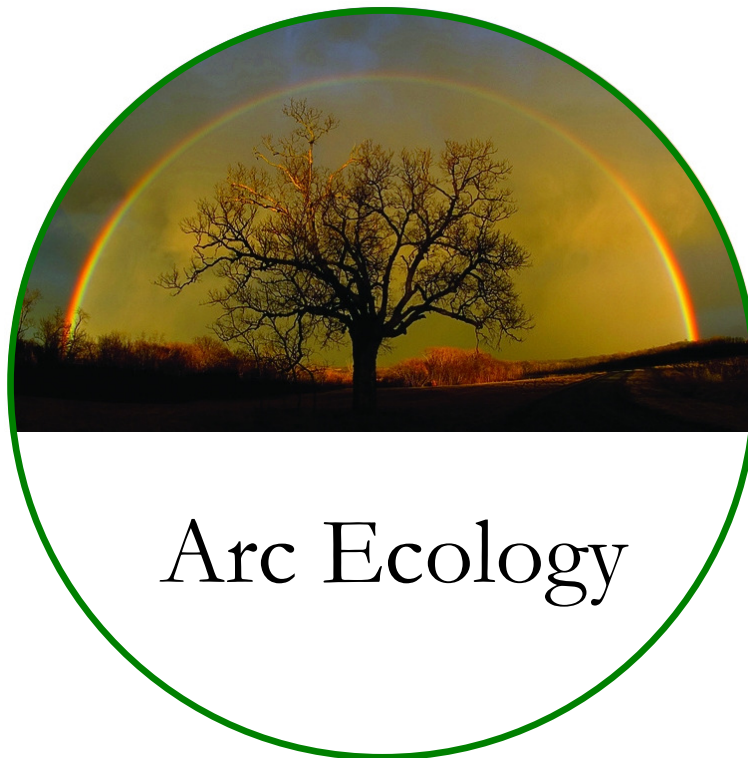




## BARN AT WATERSIDE COTTAGE, BUXWORTH - UPDATE PROTECTED SPECIES APPRAISAL

OCTOBER 2017

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## INTRODUCTION

Arc Ecology were commissioned to undertake an update Protected Species Appraisal of a barn adjacent to Waterside Cottage, Buxworth, High Peak, Derbyshire to attempt to determine the presence/absence of any such species within the buildings prior to a planning application being submitted for the development of the site.

A previous ecological survey of the building had been undertaken by MG Wildlife Consultants on the 22<sup>nd</sup> August 2012 during which two aged droppings of brown long-eared bat (*Plecotus auritus*) were found within the building.

Due to this, MG Wildlife Consultants undertook two dusk emergence surveys for bats on the 13<sup>th</sup> and 27<sup>th</sup> September 2012. No bats were seen entering or exiting the building during either of these surveys, although brown long-eared bat and common pipistrelle bat (*Pipistrellus pipistrellus*) activity was recorded in the wider area during each survey.

Given the habitats present within the site, particular emphasis was given to the potential for the site to support roosting bats and nesting birds.

## SITE DESCRIPTION

The site lies approximately 1.5 km to the north of the village of Whaley Bridge in the High Peak district of Derbyshire at OSGR SK 01325 83197 and consists of a single storey barn attached to a dwelling property immediately to its east.

Since the previous survey, the building has become totally derelict. The roof in its entirety has collapsed and sections of the walls have fallen. There are large areas of missing mortar on the remains of the walls and some sections of the wall can be seen to be leaning and are thought likely to collapse further in the near future (see Photographs 1 - 4).

A previous access into the adjoining cottage roof void has now been blocked (see Photograph 4), presumably to avoid water ingress due to the now missing roof on the barn

Habitats in the wider area consist mainly of arable and pastoral land with scattered built environment, with the River Goyt running north-south to the west of the site.

**Photograph 1 - Southern aspect of building**



**Photograph 2 - External western aspect of building**



**Photograph 3 - Internal view of building**



**Photograph 4 - Internal eastern view showing gap to adjoining building now blocked**



## **METHODOLOGY**

### BATS

An update appraisal of the building for presence/absence of bats was undertaken on the 4<sup>th</sup> October 2017 by a suitably qualified ecologist and current holder of a Natural England licence to survey for bats (license number 2017-27501-CLS-CLS).

