



## **Reptile Mitigation Strategy**

**FOR**

**FLAMBEAU EUROPLAST, THANET**

<b>Date of report</b>	19 <sup>th</sup> October 2023
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## 1.0 INTRODUCTION

- 1.1 Corylus Ecology has been commissioned by Flambeau EuroPlast Ltd to undertake surveys to determine the presence / likely absence of reptiles at Flambeau EuroPlast, Thanet, Kent, hereinafter referred to as 'the Site', in 2023. These surveys were carried out in relation to recommendations made in the *'Preliminary Ecological Appraisal Report (Corylus Ecology, April 2023)*.
- 1.2 The Site is set in an urban environment within Ramsgate, Kent, located 850m to the west of Ramsgate train station. The OS grid reference at Site centre is TR 36318 65546. The Site is divided into two district areas with the eastern section dominated by a large warehouse and hardstanding and the western sections dominated by colonising grassland, scrub and tall ruderal habitats. The total area of the Site is approximately 3.3ha. The wider surrounding area is dominated by urban development with industrial land and carparking to the west, Manston Road to the north and east and a railway line and housing to the south.
- 1.3 The proposals include the construction of up to 118 residential units with associated hard and soft landscaping to include new access routes. The details of the proposed development are shown in Figure 2 drawing 'CDP Architecture, proposed Site Plan OL\_TH\_0187.
- 1.4 All British reptiles are afforded legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This legislation is a consequence of a national decline in reptile numbers associated with habitat loss. Under the terms of the Act, it is illegal to intentionally kill or injure a reptile. To avoid committing an offence under the Act during development activities, mitigation methods include trapping and relocating reptiles to previously identified receptor sites, or retaining animals within the existing site whilst using exclusion fencing and habitat enhancement as appropriate. Mitigation for the more common British reptile species does not require a licence from Natural England.

## 2.0 BASELINE CONDITIONS

- 2.1 A seven-visit presence / likely absence survey was undertaken by Corylus Ecology between 19<sup>th</sup> July and 26<sup>th</sup> September 2023. This survey recorded a single species of reptile: common lizard *Zootoca vivipara*, see Appendix 1 for the full set of survey results.
- 2.2 Common lizards were recorded during three of seven visits with a peak count of **two adult and two juvenile** recorded on 22<sup>nd</sup> August 2023. The peak count of two equates to a 'Low' population of common lizard (HGBI, 1998). The results for the Development Area equate to a total score of one point under the Froglife Criteria and therefore the Site is not categorised as a Key Reptile Site.
- 2.3 To derive an indication of the size of the population which may be present, the proportion of the total population recorded during a standard presence/likely absence survey is suggested to be in the region of 10%. For the Site this would equate to approximately 20 common lizards across this Site. However, the heat trap density used during the survey was greater than the ten traps per hectare recommended by Froglife (1999): 24 heat traps in an area of 1.2ha is equivalent to 20 traps per hectare. It is therefore considered that a higher percentage of the common lizard population would have been detected during the seven survey visits, which puts the likely population estimate at a smaller number of individuals than 20.
- 2.4 The common lizards were recorded predominantly on the edges of the Site with adults only recorded under felts 03 at the north edge, 20 in the centre and 11, 12 and 15 at the south edge. It is likely that the area of waste ground to the north and railway embankment to the south adjacent to the Site have held onto the reptile population during the historic site working and clearance works. No reptiles were recorded within the eastern and western edges of the Site. Figure 1 shows the felt locations and reptile records.

### **Impacts**

- 2.5 The proposals for the Site will result in the clearance and loss of sections of the suitable habitat within the Site, with retained habitat situated along the northern and western boundaries of the Site. Therefore, a mitigation strategy is required that will include the relocation of reptiles from impacted areas of the Site to an on-site receptor.

