



BRIGHT GREEN
ENVIRONMENTAL

Bat Survey Report

For proposed development for

Hambleton House

9 Newmarket Road

Moulton

CB8 8SS.

Survey and Report by:
Tony Hargreaves BSc AIEMA
Director

19th February 2021
Project Ref: 17423

Disclaimer

This report is prepared by Bright Green Environmental for the sole and exclusive use of J A International in response to their particular instructions. No liability is accepted for any costs, claims or losses arising from the use of this report or any part thereof for any purpose other than that for which it was specifically prepared or by any other party other than J A International. No information provided in this report can be considered to be legal advice.

The findings of this report are based on the findings of the surveys carried out by Bright Green Environmental as stated and do not prove or disprove the absence or presence of any protected species. Bright Green Environmental cannot be held liable in any way for any legal actions brought against the landowner or developer in connection with this report.

Contents

1. Introduction	4
1.1. Introduction	4
2. Site Description.....	7
3. Methodology	8
4. Results.....	9
5. Conclusion.....	15
6. Recommendations and Mitigation/Enhancement	18

1. Introduction

1.1. Introduction

1.1.1. Bright Green Environmental was instructed by J A International to carry out a Bat Survey of the property Hambleton House, 9 Newmarket Road, Moulton, CB8 8SS. As required in respect of the proposed development which involves the extension of the existing house as detailed on the plans contained within this report.

1.1.2. The surveyor is an associate member of the Chartered Institute of Environmental Management and Assessment (AIEMA) and subject to the IEMA Professional Code of Conduct and licensed by Natural England to survey for bats (2016-20863-CLS) and great crested newts (2016-23214-CLS). He has extensive experience in undertaking various ecological surveys on behalf of public and private sector clients, throughout the UK.

1.2. Objectives

1.2.1. To identify any potential impacts upon bats as a result of the proposed development, in particular to identify any bat activity at the property to inform the planning application for the proposed works.

1.2.2. The development is understood to be the demolition of the existing property and construction of 2 detached residential dwellings.

1.2.3. The survey is in addition to the previous ecological appraisal undertaken by AGB Environmental Ltd. in September 2020, which looked at the ecology of the site and identified the presence of bats and requirement for a bat survey.

1.3. Legislation and Ecology

1.3.1. Bats (all species)

1.3.2. All British bats are classed as European Protected Species and therefore received protection

The Conservation of Habitats and Species Regulations 2017, making it an offence to:

Deliberately kill, injure or capture bats;

Deliberately disturb bats, including in particular any disturbance which is likely to impair their ability to survive, to reproduce or to rear or nurture their young, or their ability to hibernate or migrate, or which is likely to affect significantly their local distribution or abundance;

Damage or destroy a breeding site or resting place of a bat.

- 1.3.3. In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:
- Damage or destroy, or obstruct access to, any structure or place which any bat uses for shelter or protection; or
 - Disturb bats while occupying a structure or place used for that purpose.
- 1.3.4. If proposed development work is likely to destroy or disturb bats or their roosts a license may need to be obtained from Natural England which would be subject to appropriate measures to safeguard bats.
- 1.3.5. The presence of bats does not necessarily mean that development cannot go ahead, but that with suitable, approved mitigation, exemptions can be granted from the protection afforded to bats under regulation 39 by means of a license. Natural England, for the Secretary of State for the Department for Environment, Food and Rural Affairs (DEFRA) is the appropriate authority for determining license applications for works associated with developments affecting bats. In cases where licenses are required, certain conditions should be met to satisfy Natural England. Before a license can be issued to permit otherwise prohibited acts three tests should be satisfied. These are:
1. Regulation 44(2)(e) states that licenses may be granted to 'preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.
 2. Regulation 43(2)(a) states that a license may not be granted unless Natural England is satisfied 'that there is no satisfactory alternative'.
 3. Regulation 44(3)(b) states that a license cannot be issued unless Natural England is satisfied that the action proposed 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
- 1.3.6. Natural England expects the planning position to be fully resolved as this is necessary to satisfy tests 1 and 2. Full planning permission, if applicable, will need to have been granted and any conditions relating to bats fully discharged. For test 3, Natural England should be satisfied that sufficient survey

effort has been carried out and that the impact assessment and proposed mitigation measures (submitted with the license application) are adequate to maintain the species concerned at a favourable conservation status.