An internal and external inspection of the building was carried out where possible to attempt to prove presence/absence of the use of the buildings by roosting bats. Any evidence of the presence of bats, such as droppings; staining or scratch marks on brickwork and woodwork or the presence of the animals themselves was recorded. The appraisal was augmented by the use of ladders, a strong torch (Cluson 'Clulite' CB2), a Stagg Electronics 'Batbox Duet' heterodyne bat detector and a Provision 100 endoscope where required.

The survey was carried out in accordance with current guidelines given by Mitchell-Jones (2004) and the Bat Conservation Trust (2016).

### NESTING BIRDS

The appraisal for nesting birds was undertaken following guidelines given in Bibby *et al.* (2000) and consisted of inspection of the buildings for evidence of current or historic nesting.

## **DEVELOPMENT PROPOSALS**

The proposed development of the site (as currently understood) is demolition of the existing building and construction of a new-build dwelling within the site footprint.

## **CONSTRAINTS**

There were constraints to the survey regarding health and safety issues. The low structural integrity of the building meant that most areas were not considered safe to access and the instability of the walls prevented safe access using ladders to higher cracks and crevices.

## **SURVEY RESULTS**

### BATS

While access to the building was limited by the constraints given above, no evidence of the presence of bats was found in the areas that could be safely accessed.

The derelict state of the building, notably the missing roof, extensive damage to the stonework and mortar and the fact there are no longer any capstones on the walls mean that the building in

its entirety is bright, exposed to the elements and subject to extensive water ingress into the cavities in the mortar.

As such, the building was assessed to have minimal potential to support a permanent roost for bats in any numbers, and it is considered that use of the building by bats, if any, would most likely be by individual bats on an opportunistic basis during periods of good weather.

#### NESTING BIRDS

There was no current or historic evidence of the presence of nesting birds found either externally or internally on the parts of the building considered safe to survey, and for the reasons given above the building is only considered to have potential to support nesting birds during periods of prolonged good weather.

However, this does not entirely discount the possibility that nesting birds could use the building in subsequent nesting seasons should the right weather conditions prevail.

#### OTHER PROTECTED AND NOTABLE FLORA AND FAUNA SPECIES

There was no evidence of the presence of any other notable fauna species noted during the survey and there are no habitats present within the site considered particularly suitable to support such species.

It was noted during the survey that the building is surrounded by quite extensive stands of Himalayan balsam (*Impatiens glandulifera*). This species is classed as an invasive weed and has particular requirements with regard to its removal and transportation which are outlined in the Constraints and Recommendations section below.

### **CONSTRAINTS AND RECOMMENDATIONS**

#### BATS

Bats and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended by the CROW Act 2000), and by the Habitats Regulations 1994 (as amended 2007). In summary, these make it an offence to damage, destroy or obstruct any place used by bats for breeding and shelter, disturb a bat, or kill, injure or take any bat.

In addition, seven bat species are on the UK Biodiversity Action Plan and are listed as Species of Principal Importance under the provisions of the NERC Act 2006. The National Planning Policy Network document 'ODPM Circular 06/2005' gives guidance on the treatment of Species of Principal Importance and states that local authorities should ensure that they are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations.



Due to lack of evidence found and the assessed unsuitability of the building to support a permanent roost, bats are not considered to pose a constraint to the proposed development of the building.

No further survey for bats with regard to the building is considered necessary and the risk of any bats being present during any work on this building is considered to be negligible.

However, bats are highly mobile species and can inhabit buildings at any time. Due to this, contractors should be made aware of the fact, albeit slight, that individual bats may be present if work is undertaken during the active season for bats.

In the unlikely event that a bat is found, all work should cease and an appropriately licensed ecologist and/or Natural England should be contacted for advice and it is possible that a European Protected Species licence would be required for work to continue.