### **On-Site Receptor site R1**

- 2.6 A Receptor Site has been identified and this is the dedicated receptor area that forms the northern and western boundaries of the Site. The proposed receptor area comprises suitable habitat for reptile in the form of unmanaged grassland and scrub and is known to support common lizards already, however in its current state it is overgrown with dense areas of scrub and trees scattered throughout which is sub-

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optimal for common lizard. There is good habitat connectivity between the receptor area and surrounding landscape to the north and south. The vegetated railway embankment along the southern boundary of the Site and area of scrubland to the north of the Site provide good habitat corridors for reptiles moving from the receptor area to other areas of suitable habitat in the wider landscape.

- 2.7 The receptor site R1 will be 2030m<sup>2</sup> (0.2ha) in total size and forms the northern and western boundaries of the Site (Figure 2). This area is part of the red line development boundary and is under the same land ownership as the development. The receptor site will not be publicly accessible and suitably protected from disturbance by barriers such as fencing to prevent degradation to the area. Access will be made for management purposes.

### 3.0 REPTILE MITIGATION STRATEGY

- 3.1 From this point on the reptile habitats will be referred to as two separate areas: the 'development site' refers to the southeastern section of the development Site at Flambeua Europlast (0.79ha) where reptiles were recorded and the 'receptor site R1' (0.2ha) which will be the area forming the northern and western boundary of the Site (Figure 2) into which the reptile population will be relocated to and retained.
- 3.2 All grassland and colonising scrub habitats within the development site should be maintained with a regular management regime within the Site and continued up to the point of commencement of Site works. This management should be implemented to avoid the habitats within the development Site becoming more suitable for reptiles. It is recommended that the sward height be maintained at 150mm or less.

#### *Mitigation*

- 3.3 No works on site shall commence until the development area has been cleared of reptiles. Minor works will need to be discussed and approved by the project ecologist. The mitigation plan will require the following stages:

1. Enhancement and Preparation of Receptor Site
2. Installation of reptile fence
3. Relocation of Reptiles from Development Area to Receptor Site
4. Destructive Search of Development Site
5. Post-construction Monitoring
6. Post-construction Management

#### *Receptor site preparation*

- 3.4 The proposed receptor site is currently dominated by denser areas of scrub and introduced shrubs and is becoming sub-optimal for use by common lizards with the edges being the most suitable currently.
- 3.5 The receptor area will need to be enhanced and this will include management of the scrub to create a more diverse structure or habitats with open areas for reptiles to bask in. Three areas will be cut back to open up these areas for reptiles, labelled Area 1, 2 and 3 on Figure 2, and tussocky grassland will be allowed to establish; this may involve reseeding using EM10 Tussock Mixture. The scrub will be cut in the reptile active months (April – October) and involve the vegetation being cut using hand-tools only until reduced to a height of 150mm. Recommendations and precautionary measures in relation to breeding birds in the areas of scrub to be cut have been provided in paragraph 3.6. The receptor area will also be enhanced with log piles to support reptiles relocated from the development site, including four log piles to be created and placed within the receptor site (see Figure 2).

Log piles –Each log pile should be secured with stakes to prevent piles from collapsing, and also secured with wire to prevent removal or dismantling. These log piles will create summer refuge. Four log piles will be created.

Future management of this area should involve infrequent management of a yearly cut of the grassland in August/September, to a height no lower than 150mm, using hand tools only.

It is best to undertake all vegetation works in warm conditions so that animals can move out of harm's way.

### **Development Site Mitigation Works**

1. *Prepare development site for reptile relocation*

The development Site will be managed up until the relocation works begin, with vegetation being kept to a height no greater than 150mm by cutting it across the Site, to aid in the trapping and to prevent further habitat from establishing.

2. *Development Site Installation of Reptile Fencing*

Herptile semi-permanent reptile fencing will be installed around the northern, western and southern perimeter of the Development Site to prevent reptiles from entering into the Development Site from the surrounding habitats, as well as the receptor site. The fence will be left in place until development works are complete. The fencing contractor will be supervised by an ecologist during the installation of the fencing.

Any damage to exclusion fencing will be repaired by the contractor immediately to make sure the integrity of the fence is maintained.

3. *Reptile Relocation*

Reptile refugia/heat traps will be laid across the development Site. This will include a range of refuge types, including roofing felt and corrugated iron. Refugia will be a minimum of 0.5m x 1m.