2. Site Description

2.1. Site Description

- 2.1.1. The site is located to the south of Newmarket Road in Moulton, West Suffolk, at central Ordnance Survey Grid Reference: TL 69416 64398. The site comprises a bungalow with garage, driveway and garden habitat comprising an area of hardstanding, amenity grassland, introduced shrub and scattered trees. Two sheds are also present on site (see Appendix 1).
- 2.1.2. The site was situated within a suburban location and surrounded by agricultural fields to the north and housing development to the east, west and south. The wider area comprised agricultural land with interconnecting hedgerows and watercourses and pockets of deciduous woodland and village settlements. The Kennett River is located 350m to the east of the site.
- 2.1.3. The existing building comprises of 2 single storey sections, with pitched tiled roofs linked by a flat roofed section.
- 2.1.4. The western section has a single pitch concrete tiled roof which has gable ends to the front and rear elevations.
- 2.1.5. The eastern section has a pitched concrete tiled roof with several ridges and hipped gables.

Figure 2.1 Aerial image of site.



3. Methodology

3.1. Desktop Survey

3.1.1. A review of the previous preliminary ecological appraisal was undertaken prior to the site survey, this included a local biodiversity records search dated 2nd September 2020 and a review of the Multi-Agency Geographic Information for the Countryside (MAGIC) dated 7th September 2020.

3.2. Daytime Survey

3.2.1. The Bat Conservation Trust (2016) Bat Surveys – Good Practice Guidelines were used as the basis of the survey methodology.

3.2.2. A daytime preliminary survey of the property was carried out during daylight hours on 18th January 2021 when an inspection of the interior and exterior of the property was undertaken for signs of bats. Equipment used included ladders, high power close focus binoculars, high power inspection torch, endoscope, and camera.

3.2.3. In examining the buildings for bats, attention was given to any small crevice in which bats may roost such as any cavities within internal and external fixings, often used by bats as roosting sites. Floors and exposed surfaces were inspected for bat droppings, bat urine, feeding remains, oil staining from the fur of bats (indication of frequent use of a site), and wear of substrates caused by the movement of bats in and out over a long period of time.

3.2.4. This survey sought to confirm the findings of the previous survey and further identify and classify bat use of the site.

3.3. Activity Surveys

3.3.1. The Bat Conservation Trust (2016) Bat Surveys – Good Practice Guidelines will be used as the basis of further activity surveys.

4. Results

4.1. Desktop Survey

- 4.1.1. The previous report and its data/desk study identified the presence of Common and Soprano bat species within 2km , in addition to a EPS mitigation license for Common Pipistrelle approximately 445m SE of the site.
- 4.1.2. It was noted that the previous survey report had made an error in their description of the east and west sections of the existing bungalow, where they should be read as vice versa to accord with this report and what is accurate to the site.
- 4.1.3. The previous report identified that the 2 outbuildings as presenting negligible opportunity for bats, with nor further surveys necessary.
- 4.1.4. It identified the bungalow as being a positive bat roost of high roost suitability with positive evidence of Brown Long Eared bats and Common Pipistrelle.
- 4.1.5. It identified potential access points via lifted tiles, through torn lining into the loft void, missing mortar under ridge tiles.
- 4.1.6. Roosting opportunities and evidence was found in both the east and west roof voids.

4.2. Daytime Survey

External

- 4.2.1. Externally the survey identified that over the majority of the roof the modern concrete roof tiles are tight fitting preventing access opportunities for bats.
- 4.2.2. The survey identified a number of gaps beneath the otherwise tight-fitting concrete roof tiles where the occasional tile had lifted, gaps in the ridge tile mortar as per the previous survey.
- 4.2.3. Additionally the survey identified gaps beneath the lead flashing on the east section chimney, also a gap between the UPVC gable barge board and the brickwork to the eastern section.
- 4.2.4. There was no evidence of bats externally, although the survey was at a sub optimal time of year.