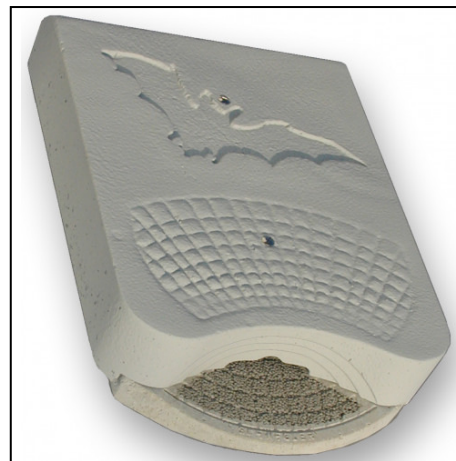
There is potential to enhance the site for bats during or post-development. This can be through erection of external bat-boxes on the proposed renovated building or the inclusion of bat bricks and/or tiles into the design of the new building (see Appendix A).

Wooden bat-boxes are likely to be damaged by weather relatively quickly, so more durable bat-boxes made of woodcrete such as the Schwegler 2FE and 1WQ (pictured below) are recommended.

**2FE**



**1WQ**



These boxes can be painted using non-toxic external paint to remain in keeping with the building décor.

While these boxes can be placed on any aspect of the building, ideally they should be mounted avoiding facing south/south-west where prevailing weather tends to originate.



The boxes should be placed as close to the apex of the roof as possible, ideally avoiding placement above windows to avoid the potential for discolouration from faeces and urea should the boxes be used.

These bat-boxes are available from a range of suppliers including Envisage Wildcare ([www.wildcareshop.com](http://www.wildcareshop.com)) and Alana Ecology ([www.nhbs.com](http://www.nhbs.com)).

Further enhancement of the site for bats (and also other species, notably birds and invertebrates) can be achieved by the use of plant species that are known to attract insects or have a recognised ecological value in any landscaping that may be undertaken. A list of such species is given in Appendix B.

### NESTING BIRDS

All nesting birds are protected under the Wildlife and Countryside Act 1981, which makes it an offence to kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to disturb them while they are nest building or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.

A number of bird species are also listed as Species of Principal Importance under the provisions of the NERC Act 2006. The National Planning Policy Network document 'ODPM Circular 06/2005' gives guidance on the treatment of Species of Principal Importance and states that local authorities should ensure that they are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations.

There was no current or historic evidence of the presence of nesting birds noted during the survey, but it is possible that nesting birds could potentially use the building if weather conditions permit it during subsequent nesting seasons. Due to this, if possible, any work on the building should avoid the nesting season for birds (February to September inclusive).

If this is not possible, then an appropriately experienced ecologist should conduct an investigation of the building to determine whether it is in use by nesting birds immediately prior to work commencing. If nesting birds are found to be present at this time, all work likely to cause disturbance should cease until the young have fledged and the nest is no longer in use.

### INVASIVE FLORA SPECIES

Himalayan balsam is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England and Wales. As such, it is an offence to plant or otherwise allow this species to grow in the wild.

Fortunately, control of this species is relatively simple. Mechanical control, by repeated cutting or mowing can be effective on larger stands, but with small to medium infestations (such as that present within the site) hand-pulling would be sufficient as the species is shallow rooted.

To avoid additional spread the plants should not be disturbed if seeds pods are visible (usually from May onwards).

Himalayan balsam can also be controlled by spraying the foliage with glyphosate. The plants should be sprayed in the spring before flowering, but late enough to ensure that germinating seedlings have grown up sufficiently to be adequately covered by the spray.

If taken away from the site of origin, the plants and associated material (e.g. soil) becomes Controlled Waste and must be disposed of at a landfill site that is authorised to accept it.

