

**MILL RYTHE HOLIDAY VILLAGE
HAYLING ISLAND, HAMPSHIRE**

REPTILE SURVEY

A Report to: Avison Young

Report No: RT-MME-153231-02

Date: November 2020



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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development".

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	12/11/2020	Stephanie Bradbury BSc (Hons) (Senior Ecological Consultant) and Hannah Train GradCIEEM (Senior Ecological Consultant)	Tim Hextell MCIEEM (Principal Technical Ecological Consultant)	Tom Docker CEcol MCIEEM (Managing Director)

The information which we have prepared is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

VALIDITY OF DATA

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, it may be necessary to undertake an updated survey to assess any changes in the status of reptile species on site, and to inform a review of the conclusions and recommendations made.

NON-TECHNICAL SUMMARY

In August 2020, Avison Young commissioned Middlemarch Environmental Ltd to undertake a Reptile Survey at the site of a proposed development at Mill Rythe Holiday Village in Hayling Island, Hampshire.

Middlemarch Environmental Ltd previously completed a suite of ecological surveys and assessments at the site in 2016 and 2017 to inform a planning application associated with the refurbishment of the wider site. Permission for the development was granted by Havant Borough Council in May 2017 (Application Number: APP/16/01237), after which Middlemarch Environmental Ltd prepared a number of documents to discharge various planning conditions. It is now understood that a new planning application is to be submitted to seek to vary the development commenced under APP/16/01237. The proposal relates to three separate red-line areas within the site, although the amendments are submitted under one application and should be viewed as a variation of the existing permission. A suite of updated ecological survey and assessment work is required to support this new planning application.

The western half of the site is dominated by the existing Mill Rythe Holiday Village, encompassing a number of self-catering accommodation units and associated leisure facilities. This part of the site is deemed to be largely unsuitable for reptiles. The eastern half of the site is dominated by a former pitch and putt golf course, comprising a mosaic of grassland, scattered blocks of scrub and tall ruderal vegetation. This portion of the site provides some basking, foraging and refuge opportunities for reptiles. The eastern half of the survey area, considered to be the most suitable for reptiles, is directly connected to further areas of suitable habitat, comprising mosaics of scrub, intertidal habitats, coastal grassland and rough grassland.

The presence/absence survey undertaken at the site identified the presence of low populations of common lizard (peak count of two adults) and slow worm (peak count of one adult) within the eastern portion of the site. The site does not meet the criteria to be classed as a Key Reptile Site.

The proposed development will result in the loss of some habitat which supports the low populations of common lizard and slow worm. In addition, site preparation and clearance works have the potential to result in the killing or injury of individual reptiles. In order to ensure that the proposed development does not result in a breach of wildlife legislation, and that the favourable conservation statuses of the reptile populations within the survey area are maintained, the following recommendations are made:

- R1** A Reptile Mitigation Strategy should be compiled. This strategy will detail how the works will proceed without breaching wildlife legislation, and will ensure that:
- Reptiles will be protected from harm that might arise during development work; and,
 - Sufficient quality, quantity and connectivity of habitat is provided to accommodate the reptile population, either on-site or at an alternate site, with no net loss of favourable conservation status.

The scope of the Reptile Mitigation Strategy should be agreed with the local authority ecologist prior to any works commencing.

The Reptile Mitigation Strategy can be prepared as a standalone report, or incorporated into an Ecological Mitigation Strategy (EMS).

Middlemarch Environmental Ltd has been instructed to prepare an EMS (Report RT-MME-153231-03).

- R2** Should development works not have commenced by April 2022, an updated assessment should be undertaken to record any changes in the status of the reptile populations at the site.

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1. INTRODUCTION

1.1 PROJECT DESCRIPTION

In August 2020, Avison Young commissioned Middlemarch Environmental Ltd to undertake a Reptile Survey the site of a proposed development at Mill Rythe Holiday Village in Hayling Island, Hampshire.