Figure 4.1 External survey photographs

<p>Modern roof tiles are largely tight-fitting preventing access (east elevation).</p> 	<p>Gaps beneath lifted tiles and gaps in ridge mortar on eastern section.</p> 
<p>Gaps around flashing of western section chimney</p> 	<p>Gap between UPVC barge board and brickwork on western section front elevation.</p> 

Internal

4.2.5. Internally evidence was found of both common pipistrelle and brown long eared droppings scattered within both loft voids over east and west sections as per the previous survey.

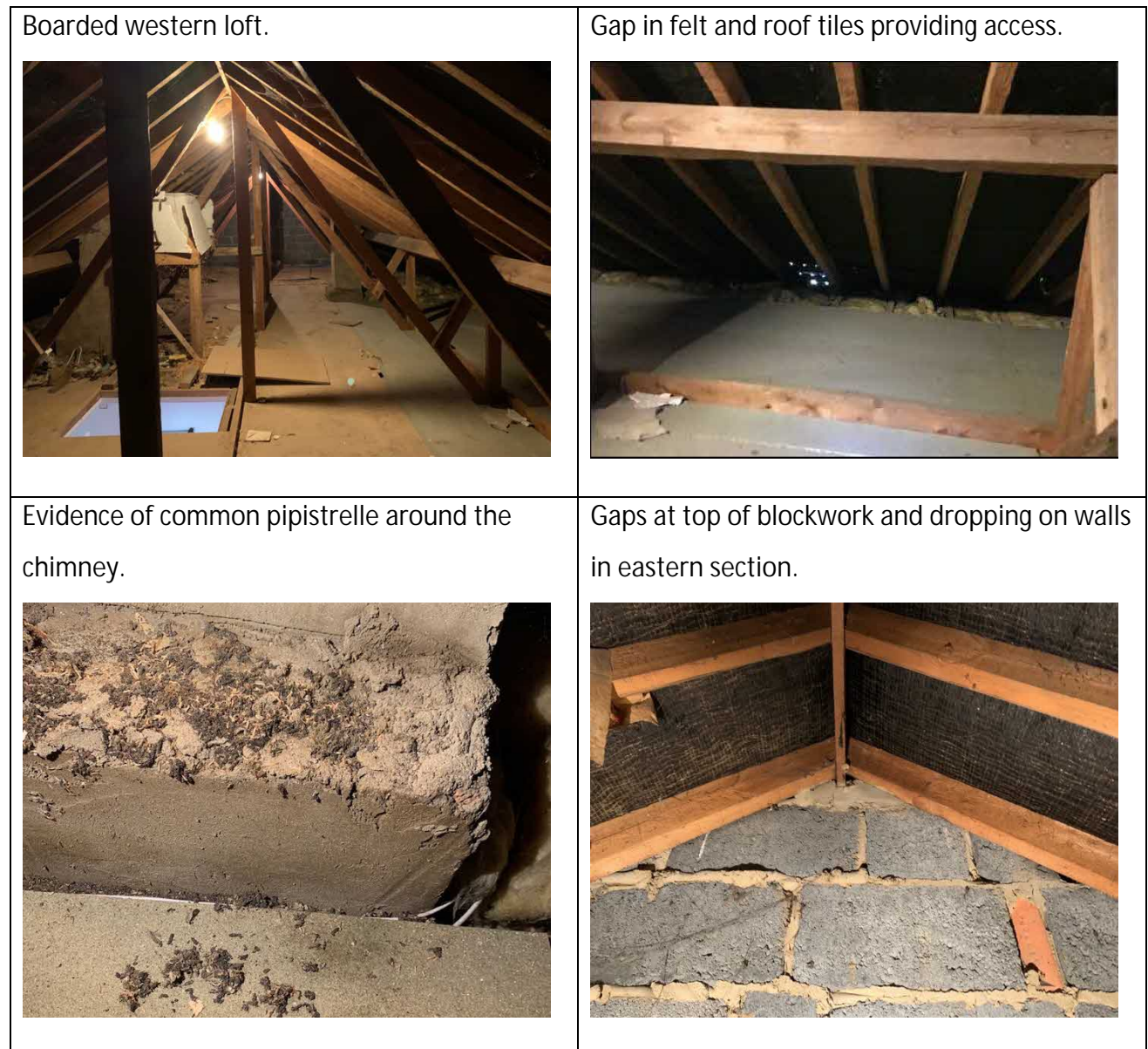
4.2.6. In addition there were numerous mouse and rat droppings.