## SUMMARY

- An update Protected Species Appraisal was carried out on a barn adjacent to Waterside Cottage, Buxworth, High Peak, Derbyshire by Arc Ecology on the 5<sup>th</sup> November 2012.
- No evidence of the presence of bats was found during the survey, but areas of the building could not be entirely accessed due to health and safety issues.
- The building is in a high state of dereliction and is open to the elements and extensive water ingress and is assessed to be generally unsuitable to support any permanent roost for bats.
- It is considered that the use of the building by bats, if any, would be opportunistic use by individual animals during periods of good weather.
- No further survey of this building for bats is considered necessary.
- However, bats can inhabit buildings at any time. As a precaution contractors should be made aware of the possibility, albeit slight, that bats may be present during work on the buildings.
- In the unlikely event that a bat is found during work on the building, all work should cease and an appropriately licensed ecologist and/or Natural England should be contacted as it is possible that a European Protected Species licence may be required for work to continue.
- There is potential to enhance the site for bats and other species during or post development by the inclusion of bat bricks and/or tiles, erection of external bat boxes and use of insect attracting plants in any landscaping.
- No evidence of the presence of nesting birds was noted, but it is possible that nesting birds could use the building if periods of good weather allow it.
- Due to this, work on this building should avoid the nesting season for birds (February to September inclusive).
- If this is not possible, then the building should be checked by an appropriately experienced ecologist immediately prior to work commencing to determine whether nesting birds are present.
- If nesting birds are found to be present at this time, all work likely to cause disturbance should cease until the young have fledged and the nest is no longer in use.

- Stands of Himalayan balsam are present within the site. These should be removed according to current guidelines prior to any works commencing.

## REFERENCES

- Bat Conservation Trust (2016).  
Bat Surveys for Professional Ecologists - Good Practice Guidelines (3<sup>rd</sup> Edition).  
Bat Conservation Trust, London.
- Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000).  
Bird Census Techniques (2<sup>nd</sup> Edition). Academic Press, London.
- Mitchell-Jones, A.J. (2004).  
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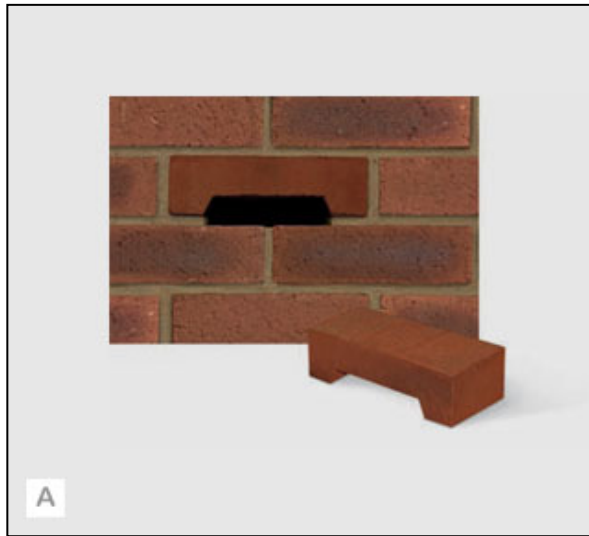
## APPENDIX A - DETAILS OF BAT BRICKS AND TILES