Middlemarch Environmental Ltd previously completed the following assessments at the site in 2016 and 2017 to inform a planning application associated with the refurbishment of the wider site:

- Preliminary Ecological Appraisal (Report RT-MME-123420-01);
- Preliminary Roost Assessment (Report RT-MME-123420-02); and,
- Endoscope Bat Survey (Report RT-MME-124714-Rev A).

Due to the proximity of the site to Chichester and Langstone Harbours Ramsar wetland and Special Protection Area (SPA), Solent Maritime Special Area of Conservation (SAC), Solent and Isle of Wight Lagoons SAC, and Portsmouth Harbour Ramsar wetland and SPA, Middlemarch Environmental Ltd also completed a Habitat Regulations Assessment: Stage 1 Screening Report (RT-MME-123420-06-Rev C) in 2017.

Permission for the development was granted by Havant Borough Council in May 2017 (Application Number: APP/16/01237). Middlemarch Environmental Ltd subsequently prepared a Construction Ecological Management Plan (CEcMP, Report RT-MME-125561-01) and a Landscape and Ecological Management Plan (LEMP, Report RT-MME-125561-02 Rev B) in order to discharge two conditions of the planning permission.

It is now understood that a new planning application is to be submitted to seek to vary the development commenced under APP/16/01237, to allow for further redevelopment of the holiday site, including the demolition of redundant chalets, siting of new caravans and creation of a wildlife area within the former pitch and putt golf course located in the eastern part of the site. The proposal relates to three separate red-line areas within the site, although the amendments are submitted under one application and should be viewed as a variation of the existing permission. A suite of updated ecological survey and assessment work is required to support the planning application.

In addition to the Reptile Survey, Middlemarch Environmental Ltd has completed a Preliminary Ecological Appraisal (Report RT-MME-153231-01) and Bat Surveys (Report RT-MME-153320) at the site in 2020.

Middlemarch Environmental Ltd has also been commissioned to prepare an Ecological Mitigation Strategy (Report RT-MME-153231-03) and an updated Shadow Habitat Regulations Assessment: Stage 1 Screening and Stage 2 Appropriate Assessment (Report RT-MME-153231-04), the latter of which is to be informed by Winter Bird Surveys.

All native reptile species receive protection under UK law and are capable of being material considerations in the planning process. Further information about the legislation that protects reptile species is provided in Appendix 1.

1.2 DEVELOPMENT SITE DESCRIPTION AND CONTEXT

The site comprises an irregular parcel of land approximately 13 ha in size, located on the eastern coast of Hayling Island, centred at National Grid Reference SU 7292 0061. The site effectively divides into two discrete areas. The western half of the site is dominated by the existing Mill Rythe Holiday Village, encompassing a number of self-catering accommodation units and associated leisure facilities. At the time of the survey, the site included approximately 50 buildings, tennis courts, structured play areas, bowling green, swimming pool, boating lake, car parking, access roads and associated hard and soft landscaping, the latter including extensive areas of formal mown grassland. The eastern half of the site is dominated by a former pitch and putt golf course of just over 2.5 ha in extent which is no longer in use and has developed a ranker sward with scattered blocks of scrub and tall ruderal vegetation. In the north-east corner of the former pitch and putt course is a large triangular lake.

Bordering the site to the north and east are a range of intertidal habitats separated from the surveyed areas by sea defences frequently occupied by dense scrub. To the south is Tournembury Golf Course and to the

west are a series of medium-scale fields occupied by rough grazed pasture and arable crops delineated by well-timbered boundaries.

The site is adjacent to a number of statutory designated sites including Chichester and Langstone Harbours Ramsar wetland, Site of Special Scientific Interest and Special Protection Area and Solent Maritime Special Area of Conservation. These sites form large estuarine systems comprising habitats such as mud and sand flats and salt meadows.

1.3 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author
3877-410 Rev R / Proposed Site Plan	A&M Architectural Partnership LLP

Table 1.1: Documentation Provided by Client

2. METHODOLOGIES

2.1 DESK STUDY

As part of the Preliminary Ecological Appraisal (Report RT-MME-153231-01) an ecological desk study (which included a search for records of reptiles) was undertaken within a 2 km radius of the site. The consultee for the desk study was Hampshire Biodiversity Information Centre.

Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by this organisation. Relevant reptile data are discussed in Chapter 3. In compliance with the terms and conditions relating to its commercial use, the full desk study data are not provided within this report.

2.2 SITE SUITABILITY ASSESSMENT

An assessment of the suitability of the site to support reptile species was undertaken, based on a review of habitat characteristics and other parameters known to influence reptile distribution. The following parameters were considered:

- Location of site in relation to species range of native reptiles;
- Site management and disturbance;
- Topography and aspect of site;
- Vegetation type and structure;
- Likely prey abundance;
- Presence of refugia and potential hibernation habitat;
- Egg-laying site potential (grass snake and sand lizard only); and,
- Connectivity to surrounding habitat of potential value to reptiles.

The suitability assessment was used to design the route of survey transects for the presence/absence survey (see Section 2.3).

2.3 PRESENCE/ABSENCE SURVEY

A presence/absence survey for reptiles was undertaken in accordance with the best practice methodology detailed in the Herpetofauna Workers Manual (Gent and Gibson, 2003). This consisted of the following works:

- An initial assessment of the potential reptile habitat characteristics was undertaken, in order to identify features and habitats of potential value to reptile species.
- Survey transects through the site were identified to ensure all suitable habitats were covered by the survey.
- Checks of any natural refugia present within the survey area, such as log piles or rubble piles, were undertaken.
- A series of artificial refugia were installed within the site to facilitate detection of reptiles (further detailed below).
- Seven survey visits to the site were undertaken to inspect natural and artificial refugia in suitable weather conditions.

100 artificial survey refugia were installed within the site during the first survey visit. These refugia consisted of squares of roofing felt approximately 500 mm x 500 mm.

Reptiles are ectotherms, deriving their body heat from the external environment. Therefore, the timing of the survey visits was dictated by the time of year and weather conditions. Where possible, surveys were undertaken on warm sunny days with little cloud cover and wind to maximise the probability of recording reptiles within the site. Suitable weather conditions for undertaking refugia checks are outlined in the Herpetofauna Workers Manual, and are summarised in Table 2.1.

Parameter	Value
Temperature	9 - 17° C
Sunshine	Preferable
Cloud	Little or None
Wind	Low/None

Table 2.1: Suitable Weather Conditions for Reptile Surveys

2.4 ASSESSMENT OF SITE IMPORTANCE FOR REPTILES

Current best practice guidance recognises that undertaking detailed population assessments for reptile species is difficult, as the number of survey visits required to give an accurate assessment is prohibitive for the majority of projects.

It is desirable, however, to attempt to judge the overall importance of the survey site for reptiles. In order to provide a basic assessment of site importance, the results of the survey were analysed in the context of Froglife Advice Sheet 10 - Survey Assessment: Key Reptile Sites (Froglife, 1999). This provides a simple methodology for assessing the value of a site to reptile species, based upon the number of species recorded on site and the peak adult count for each species per hectare, when refugia are installed at a density of up to 10 per hectare.

The guidelines for assessing the value of the site to reptile species are summarised in Table 2.2.

Reptile Species	Low Population Score 1	Good Population Score 2	Exceptional Population Score 3
Adder	<5 individuals/ha	5-10 individuals/ha	>10 individuals/ha
Grass snake	<5 individuals/ha	5-10 individuals/ha	>10 individuals/ha
Common lizard	<5 individuals/ha	5-20 individuals/ha	>20 individuals/ha
Slow worm	<5 individuals/ha	5-20 individuals/ha	>20 individuals/ha

Table 2.2: Key Reptile Site Population Class Assessment and Scoring Criteria

Froglife define a Key Reptile Site as one that meets any of the following criteria:

1. Site supports at least three reptile species;
2. Site supports two snake species;
3. Site supports an 'exceptional population' of one species (see Table 2.2);
4. Site supports an assemblage of species scoring at least 4 (see Table 2.2); or,
5. Site does not satisfy Points 1-4 but is of particular regional importance due to local rarity.

Sites that support populations of either smooth snake or sand lizard are also considered to be Key Reptile Sites.

