Jerome Starkey
Countryside Correspondent

Half a dozen sika deer bounded down the hill, past the badgers' sett and through a thicket where the hedgehogs live, towards the stream that feeds Poole harbour, where otters and voles have made their homes.

Behind them, framed by limestone bluffs, stood the ruins of Corfe Castle where greater horseshoe bats roost in an old mill and brown hares box on the nearby common.

They share the Dorset heaths with rabbits, foxes, weasels, stoats and at least three different types of mice.

This swathe of land on the Isle of Purbeck has been identified as the most biodiverse place in Britain, with 44 of the 58 species that were included in the most comprehensive count of Britain's mammals since 1995.

The 10km square, which stretches from Wareham to the Arne peninsular and south towards the Jurassic coast is also home to severely threatened hazel dormice, water voles and serotine bats.

Among the species missing were the wildcat, which lives only in Scotland, the lesser white-toothed shrew, which lives in the Scilly Isles, and the greater mouse-eared bat, of which a single ringed male in West Sussex is the only known example.

The survey by the Mammal Society, University of Sussex and Centre for Ecology and Hydrology analysed more than 1.5 million mammal sightings from the past 22 years at the government's request. It found that a fifth of British species were facing a severe risk of extinction, but it also identified places where wildlife is thriving. Four of top the five squares for biodiversity, which were based on Ordnance Survey maps, were in Dorset. The fifth was near Farnham in Surrey.

Fiona Mathews, the report's author, said the southwest had a natural advantage because of its climate and topography—steep slopes and infertile soil — which had held the march of modern agriculture at bay.

Castle

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She said the Isle of Purbeck had also benefitted from a variety of different habitats, including heaths and ancient



woodland and a vast amount of land that is managed for conservation.

The RSPB owns four reserves inside the square, which cover 1,000 hectares. The National Trust owns almost 3,000 hectares, half of which are managed for conservation and half of which is let to nature friendly farmers. There is also a National Nature Reserve run by Natural England and a sixhectare site run by the Amphibian and Reptile Conservation Trust.

Professor Mathews said that this "landscape scale" conservation was essential if the government wanted to fulfil its promise to leave the environment in a better state than it found it. "We need expanses, not small pockets of land for nature," she said. "The great thing about the Dorset

is contiguous. There is a low population density, relatively few roads and because of its topography it has escaped the intensification of agricultural production that has hit elsewhere." It is not all good news. The sika deer are an invasive species that have pushed roe deer off the traditional range.

The same square is also one of the most biodiverse places for plants, with 1,517 species, according to the Botanical Society of Britain and Ireland. It is also

reptiles including smooth snakes and sand lizards, as well as the critically endangered ladybird spider, so threatened that the location of its colonies in south Dorset is a secret.

home to all six native