**Ibstock Brick Company:**

**Head Office: Leicester Road, Ibstock, Leicestershire, LE67 6HS. 01530 261999**

**Sales Office 0844 800 4575**



Free Access Bat Box A

Discrete single bat brick

Easy to install

Allows bats to create a natural home habitat within the cavity of the building



### **Enclosed Bat Box B**

Designed specifically for the pipistrelle bat

Available in all brick types

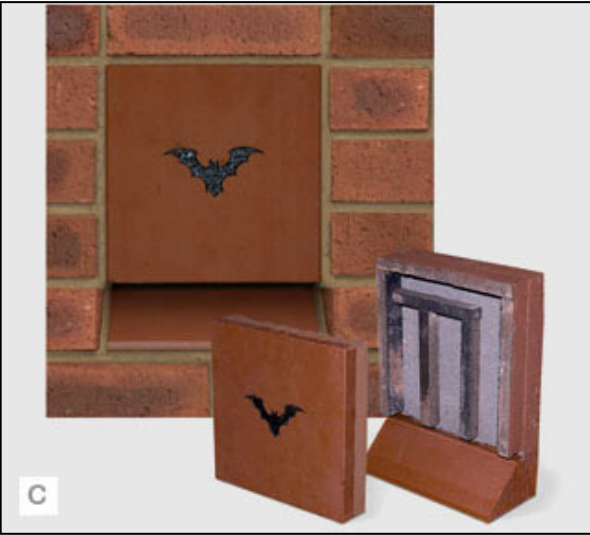
Various sizes

Several roosting zones are created inside the box

Bats are contained within the bat box itself

Maintenance free with entrance at the base

Ideal for new build & conservation work



Bat Box with Engraved Motif C

|                                           | Sizes                          | Durability                    |
|-------------------------------------------|--------------------------------|-------------------------------|
| Eco Habitats for Bats - Technical Data: A | 215mm x 65mm                   | F2 S2 - Fully Frost Resistant |
| Eco Habitats for Bats - Technical Data: B | 215mm x 215mm or 215mm x 290mm | F2 S2 - Fully Frost Resistant |
| Eco Habitats for Bats - Technical Data: C | 215mm x 215mm or 215mm x 290mm | F2 S2 - Fully Frost Resistant |



Tudor Roof Tile Co. Limited  
Dengemarsh Road, Lydd, Kent, TN29 9JH  
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Email: [info@tudorrooftiles.co.uk](mailto:info@tudorrooftiles.co.uk)  
Web: [www.tudorrooftiles.co.uk](http://www.tudorrooftiles.co.uk)



CRAFTED by Tudor Tiles



## **Bat Access Tile Set**

All UK bats and their roosts are protected by law. The Wildlife & Countryside Act introduced in 1981, gave legal protection to all bat species and their roosts in England. The Conservation (Natural Habitats, etc.) Regulations 1994 as amended (most recently in 2007 and 2009 and better known as the Habitats Regulations), further strengthened this legal protection.

Bat-related offences are arrestable. The potential fine for each offence is £5,000 per bat. An offender can also be imprisoned for six months. If any property has been, or is suspected to have been, home to any number of bats, at any time, legislation requires taking advice and precautions when working on the roof. Legislation also requires provision to allow access for bats if they return.

Different species of bats prefer differing places to roost. The two most usually found species in the UK are Pipistrelle and Brown Long-Eared.

Pipistrelle



Brown Long-Eared

Pipistrelle prefer confined spaces such as under tiles on roof and hanging. The Brown Long-Eared prefer roof timbers and ridges inside lofts.

Tudor Roof Tiles Co. Limited can provide purpose made access points within your roof tiles or ridge tiles. The Bat Access Set can form part of a mitigation package required by law for existing roosts or as potential access where a roost had not previously been present.



Available in all 5 Tudor colours, or in Natural Clay (without sand face), the Bat Access Set presents a bat optimised entrance to the under-felt, or to the loft when the under-felt is opened.

For use within the roof tiles, the top 'tunnel' tile offers the bat an 18mm high x 165mm long (approx.) tunnel to an entrance hole in the undertiles. This allows the bat to crawl into the roost area.

An advantage of Tudor's tiles large double camber, is that it provides the maximum amount of natural air flow under the tiles. The carefully designed access, along with this air flow between the tiles and the under-felt, aims to provide conditions where the bats are protected from any extremes of heat. Tudor also offer ridge tiles with a similar 18mm access cut into the ridge tile side, and we can look to manufacture bespoke access tiles to your requirement.

Expert advice on bats can be obtained from the Bat Conservation Trust, 15 Cloisters House, 8 Battersea Park Road, London, SW8 4BG. Bat Helpline 0845 1300 228 .... [www.bats.org.uk](http://www.bats.org.uk) ..... email [enquiries@bats.org.uk](mailto:enquiries@bats.org.uk)

## APPENDIX B - INSECT ATTRACTING PLANT SPECIES

## WILD PLANT SPECIES FOR WILDLIFE GARDENING

**Note:** Where 'attracts insects' is mentioned you can assume that birds will also be consequently be attracted, and where 'seeds' are mentioned these will attract birds generally, although some seed types are specific to certain species. The odd plant here, like Columbine, can overtake your garden if not suitably controlled.