Western Loft Section

4.2.7. The western loft is lined with bitumous felt which is generally in good order with a few tears which may afford bat access into the loft void from the tile felt void.

- 4.2.8. It is boarded along the center, with mineral insulation beneath extending to the eaves.
- 4.2.9. Additionally this survey identified the presence of a concentration (<50) of small fine particle droppings without a strong odour, characteristic of common pipistrelle, at the base of the chimney in the western loft. There was no light visible around the chimney where the roof meets it. The droppings were dry and grey, suggesting they are old, with no fresh droppings evident. It may be that this roost location has not been used for some time. The droppings may fall through from the tile felt void around the chimney. This is often a favoured roost location for pipistrelle species.
- 4.2.10. The location of this roost corresponds with the external gaps identified beneath the ridge tile through missing mortar, lifted roof tile and flashing around the chimney.
- 4.2.11. The number of pipistrelle droppings and their concentration does not suggest it is likely to be a maternity roost, or has been in the past. Pipistrelle species generally roost in large numbers and have large amounts of droppings associated with their roosts.
- 4.2.12. If the roost is within the tile felt void and droppings are only falling into the loft around the chimney where there is a gap in the felt, then this evidence may not be a full representation of the roost in the tile felt void. Therefore we would assume it could be used as a maternity roost until confirmed by further activity surveys.
- 4.2.13. There was a scattering of occasional medium sized rough textured droppings characteristic of brown long eared bats generally through the loft void.
- 4.2.14. There was a concentration (<20) of medium sized rough textured droppings characteristic of brown long eared bats at both gable elevations, with some droppings stuck to the block work. There are gaps at the top of the blockwork between it and the roof timbers that corresponds with the gaps behind the barge boards identified externally. The presence of droppings on walls beneath access points is common as bats often defaecate as they enter and leave a roost. Therefore the access points are considered to be at the gable ends.
- 4.2.15. The number and distribution of brown long eared droppings is not of significant number or concentration to indicate the roost is used by large numbers such as a maternity roost. It is more suggestive of a roost used by an individual or small number.

Figure 4.2 Internal survey photographs of western loft section.



Eastern Loft Section

- 4.2.16. The eastern loft is lined with bituminous felt which is generally in good order with a few tears which may afford bat access.
- 4.2.17. It is covered with mineral insulation extending to the eaves. It appears from the installation ticket this was topped up in 2008, so any evidence is accumulated since that date.
- 4.2.18. There is a scattering of a small number (approximately 50) of droppings both small fine particle and medium rough textured droppings characteristic of common pipistrelle and brown long eared respectively.

4.2.19. These are scattered throughout the loft on top of the mineral insulation, although generally beneath the ridge beams of the various loft areas, which may indicate this is the roosting location along the ridge, often preferred by brown long eared bats.

4.2.20. The new mineral wool insulation was lifted in several locations and no significant amounts of dropping were seen beneath.

4.2.21. The number and distribution of droppings does not present a significant number or concentration to indicate the roost is used by large numbers such as a maternity roost. It is more suggestive of a roost used by an individual or small number of individuals, circa 50 droppings over a 12-year period.

Figure 4.3 Internal survey photographs of eastern loft section.