3. DESK STUDY

3.1 BIOLOGICAL RECORDS

Records of reptile species within a 2 km radius of the survey area provided by Hampshire Biodiversity Information Centre are summarised in Table 3.1. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Site	Species of Principal Importance?	Legislation / Conservation Status
Slow worm <i>Anguis fragilis</i>	2	2015	410 m south	✓	WCA 5 S9(1) WCA 5 S9(5)
Grass snake <i>Natrix helvetica</i>	1	2015	410 m south	✓	WCA 5 S9(1) WCA 5 S9(5)
Common lizard <i>Zootoca vivipara</i>	1	2011	880 m north-west	✓	WCA 5 S9(1) WCA 5 S9(5)
Adder <i>Vipera berus</i>	1	2006	1.55 km north-west	✓	WCA 5 S9(1) WCA 5 S9(5)

Table 3.1: Reptile Species Records Within 2 km of Site

3.2 PREVIOUS REPTILE SURVEYS

Middlemarch Environmental are not aware of any previous reptile surveys conducted at this site.

4. RESULTS

4.1 INTRODUCTION

The reptile habitat assessment and presence/absence survey were undertaken between 31st August and 22nd September 2020 by Vicky Steyn (Field Ecologist).

4.2 SURVEY CONSTRAINTS

There were no constraints to the survey.

4.3 SITE SUITABILITY ASSESSMENT

The habitat characteristics of the site with regard to suitability to support reptile species are summarised in Table 4.1. Photographs of the habitats present on site are provided in Chapter 8.

Reptile Habitat Characteristic	Description
Location of site in relation to species range of native reptiles	The site falls within the known distribution of all six species of British reptile and records indicate the potential presence of common lizard within 1 km of the site.
Site management and disturbance	The survey area is effectively composed of two discrete areas. The western half comprises a formal holiday complex dominated by the built environment and with extensive zones of closely mown amenity grassland. This complex is well used throughout the year by visitors. The western area of the site is considered to be unsuitable for use by reptile species. The eastern section of the survey area comprised a former pitch and putt golf course with associated linear scrub around its margins and a large lake in the north-eastern corner. The pitch and putt course is no longer in use (seemingly last in use approximately five years ago) and is developing a longer grassy sward with patches of tall ruderals and colonising scrub. Currently this eastern area is undisturbed and not subject to any management activities. Some patches of grassland have been closely grazed by rabbits.
Topography and aspect of site	The whole survey area generally occupies flat ground within a coastal location. Sea defences and embankment areas, occupied by dense scrub and tall ruderal vegetation, form the northern and eastern boundaries of the former pitch and putt golf course. In places, most notably to the south and east of the former pitch and putt course, the ground was often undulating with hummocks and hollows often as a result of rabbit diggings and associated activity.
Vegetation type and structure	The western half of the site consists of a formal and intensively managed landscape and is considered to provide negligible suitable habitat for reptiles. The eastern section of the site comprised a disused pitch and putt golf course which is developing into a habitat mosaic of rough grassland, tall ruderals and both dense and scattered scrub.
Likely prey abundance	Invertebrates likely to be present on site in abundance.
Presence of refugia and potential hibernation habitat	Located within the eastern section of the site, within the former pitch and putt golf course, were areas of extensive rabbit burrowing and digging/scraping together with some deposited cut brash and piled log material. It is considered that these features often high quality potential refugia and hibernation areas.
Egg-laying site potential (grass snake and sand lizard only)	Some scattered piles of composting cut grass material were noted on the margins of the former pitch and putt course.
Connectivity to surrounding habitat of potential value to reptiles	The eastern half of the survey area, considered to be the most suitable for reptiles, is directly connected to areas of coastal habitat comprising habitat mosaics of scrub, intertidal habitats, coastal grassland and rough grassland. The northern boundary of the study site was formed by a sea defence occupied by scrub, rough grassland and tall ruderal vegetation and a wet ditch which directly links to suitable reptile habitat to the west.