Heat traps will be allowed to 'bed in' for around five days. Following HGBI Guidance a minimum of 60 trapping sessions are recommended for a 'Low' and common lizard population. However, considering the small area to be trapped and the high likelihood that greater than 10% of the population was noted during the presence/likely absence survey, 60 trapping sessions is considered excessive for a site measuring 0.79ha and where a proportion of the population will be retained in situ within the receptor area.



Therefore 45 trapping sessions are proposed; a review will be made at 30 trapping sessions to determine if 45 trapping sessions are required. If no animals are caught during five consecutive sessions during the trapping exercise, the relocation may be able to finish early. If reptiles are still being captured after 45 sessions, then the trapping will continue until five days of zero captures in good weather has been achieved.

During the relocation, details regarding the numbers of animals and their gender will be recorded along with sightings of un-captured reptiles. The captures will be plotted on a graph over time to demonstrate that a reasonable majority of animals (95%) have been removed from the development area (HGBI, 1998).

The relocation will involve capturing animals by hand which are using the artificial refugia (tins and mats) to thermoregulate. Visits will be undertaken in the early morning and/or late afternoon, and in suitable weather conditions conducive to capturing reptiles, for example, when there are intermittent showers and sunny spells. Trapping in periods of prolonged wet, or hot, dry weather will be deemed unsuitable for site visits.

Animals will be moved from the Development Site to the Receptor Site and released there on the same day as they are captured.

It should be noted that there may be a requirement to clear vegetation in the Development Site during the trapping exercise to aid in the capture of reptiles. Should this be required then the clearance contractor will be directed by the project ecologist. However, any clearance required during the trapping will be limited to hand tools only.

#### 4. *Conduct a destructive search of the development site*

Once the trapping sessions have been completed, a destructive search will be undertaken within the development site. This will involve an ecologist supervising a 360° excavator machine with a toothed bucket (minimum 13 tonnes) to clear the development site of all remaining vegetation with any remaining reptiles which are found being moved to the receptor site. Other animals, such as amphibians or small mammals, will also be moved to safety during this process. Once the Site has been cleared, development can commence. The herptile fencing will remain in place for the duration of the development works and will be protected by the installing of heras fencing from construction works.

Any spoil piles including brick rubble and compost heaps/grass cuttings will be removed by hand under supervision of the project ecologist.

## 5. *Monitoring*

Post-relocation monitoring is proposed and should take place one-year post-development to monitor the success of the relocation exercise. This should cover spring and autumn periods to check that the mitigation has been successful and to ensure that the management of the receptor is working. The monitoring will involve seven checks, as per the presence/absence surveys. The results of the monitoring may be fed back into the management strategy (if revisions to it are considered necessary) and any feedback will be given to the developer/site managers.

## 6. *Management*

Due to the overgrown nature of the receptor site, scrub, introduced shrub and vegetation clearance has been recommended prior to the relocation exercise. In the first 5 years post creation areas 1, 2 and 3 within the receptor area will be checked for re-growth of bramble scrub and/or introduced shrub and where necessary appropriate management of the vegetation will be carried out. This management will include cutting of the grassland and scrub to no lower than 150mm, using hand tools only; this will prevent woody species establishing whilst retaining grassland habitats. It is best to undertake this work in warm conditions (above 15°C) to so that animals can move out of harm's way. All arisings can be used to create or supplement compost heaps within the receptor area; these should be located in shaded areas. If necessary over-seeding of the EM10 seed mix may be required.

**Biodiversity enhancements** – Four log piles will have been installed in the receptor site prior to the relocation exercise beginning. It is considered that these enhancements will be sufficient to increase the carrying capacity of the receptor site and maintain it into the future in order to secure the long-term viability of the reptile populations.