4.2.22. The building is considered to offer high roost suitability where there are a number of access opportunities identified.

4.2.23. It is a confirmed roost through the presence of brown long eared and common pipistrelle droppings.

4.2.24. The property is not considered suitable to be used as a hibernation roost due to the roof where roost opportunities exist would be affected by daily temperature fluctuations which would not result in a stable environment required for hibernation.

4.3. Activity Survey

4.2.1. No activity surveys were undertaken due to the time of year.

4.3.2. The bat survey guidelines state that roosts of High Roost Suitability should be subject to 3 activity surveys, at least 2 of which should be undertaken during the optimal period May to September.

4.3.3. These will need to be carried out to inform the EPS bat license application.

5 Conclusion

- 5.1.1 The surrounding habitat is suitable for foraging and roosting bats, the desktop study has identified 2 species of bats roosting within 2km of the site.
- 5.1.2 The proposed development is considered to be small scale residential works and contained within the site and will not have an impact beyond this.
- 5.1.3 The development is understood to involve the demolition of the existing building and its replacement with 2 detached residential dwellings.
- 5.1.4 The surveys have confirmed the building is a bat roost by 2 species of bats through the presence of droppings characteristic of common pipistrelle and brown long eared bats.
- 5.1.5 The evidence suggests that it is a day roost for small numbers or individuals of both species.
- 5.1.6 However the common pipistrelle roost is within the tile felt void full dropping evidence visible in the loft may not be a full representation of the roost in the tile felt void. Therefore we would assume it could be used as a maternity roost until confirmed by further activity surveys.
- 5.1.7 It is considered to offer high roost suitability where there are a number of access and roost opportunities including gaps in roof tiles, flashing, gable ends and is suitable for maternity roosting.
- 5.1.8 The likely access points have been identified through association with droppings as the gaps in roof tiles around the western chimney (common pipistrelle), and the gaps over the gable walls and barge boards (brown long eared).

Assessment of Impacts

- 5.1.9 The proposed works involve the demolition of the property. This will result in the likely disturbance of bats and destruction of their roosts, which will result in a breach of the wildlife legislation affording bats and their roosts protection as outlined below and will therefore require a Natural England EPS license.
- 5.1.10 All British bats are classed as European Protected Species and therefore received protection under The Conservation of Habitats and Species Regulations 2017, making it an offence to:
 - Deliberately kill, injure or capture bats;
 - Deliberately disturb bats, including in particular any disturbance which is likely to impair their ability to survive, to reproduce or to rear or nurture their young, or their ability to hibernate or migrate, or which is likely to affect significantly their local distribution or abundance;
 - Damage or destroy a breeding site or resting place of a bat.

- 5.1.6 In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:
- Damage or destroy, or obstruct access to, any structure or place which any bat uses for shelter or protection; or
 - Disturb bats while occupying a structure or place used for that purpose.
- 5.1.7 As part of the EPS license a detailed working methodology and mitigation strategy will be adopted for the proposed works, to minimise the impact upon bats.
- 5.1.8 Critically the preliminary bat survey undertaken has confirmed the presence of 2 species, brown long eared and common pipistrelle bats in 2 roost locations (in the loft void and beneath roof tiles) and an assessment has been made on the evidence as to the classification of the roost as one of high roost suitability, with potential to be a maternity roost although no direct evidence of maternity activity for either species.
- 5.1.9 Considering the scale of the proposed works, the species and roosts identified in combination with a suitable method statement and mitigation strategy that will not harm the conservation status of any bats, we are confident that an application for a Natural England European Protected Species (EPS) License would be successful upon granting of planning permission.
- 5.1.10 It is a legal requirement of the Local Authority to have regard of the Habitats Directive when considering the planning applications. The species protection provisions of the Habitats Directive, as implemented by the conservation (Natural Habitats Etc.) Regulations 1994, contain three "derogation tests" which must be applied by Natural England ("NE") when deciding whether to grant a license to a person carrying out an activity which would harm a European Protected Species. For development activities this license is normally obtained after planning permission has been obtained. The three tests are that:
- the activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety;
 - there must be no satisfactory alternative; and
 - favourable conservation status of the species must be maintained.
- 5.1.11 The Local Authority must also consider these three tests when deciding whether to grant planning permission for a development which could harm an EPS. A LPA failing to do so would be in breach of Regulation 3(4) of the 1994 Regulations.