Table 4.1: Summary of Reptile Habitat Characteristics

It should be noted that the presence of good quality reptile habitat (e.g. habitat providing features of value to reptiles) does not confirm that reptiles will be present at the site, just as the presence of low quality habitat does not confirm that reptiles will be absent

4.4 PRESENCE / ABSENCE SURVEY

Weather conditions at the time of each of the survey visits are presented in Table 4.2.

Date/Time	Parameter	Cloud cover (%)	Air temperature (°C)	Precipitation	Wind speed (F)
21-08-2020*	Preceding survey	Dry, bright and sunny			
09:30	During survey	10	15	Nil	F1-2
31-08-2020	Preceding survey	Overcast and breezy			
10:00	During survey	80	13	Nil	F2-3
02-09-2020	Preceding survey	Warm and sunny			
08:30	During survey	20	14	Nil	F3
05-09-2020	Preceding survey	Sunny and clear			
09:00	During survey	10-20	12	Nil	F3-4
10-09-2020	Preceding survey	Partly cloudy with sunny spells			
10:30	During survey	50-70	15	Nil	F3-4
13-09-2020	Preceding survey	Dry, sun and scattered cloud			
09:00	During survey	50	15	Nil	F4
17-09-2020	Preceding survey	Sunny and clear			
16:00	During survey	30-60	16	Nil	F2-3
22-09-2020	Preceding survey	Mild and cloudy			
10:00	During survey	90	17	Nil	F3

*Artificial refugia set out on site

Table 4.2: Weather Conditions During Survey Visits

The findings of the presence/absence survey are detailed in Table 4.3. The location of reptile survey transects, and any reptiles recorded on site, are plotted on Drawing C153231-03-01 in Chapter 7.

Visit	Date	Common Lizard	Slow worm	Grass Snake	Adder
1	21-08-2020	-	-	-	-
2	31-08-2020	1 juvenile	1 adult female	-	-
3	02-09-2020	2 adults 1 juvenile	-	-	-
4	05-09-2020	1 juvenile	-	-	-
5	10-09-2020	-	-	-	-
6	13-09-2020	-	1 adult male	-	-
7	17-09-2020	-	-	-	-
8	22-09-2020	1 adult	-	-	-

Table 4.3: Presence/Absence Survey Results

The surveys identified the presence of a small number of common lizard and slow worm at the eastern end of the survey area within the former pitch and putt golf course. A peak count of two adult and one juvenile common lizard was made on 2nd September 2020 and a single adult slow worm on 31st August and 13th September 2020.

4.5 ASSESSMENT OF SITE IMPORTANCE FOR REPTILES

The results of the presence/absence survey were assessed using Froglife's site valuation methodology, outlined in Section 2.3. The results of this assessment are detailed in Table 4.4.

Species	Maximum Count of Individuals*	Number of Individuals / ha	Estimate of Population Level During Survey	Key Reptile Site Score
Common lizard	2	0.8	Low	1
Slow worm	1	0.4	Low	1
* Maximum count of adults recorded by surveyor on one visit			Total Score	2

Table 4.4: Reptile Population Estimate

The surveyed site is not considered to be a 'Key Reptile Site' as it does not fulfil any of the criteria highlighted in Section 2.4.

5. DISCUSSION AND CONCLUSIONS

5.1 SUMMARY OF SITE PROPOSALS

The description of proposed development is as follows:

“Application for full planning permission, pursuant to APP/16/01237, for the redevelopment of the holiday site including the demolition of redundant chalets, use of land for the siting of 112 holiday caravans with areas of open recreational space, cease the use of the land for pitch and putt purposes and retain the remaining pitch and putt area as a managed wildlife area including the provision of an ecology bund & ditch, landscaping, the siting of three bird hides with bat roost in their roof spaces and a mown ‘circular wildlife walkway’.”

5.2 HABITAT ASSESSMENT

The survey area comprised two distinct areas. The western half of the study site was occupied by extensive zones of the built environment interspersed with blocks of very closely mown amenity grassland with occasional scattered trees and introduced shrubs. It was considered that this area of the Mill Rythe study site was unsuitable for reptiles due to its highly managed nature, lack of habitats considered suitable for use by reptiles and being well used by the general public.

