousa Gravel deposits give more acidic, well drained soils. The unusual geology combined with the mild oceanic climate has led to the development of a unique flora and fauna. The heathland vegetation of the Lizard district is of international importance, this site protecting a large area of the remnant heathland on gabbro. The heathland supports the rare Cornish heather *Erica vagans*, a Red Data Book species (*) confined in the British Isles to the Lizard district and County Fermanagh in Northern Ireland.

The site supports a range of lowland heath communities with areas of willow carr and scrub. Two of the heathland communities 'Tall Heath' and 'Mixed Heath' are unique to the Lizard district in the British Isles. The heathlands are enclosed by hedges and ditches and traversed by a system of ancient cart tracks.

'Tall Heath' is found in flat, wet areas and is co-dominated by Cornish heath, black bog-rush *Schoenus nigricans* and purple moor-grass *Molinia caerulea* with frequent tormentil *Potentilla erecta*, saw-wort *Serratula tinctoria*, western gorse *Ulex gallii*, cross-leaved heath *Erica tetralix*, great burnet *Sanguisorba officinalis* and lousewort *Pedicularis sylvatica*. Wavy St John's-wort *Hypericum undulatum* has also been recorded in some stands of 'Tall Heath' on gabbro.

'Mixed Heath' dominates drier areas and comprises Cornish heath, gorse *Ulex europaeus*, western gorse and bell heather *Erica cinerea* along with betony *Stachys officinalis*, wild thyme *Thymus praecox* subsp. *arcticus*, tormentil and glaucous sedge *Carex flacca*.

Where the loess and Crousa Gravels overlie gabbro, the deeper, well drained soils support a more acidic 'Short Heath' community. This is characterised by heather *Calluna vulgaris*, bell heather, cross-leaved heath, western gorse, purple moor-grass and bristle bent *Agrostis curtisii*.

Areas of 'Short Heath' which have been disturbed in the past are now dominated by a 'Wet Heath' community. This comprises tussocks of purple moor-grass which support typical heath species including Cornish heath, cross-leaved heath, heather, lousewort, western gorse and tormentil. The wet hollows between the tussocks are characterised by creeping willow *Salix repens*, flea sedge *Carex pulicaris* and lesser spearwort *Ranunculus flammula*.

The ditches and streams of the area support wetland species including lesser water-parsnip *Berula erecta*, cuckoo flower *Cardamine pratensis* and water figwort *Scrophularia auriculata*. The ancient cart tracks provide excellent habitat for the rare pigmy rush *Juncus pygameus* (*) and the nationally scarce yellow centaury *Cicendia filiformis*.

The orchid flora is of particular note. Heath spotted-orchid *Dactylorhiza maculata* subsp. *ericetorum*, early marsh-orchid *Dactylorhiza incarnata*, lesser butterfly-orchid *Platanthera bifolia* and the fragrant orchid *Gymnadenia conopsea* are all commonly found. Two species of the butterwort family have also been recorded. The peaty soils in the south of Crousa Downs support pale butterwort *Pinguicula lusitanica* and common butterwort *Pinguicula vulgaris* at its only known location in Cornwall.

Great fen-sedge *Cladium mariscus*, a rare plant species in the south-west, is found in small populations scattered throughout the site, the largest stand being at Main Dale.

The gabbro Crusairs support many calcifuge bryophytes including *Grimmia trichophylla* and *Hedwigia ciliata* tussocks of *Breutelia chrysocoma* are found on peaty soils and *Scorpidium scorpioides* carpets large areas. In addition, the Lizard heathlands are a Grade II lichen site of the *Calluna/Erica vagans* type.

The site supports a large number of threatened invertebrate species. This includes the flies (Diptera) *Pherbellia argyra* (*) and *Platypalpus stabilis*. Main Dale supports a large population of butterflies and moths (Lepidoptera), with a strong breeding colony of the marsh fritillary butterfly *Eurodryas aurinia*. The nationally restricted moth *Glyphipterix schoenicollela* has also been recorded here.

The heathland and willow carr provide breeding and feeding sites for a wide range of birds including stonechat *Saxicola torquata*, kestrel *Falco tinnunculus*, buzzard *Buteo buteo* and barn owl *Tyto alba*. The area also provides winter hunting grounds for hen harrier *Circus cyaneus* and is important for the passage of migratory species.