Appendix 12-F Reptiles

12-E.1 Introduction

Background

12-E.1.1 The reptile survey was undertaken by Ecological Survey & Assessment (ECOSA) and was carried out along the route of the proposed Bexhill-Hastings Link Road.

Objectives

12-E.1.2 At this stage of the planning process the aim of the survey was to provide an indication of the extent to which the Scheme is utilised by reptiles and highlight the areas in which they could be present.

Legislation

12-E.1.3 All of the common reptile species native to Britain (grass snakes, adders, common lizards and slow worms) are protected by the Wildlife & Countryside Act, 1981 (as amended). This legislation makes it illegal to intentionally kill or injure a common reptile. As a result, reptiles must be rescued from areas of development and relocated onto suitable release sites before any site works can commence. Further information on legislation is given in Appendix 11-2A of the ES.

12-E.2 Methods

Introduction

12-E.2.1 This section outlines the methodology used during the various surveys carried out during August and September 2005.

Method of Survey

12-E.2.2 A total of 242 refugia were placed throughout the survey area at suitable locations along the route of the Scheme. These refugia consisted of sheets of tin and roofing felt measuring approximately 50cm^2; these materials warm faster than the surrounding environment and reptiles, being 'cold' blooded, habitually use them to warm their bodies. The refugia were checked at regular intervals throughout the summer, each refugia being checked on approximately eight occasions. Any records of reptiles were recorded and marked on maps of the survey area. The refugia were only checked when the weather conditions were suitable for reptile activity; this is generally when conditions cooler and partly cloudy so that animals need to return to refugia to maintain their body temperature. Reptiles were also noted when seen away from the refugia. For ease of reference the records have been categorised and separated up into different sectors/sheet numbers.

Limitations

12-E.2.3 Access was limited in the western area of the Scheme due to lack of access permission to Glover's Farm.

12-E.2.4 Refugia were generally placed in areas that were considered suitable for supporting reptiles as a result small pockets of suitable habitat and larger areas of unsuitable habitat were not surveyed.

12-E.3 Results

Introduction

12-E.3.1 This section discusses the findings of the survey. Figure 11-6.1 shows the distribution of the refugia and the location of reptile refugia. Each sector along the Scheme is discussed separately.

Sector 1

12-E.3.2 Twenty two refugia were laid in this sector but there were no records of any reptiles.

Sector 2

12-E.3.3 A total of 25 refugia were laid in suitable accessible areas along the Scheme. On the 6th June 2005 a single common lizard (*Lacerta vivipara*) was located within the rush pasture to the north of Acton's Farm and a grass snake (*Natrix natrix*) was found in the same area on the 12th June 2005. A single female slow worm (*Anguis fragilis*) was found on the 30th September 2005 under one of five refugia just west of Acton's Farm.

Sector 3

12-E.3.4 A total of 93 refugia were laid in the area around Adam's Farm and along the line of the disused railway line. On the 23rd May 2005 2 adult male grass snake were seen around the pond to the north of Decoy Pond Wood. On the 26th May four grass snake were seen, one male, one female and two immature around the same pond. The only other record from this sector was of 2 female slow worm under refugia on the 8th September 2005.

Sector 4

12-E.3.5 A total of 74 refugia were laid within this sector, 59 of those to the west of the railway line on land belonging to Upper Wilting farm and 15 to the east of the railway line, between it and the B2092. Reptiles were found under the refugia just to the north west of the farm, one female slow worm and a juvenile common lizard on the 7th September 2005 and a juvenile slow worm on the 19th September 2005. Between the railway line and the B2092 a male common lizard

and two juvenile slow worms were found on the 8th September 2005, a further two slow worms, one juvenile, one female were found in the same area but under different refugia on the 30th September 2005.

12-E.4 Discussion

12-E.4.1 Numbers of reptiles across Scheme are generally low and patchily distributed. This is due to the generally isolated nature and small size of areas with suitable habitat. However, areas of the flood plain may have naturally low reptile populations due to winter flooding which would result in high mortality of over-wintering animals.

12-E.4.2 Guidelines developed (Table 12-F.1) suggest that sites that support three or more species of reptile or an exceptional population of a single species should be considered as a Key Reptile Site. Based on this criteria the area around the pond to the north of Decoy Pond Wood supports a good population of grass snake but that in all other areas population levels are Low.

Table 12-F.1 Evaluation Criteria Developed for Assessing Reptile Populations

	Low Population	Good Population	Exceptional Population
Grass snake	<5	5-10	>10
Common lizard	<5	5-10	>20
Slow worm	<5	5-20	>20

12-E.4.3 A small amount of additional survey work is recommended;

- The refugia from 2005 remain on site, the density of these should be increased in areas where reptile habitat is suitable but animals have not been recorded so as to confirm absence beyond reasonable doubt; and

- Where reptiles are present refugia density should be increased to confirm population size.

12-E.4.4 This would allow a suitable mitigation strategy to be devised. This is likely to involve localised translocation of animals from areas where presence has been confirmed and the provision of new habitat and habitat corridors linking areas of suitable habitat.