The eastern half of the Mill Rythe complex was occupied by a former pitch and putt golf course which is no longer functional (this area has been unmanaged and neglected for at least five years). This area was originally highly managed, primarily consisting of very close mown grassland. Since management ceased it has developed a longer sward to 0.3 m in length and also contains frequent stands of tall herbs, often dominated by thistles *Cirsium* spp, great willowherb *Epilobium hirsutum* and common fleabane *Pulicaria dysenterica*. Scrub vegetation was well established in some areas with bramble *Rubus fruticosus* agg. being the dominant species. Around the margins of the pitch and putt course were more extensive areas of very dense bramble scrub. Additional habitats/features present within the pitch and putt golf course included areas that had been closely grazed by rabbits resulting in patches of very short turf interspersed with areas that had been scrapped bare by them. Extensive systems of rabbit burrows and additional digging were also noted along the eastern edges of the former pitch and putt area, adjacent to the extensive belts of bramble scrub. Also present amongst the bramble scrub were open patches of ground which had been used for deposition of vegetation clippings and brash material with some areas of piled logs noted. A wide access track was present along the eastern edge of the former pitch and putt course which possessed borders of bare and colonising ground in sheltered locations. Overall, it was considered that the former pitch and putt areas provided optimal reptile habitat with good structural diversity of vegetation together with open basking areas, potential safe refugia areas to escape to (e.g. dense bramble patches) and potential hibernacula (e.g. in rabbit burrows and beneath log and brash piles).

In terms of habitat connectivity with surrounding areas of suitable reptile habitat, the former pitch and putt golf course is bordered along its northern edge by a ditch feature, up to 5 m in width, which contained a variable depth of water but was observed to be quite silted in places and which had colonised with both aquatic vegetation and dense bramble scrub in places. This ditch abuts a sea defence bank that is occupied by a mixture of grassland and tall ruderal vegetation before grading into inter-tidal habitats. This northern boundary is considered to provide a potential dispersal corridor into surrounding habitats which are considered to offer good quality reptile habitat. To the east and south of the pitch and putt golf course habitats bordering the boundary access track comprised a mosaic of tall ruderal, scrub and ephemeral habitats with a thorn hedgerow present and directly linking into extensive areas of adjoining rough grassland, scrub and inter-tidal habitats, all of which are considered to offer high quality reptile habitat with no barriers to dispersal.

To the south of the main holiday complex lies Tournierbury Golf Course, separated from the complex by a tall hawthorn *Crataegus monogyna* dominated hedgerow. The golf course is highly managed with many areas subject to frequent and close mowing. However, there are areas of golf course ‘rough’ and pockets of scrub/trees, all of which are considered to provide additional reptile habitat.

To the west of the Mill Rythe Holiday complex, were a series of fields occupied by rough grassland with mature field boundaries, the latter often consisting of linear scrub and wet ditches bordered by extensive areas of damp-loving vegetation. These areas are considered to provide highly suitable reptile habitat.

5.3 FINDINGS OF REPTILE SURVEY AND KEY REPTILE SITE ASSESSMENT

Survey works undertaken at the site identified the presence of low populations of common lizard and slow worm within the survey area. A peak count of two adult common lizards (and one juvenile) was recorded on 2nd September 2020 and a peak count of a single adult slow worm was recorded on two dates (31st August and 13th September 2020). All of the reptiles recorded within the survey area were located within the margins of the disused pitch and putt golf course in the eastern part of the site.

The surveyed site is not considered to be a 'Key Reptile Site' as it does not fulfil any of the criteria highlighted in Section 2.4.

5.4 CONCLUSIONS AND SUMMARY OF POTENTIAL IMPACTS

Low populations of common lizard and slow worm were recorded within the former pitch and putt golf course, which occupies the eastern portion of the site. Reference to the 'Proposed Site Plan' (Drawing 3877-410 Rev Q) indicates that the western part of the former pitch and putt golf course will be developed, resulting in the permanent loss of some suitable habitat for reptiles within the site. However, much of the grassland mosaic will be retained and enhanced. If managed appropriately, this area would continue to support the low populations of common lizard and slow worm recorded within the site, and ensure that they can disperse into further suitable habitat in the wider area.