## 7. *Timings*

The timescale for the mitigation work below is a guideline as the construction timeframe is currently unknown. However, the work will need to be undertaken within the seasons specified, allowing for weather conditions:

- Receptor site preparation – Between 1<sup>st</sup> October – 1<sup>st</sup> March to avoid breeding bird period. But can be undertaken outside this under ecological supervision/checks.
- Exclusion fence installation – 1<sup>st</sup> March – 1<sup>st</sup> November inclusive under suitable weather conditions
- Reptile relocation – on completion of receptor site preparation and installation of exclusion fencing. Relocation cannot be undertaken during the winter and may be hindered during hot summer days thereby restricting relocation to March – June and/or September to October

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- Destructive search – also to take place March – June and/or September to October
  - Site clearance – To be undertaken on conclusion of destructive search.

#### *Birds*

- 3.6 The Site and receptor area supports suitable habitat for nesting birds in the dense bramble scrub and introduced shrubs. All wild birds, including eggs and chicks, are protected against injury or killing and their nests are protected against damage or destruction when in use under the Wildlife Countryside Act (1981). It is recommended that any vegetation clearance works are undertaken outside of the bird breeding season, avoiding the period March – September inclusive. If these dates do not coincide with clearance works, then it is recommended that the structure or vegetation is checked by a suitably experience ecologist before the works commence, and if breeding birds are found then works zones will be created and the vegetation clearance will be undertaken in a different area located at a suitable distance from the nest to reduce any impact of noise and disturbance.

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#### **4.0 CONCLUSIONS**

- 4.1 A presence / likely absence survey for reptiles was undertaken at Flambeau Europlast, Thanet in Kent in 2023. A peak count of two common lizards was recorded: this equates to a 'Low' population and does not qualify as Key Reptile Site.
- 4.2 To facilitate the development of the Site, a reptile mitigation strategy has been devised. This involves the relocation of the population of common lizards to an onsite receptor adjacent to the Site's northern and western boundary, as shown in Figure 2. The receptor site will be enhanced for common lizards and this will include habitat management and installation of log piles. Once these works are complete, a period of trapping reptiles from the development site will be undertaken, after which a destructive search will be carried out to clear the site of vegetation and refugia. An ongoing management strategy for the receptor site is in place and monitoring will take place for one year post-relocation.

## References

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Corylus Ecology May 23023 23044 *Flambeau Europlast, Thanet\_EcologyReport\_May2023\_v1\_final*



- Key
- Site Survey Area
  - 15 Reptile Felt 15 Location
  - 15 Common lizard recorded
  - Tree
  - Dense Scrub
  - Scattered Scrub
  - Tall Ruderal
  - A Amenity Grassland
  - Ephemeral
  - Species Poor Hedge
  - Fence
  - Building
  - Hard Standing
  - Bare Ground
  - TN1 Target Note 1

revision	description	date	checked by

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Project:  
23044 Flambeau EuroPlast, Thanet

Title:  
Reptile Survey Plan

status		drawing no. <b>Figure 1</b>		
scale	size	date	drawn	checked
NTS	A3	12.10.2023	AW	BW

CAD filename:  
Figure\_1.dwg

Figure 2 - Reptile Mitigation Plan



Proposed Site Plan 1:500

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1:500 scale bar  
 0m 10m 20m 30m 40m  
 CDP original printed to scale. Prints from PDF's could distort