5.1.12 Through considering the information within this report that confirms the building is a bat roost for 2 common and widespread species; access points identified at the gable ends and gaps in roof tiles; classification as a day roost for small numbers or individuals of both species. Whilst there is potential for maternity roosting by common pipistrelle, as any evidence within the tile felt void is not visible, this must be determined by activity surveys during the optimum period of May to October. The identification that the proposed works will result in the disturbance of individuals and destruction of a roost; the requirement for an EPS license; the probability that an EPS license application would be successful subject to a suitable Method Statement and Mitigation. It is considered the Local Authority has complied with their obligations and that the presence of bats should not prevent the granting of planning permission.

5.1.13 The bat survey guidelines state that roosts of High Roost Suitability should be subject to 3 activity surveys, at least 2 of which should be undertaken during the optimal period May to September.

6 Recommendations and Mitigation/Enhancement

6.1.1 The following is a list of potential mitigations that should be considered and will be agreed with Natural England during the EPS license application process.

6.1.2 It is recommended that the following be adopted for the proposed works to further minimise any risk to bats details.

Timing

As the property presents a maternity roost and potential for hibernating individuals, the commencement of destructive works must take place between March to April or September to October (inclusive) to avoid these seasons.

Supervision (Watching Brief)

The removal of all roof tiles, fascias, soffits and felt must be carried out by hand (Soft Strip) under the direct supervision of a licensed bat worker.

Toolbox Talk

A 'toolbox talk' of all site workers will be carried out prior to the commencement of works to inform workers of the potential presence of bats in the property, their protection and the procedure to follow for the careful removal of all tiles.

Provision of Temporary Bat Boxes

The provision of suitable bat boxes on the site away from the disturbance of the building works will be required to house any bats discovered during the works.

Discovery of a Bat

If during the soft strip a bat is discovered it will be extracted by a licensed bat handler, placed into a bag then carefully placed into a suitable bat box erected at the site.

Provision of Bat Roost and Access (Mitigation)

The proposed development will retain opportunities for all species of bats known to be present to roost. This will include cavity provision for pipistrelle species and large cavity or roof voids for brown long eared bats. As it is not a maternity roost for brown long eared bats a specific bat loft is not considered necessary.

- **Materials**
Any roofing felt where bats are permitted access should be of a non-woven material (e.g. bituminous felt) so to prevent the entrapment of any bats that should get under the roof tiles.
- **Lighting**
To minimise risk of disturbance to potential foraging and commuting bats, during and post development, any external lighting should be minimised as follows:
 - Any task lighting (during construction) or security lighting on the building, should not be directed at the potential /proposed roost areas on building itself or boundary vegetation or trees.
 - Any necessary security lighting should be set on short timers and be sensitive to large moving objects only.
 - Other lighting around the site should be keep to the minimal feasible level and be directed downward and shielded to minimise light spillage.
 - Hoods, cowls or directional lighting should be used to avoid light directed at the sky or towards boundary vegetation.
 - Lighting times should be limited, to provide dark periods.
 - The brightness of the lamps should be kept as low as feasibly possible (ILE/BCT, 2007; BCT interim guidance 2014).

If you require any further information in relation to the ecology of the site, please do not hesitate to contact me.

Survey Conducted and Report written by



Tony Hargreaves
Ecological Consultant
Director
Bright Green Environmental
Mobile: 07972 719838
Email: tony@brightgreenenvironmental.co.uk

Bright Green Environmental is a trading name of Bright Green Environmental Consultancy Ltd.
Company No: 09047569 Registered Office: 3rd Floor, 207 Regent Street, London W1B 3HH.