In the absence of mitigation, clearance of suitable habitats within the site during the preparation and construction works has the potential to result in the killing, injury or disturbance of individual reptiles present within the site. This would result in a breach of legislation under the Wildlife and Countryside Act 1981 (as amended), which protects common reptiles from intentional killing or injuring (see Appendix 1).

Insensitive habitat management once the development is operational, such as regular, close mowing of the grassland and harsh management of scrub habitats, has the potential to reduce the suitability of habitats for reptiles in the long term.

In order to avoid adverse effects on the reptile populations within the site, a recommendation regarding the production of a Reptile Mitigation Strategy is made in Chapter 6.

6. RECOMMENDATIONS

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

- R1** A Reptile Mitigation Strategy should be compiled. This strategy will detail how the works will proceed without breaching wildlife legislation, and will ensure that:
- Reptiles will be protected from harm that might arise during development work; and,
 - Sufficient quality, quantity and connectivity of habitat is provided to accommodate the reptile population, either on-site or at an alternate site, with no net loss of favourable conservation status.

The scope of the Reptile Mitigation Strategy should be agreed with the local authority ecologist prior to any works commencing.

The Reptile Mitigation Strategy can be prepared as a standalone report, or incorporated into an Ecological Mitigation Strategy (EMS).

Middlemarch Environmental Ltd has been instructed to prepare an EMS (Report RT-MME-153231-03).

- R2** Should development works not have commenced by April 2022, an updated assessment should be undertaken to record any changes in the status of the reptile populations at the site.

7. DRAWINGS

Drawing C153231-02-01 – Survey Transects and Findings



SITE OVERVIEW

1:5000

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

C153231-02-01

Legend

- Site boundary
- Common lizard
- Slow worm
- Reptile survey transect

Project
Mill Rythe Holiday Village, Hayling Island

Drawing
Reptile Survey Results

Client
Avison Young

Drawing Number
C153231-02-01

Revision
00

Scale @ A3
1:1500

Date
October 2020

Approved By
TH

Drawn By
GT

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This drawing is based on site survey
"3189-200-201-202-203-204 Site Survey.dwg", supplied by the client.

8. PHOTOGRAPHS



Plate 8.1: Former pitch and putt golf course with areas of unmanaged grassland – suitable habitat for reptiles



Plate 8.2: Marginal area of former pitch and putt golf course with areas of shorter rabbit-grazed turf providing good quality reptile habitat



Plate 8.3: Banked area around edge of former pitch and putt golf course which provides cover for reptiles



Plate 8.4: View from sea wall with potential reptile habitat in foreground and mown grassland in distance which offers negligible reptile habitat



Plate 8.5: Area of rabbit activity on edge of former pitch and putt course with rabbit burrows providing potential reptile wintering locations



Plate 8.6: Short mown grassland around holiday complex which offers no reptile habitat

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Wildlife & Countryside Act (1981) As Amended.

APPENDIX 1

LEGISLATION

All of the UK's native reptiles are protected by law. The two rarest species – sand lizard (*Lacerta agilis*) and smooth snake (*Coronella austriaca*) – benefit from the greatest protection.

Common lizard (*Zootoca vivipara*), slow-worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix helvetica*) are protected under the Wildlife and Countryside Act 1981 (as amended) from intentional killing or injuring.

Sand lizard and smooth snake are protected under The Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended) which together make it illegal to kill, injure, capture, handle or disturb these animals. Places they use for breeding, resting, shelter and protection are protected from being damaged or destroyed. It is also illegal to obstruct these animals from using such areas.

All native reptile species are listed as Species of Principal Importance on the UK Post-2010 Biodiversity Framework (2012), and as such are material considerations in the planning process.

This is a simplified description of the legislation. In particular, the offences mentioned here may be absolute, intentional, deliberate or reckless. Note that where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.

The reader should refer to the original legislation for the definitive interpretation.