Flambeau Europlast Ltd

Appendix 1

Reptile Survey Results

Site Name: Flambeau Europlast

Date set up: 12/07/2023

Visit no	Date	Initials	Species	Common lizard	Slow worm	Grass Snake	Adder	Weather conditions		Other findings
1	19/07/2023	AW	Male					Time	16:00	2 adult common lizards under felts 03 and 20
			Female					Temperature	16	
			Adult Unknown	2				Cloud cover %	20	
			Sub					Rain	0	
			Juv	0				Wind	1	
			TOTAL	2	0	0	0			
PEAK	2	0	0	0						
2	22/08/2023	AW	Male					Time	10:30	2 adult common lizards under felts 03 and 20 and 2 Juvenile common lizards under felt 11.
			Female					Temperature	19	
			Adult Unknown	2				Cloud cover %	10	
			Sub					Rain	0	
			Juv	2				Wind	1	
			TOTAL	4	0	0	0			
PEAK	2	0	0	0						
3	30/08/2023	EW	Male					Time	10:00	Adult common lizard at 12. Juvenile common lizard at 15. Both sightings near railway line area.
			Female					Temperature	15	
			Adult Unknown	1				Cloud cover %	50	
			Sub					Rain	0	
			Juv	1				Wind	3	
			TOTAL	2	0	0	0			
PEAK	1	0	0	0						
4	05/09/2023	EW	Male					Time	10:26	No animals found
			Female					Temperature	19	
			Adult Unknown					Cloud cover %	10	
			Sub					Rain	0	
			Juv					Wind	1	
			TOTAL	0	0	0	0			
PEAK	0	0	0	0						
5	15/09/2023	EW	Male					Time	10:15	No animals found
			Female					Temperature	18	
			Adult Unknown					Cloud cover %	10	
			Sub					Rain	0	
			Juv					Wind	1	
			TOTAL	0	0	0	0			
PEAK	0	0	0	0						
6	20/09/2023	EW	Male					Time	11:22	No animals found
			Female					Temperature	18	
			Adult Unknown					Cloud cover %	90	
			Sub					Rain	0	
			Juv					Wind	4	
			TOTAL	0	0	0	0			
PEAK	0	0	0	0						
7	26/09/2023	EW	Male					Time	10:25	No animals found
			Female					Temperature	18	
			Adult Unknown					Cloud cover %	100	
			Sub					Rain	0	
			Juv					Wind	0	
			TOTAL	0	0	0	0			
PEAK	0	0	0	0						



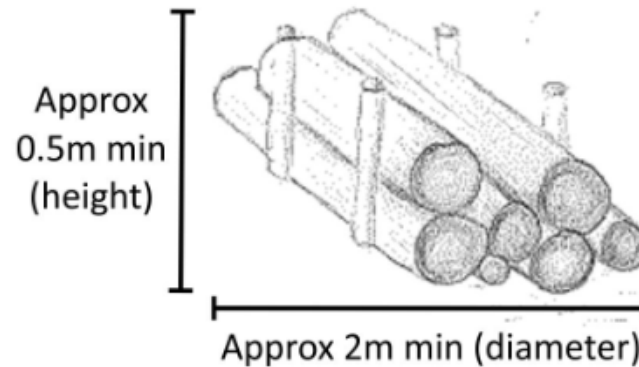
## **Appendix 2 – Reptile Legislation**

All British reptiles are afforded legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) largely as a consequence of a national decline in numbers due to habitat loss. Under the terms of the Act, it is an offence to intentionally kill or injure a reptile and accordingly in order to avoid committing an offence under the Act, appropriate mitigation techniques need to be incorporated for reptiles occurring within development sites. Mitigation methods for reptiles may include trapping and relocation of animals to a suitable receptor site, combined with the exclusion of the development site through the use of reptile fencing. Measures to enhance habitats for reptiles include the provision of hibernacula and appropriate management to improve foraging areas may also be required.

Mitigation for the more common British reptiles and amphibians does not require a licence from Natural England but would typically be agreed in consultation with the local planning authority.

Despite the range of their distribution and the diversity of habitats in which they may be found, the national status of the slow worm is not considered favourable. The slow worm is considered to have undergone a long term decline since the 1930's. Currently the largest threat has been identified as loss of habitat, in particular, due to a shift in planning policy towards the development of brown field sites (English Nature, 2004).

### Reptile Refuge (Log Pile)



Refugia are designed to provide sheltering opportunities for reptiles. Dimensions should measure a minimum of approximately 2m in diameter x 0.5m height. Refugia can be created from wood or brush piles, and should ideally be positioned across a site in areas of suitable terrestrial habitat.

The wood pile illustrated above is created by sinking 4 posts approximately 8-10cm in diameter, at least 20cm into the ground. Logs with bark, of any diameter, should be cut into consistent lengths of 2m and then tightly and nearly stacked into the space between the uprights. The log piles should not be made too high, or the timber may dry out.