### FLOWERS AND PLANTS

Amaranth - attracts insects

Bird's-foot Trefoil - foodplant for Wood White / Silver-Studded butterflies, &

Six-Spot Burnet moth

Bistort - attracts insects / seed source

Cat-Mint - attracts bees

Columbine - attracts insects

Common Evening Primrose - attracts insects / seed source

Common Thistle - seeds for Goldfinches

Common Toadflax - nectar for bees and bumble-bees

Corn Cockle - attracts butterflies

Cornflower - attracts insects / seed source

Cow Parsley - seed source

Cowslip - foodplant for Duke of Burgundy Fritillary

Devil's Bit Scabious - caterpillars of Marsh Fritillary

Dill - slugs attracted / seed source

Dog Rose - often aphids on leaves / hip fruits for birds

Dog Violet - caterpillars of various Fritillary butterflies

Eyebright - attracts bees and butterflies

Fennel - insects / hoverflies / seed source

Field Poppy - attracts insects and bees / seeds

Foxglove - attracts bumble-bees

Garlic Mustard - food source/egg laying habitat for Green-veined White &

Orange Tip butterflies

Golden Rod - attracts insect / seeds

Great Mullein - attracts butterflies

Greater Knapweed - attract bumble-bees and butterflies / seed source

Greater Plantain - seeds favoured by birds

Ground-Ivy - attracts bees

Hemp Agrimony - attracts butterflies

Honesty - attracts butterflies and bees

Honeysuckle - foodplant for caterpillars of White Admiral butterfly (rather specialised and of limited distribution) / nectar for hawkmoths and other night- flying moths

Ivy - foodplant for Holly Blue butterfly and Swallow-Tail moth caterpillars / berries for birds / attracts insects during flowering

Lady's Bedstraw - foodplant for caterpillars of Broad-Bordered Bee Hawk-moth

Lady's Smock/Cuckoo Flower – flowers for hoverflies and foodplant for Green Veined White & Orange Tip butterflies

Marjoram - nectar for butterflies and bees, and attractive to burnet moths

Marsh Marigold - beetles and other insects

Marsh and Nodding Thistles - flowers attract bumble-bees and other insects

Meadow Buttercup - attracts beetles and flies

Meadow Crane's-Bill - attracts bees

Meadow grasses - many grasses are useful habitats for certain butterfly caterpillars

Oxeye Daisy – attracts many insects

Primrose - attracts insects, bees, slugs! (though not popular with many gardeners!) / seeds for some birds / Duke of Burgundy Fritillary caterpillar (very unlikely in gardens)

Purple Loosestrife - insects plus seed source

Ragged-Robin - attracts butterflies and bees

Red & White Dead-nettle - nectar for bumble-bees

Red Campion - attracts flies and bees

Red Valerian - for butterflies

Red/White Clover - nectar for bumble-bees/bees/ foodplant of Clouded Yellow butterfly (very rarely breeds in Britain – mainly a migrant)

Rosebay Willow-herb - nectar source for bees / foodplant for Elephant Hawk-moth caterpillars

Rosemary - attracts various flying insects

Selfheal - attracts bees

St. John's Wort - attracts insects / seeds for some bird species

Stinging Nettle - food source Red Admiral, Peacock, Tortoiseshell and Comma butterfly caterpillars / seed source

Tall Melilot - bee nectar source

Teasel - good seed source – flowers attractive to various butterflies

Thyme - attracts bees

Tormentil - foodplant for caterpillars of Grizzled Skipper butterfly (unlikely in gardens)

Traveller's Joy - attracts bees and hoverflies

Tufted Sedge - insects and seed source

Water Mint - attracts various insects

White Campion - attracts moths

White Dead-Nettle - attracts bees

Wild Angelica - attracts slugs and snails!, flowers for pollinating insects, winged fruits

Wild Pansy - attracts bees

Yarrow - seeds / various insects and aphids / hoverflies and butterflies

#### SHRUBS AND TREES

Blackberry - fruit supply for birds, flowers attract many butterflies, especially Browns

Broom - attracts insects and bees / seed source

Buckthorn - foodplant for Green and Brown Hairstreak (rare) and Brimstone butterflies

Common Alder - seed source for birds and finches

Crab Apple - fruit for birds / flowers for insects

Gorse - attracts insects, especially bees and Silver-Studded Blue butterfly

Hawthorn / Elder - insects during summer / berries for autumn/winter

Holly - berries for birds / foodplant for Holly Blue butterflies

Pear - various insects

Silver Birch - seed source / aphids often present

Willow - attracts many insects and caterpillars