

ECOLOGICAL SERVICES LTD

Bat Survey: 170-172 Commercial Road, Newport, NP20 2PL



Instructed by: AFA Architects & Planners

Reported by: Ecological Services Ltd
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1.0 Background and Purpose

1.1 The buildings being surveyed consist of 170-172 Commercial Road which are situated in an urban environment in the city centre of Newport. The buildings are not currently in use and planning permission is sought to convert and renovate the two storey building into residential flats; to convert the vacant shop into a new shop and restaurant and to build a new residential flat block within the car park to the south of the site. This report will investigate if there is potential to disturb bats and will be used to assist in the planning process.

1.2 A bat report was produced by Acer Ecology in 2015 and an updated report was produced in 2017 titled '*Commercial Road, Newport. Bat Survey & Update Bat Survey Report. March 2017.*' The buildings were assessed as having low to moderate potential for roosting bats and emergence and return surveys were undertaken in 2015. No bats were observed emerging from or returning to the buildings during the surveys. An updated external and internal inspection of the buildings was undertaken in 2017. No bats or evidence of bats were found within the buildings. As the original surveys have expired, top up surveys have been instructed by the client.

1.3 To support the planning application a bat report has been commissioned to investigate if bats use the current property in any capacity during the maternity season, and for any evidence suggesting that bats use the property at other times of the year.

1.4 The report is prepared and undertaken by Mr. Richard Watkins BSc., an experienced Natural Resources Wales licensed bat ecologist with 13 years experience, license number S0931358-1.

1.5 A data search was undertaken with SEWBReC by Acer Ecology as part of their survey work in 2015 to provide information on local bat species in the area. The data search did not identify any historic bat records of bats being present within the buildings. The data search returned two non-roosting bat records within 1km of the site. An updated data search has not been undertaken at this time.

2.0 Site Description

2.1 The buildings being surveyed consist of 170-172 Commercial Road which comprise a two storey building and an adjoining former shop to the eastern elevation.

2.2 The two storey building is stone and brick built with a hipped slate roof and a clay tile ridge line. The windows have been bricked up. There are areas of timber fasciae present but no soffits. There is unlikely to be a cavity wall in the building.

2.3 The former shop is split into two sections. The first section is rendered and consists of a shallow pitched roof. This section is adjoined to the two storey building. The second section, facing Commercial Road, is brick built with a flat metal sheet roof and there is an area of metal cladding present to the eastern elevation. There are concrete fasciae present but no soffits.

2.4 The buildings date back to in excess of 30 years and are situated in an urban environment. There are likely to be moderate amounts of ambient lighting within the vicinity of the site.

2.5 The nearest significant watercourses are the River Usk, approximately 590m to the east of the site and Ebbw River, approximately 1.8km to the south west of the site at their nearest points.

2.6 The buildings being surveyed consist of 170-172 Commercial Road which are situated in an urban environment in the city centre of Newport. The buildings are immediately surrounded by a multitude of commercial and residential properties and there is a large car park to the immediate south of the buildings. There are tree-lined open spaces approximately 355m to the south west; 460m to the south east and 560m to the west of the site, however, there is no connectivity from the site to these spaces. There is relatively poor ecological connectivity for bats to the wider environment.

2.7 The National Grid Reference of the site is approximately: **ST 3144 8723**

3.0 Report Constraints

3.1 Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year; migration patterns and behaviour. The survey methods employed can provide evidence for the potential presence of bats at the times when the site was visited. Although the methods follow best practice guidance and were carried out in such a way as to maximise the chances of detection, failure to detect the target species cannot be considered as definitive proof of their absence.

3.2 The report is solely concerned with bats in relation to these buildings. Trees and other buildings not mentioned directly have not been included in this report.

3.3 Even though bats are habitual creatures they can still move to new roosts if more suitable. Therefore this report cannot predict the status of the structure in regard to bat occupancy in the future. This report should be acted upon as soon as practical. Natural Resources Wales will only accept survey data up to two years old from date of issue for licence applications, although some Local Planning Authorities will only accept survey data up to eighteen months old. If planning or building works are delayed, it is the responsibility of the client to discuss and gain approval from the *author* before work commences.

4.0 Legal Constraints

4.1 Bats, and any place a bat uses for breeding or shelter, either currently occupied or unoccupied are protected by European and British law, predominantly by **The Conservation of Habitats and Species Regulations 2017**, which are the principal means by which the Habitats Directive is transposed from European directive into law in England and Wales.

4.2 In summary this law states that it is an offence to:

- **Deliberately capture or kill a bat**
- **Deliberately disturb a bat**
- **Damage or destroy a breeding site or resting place of a bat**
- **Keep; transport; sell; exchange or offer for sale or exchange a living or dead bat or any part of a bat**

4.3 'Deliberately' may also be interpreted, as not intending to injure or kill a bat but having done so due to being insufficiently informed and unaware of the consequences of the action.

4.4 For a more comprehensive description and exact wording of the legislation please refer to:

<http://www.legislation.gov.uk/ukxi/2010/490/contents/made>

4.5 Where there is a risk that a bat roost may be present, it is incumbent upon the owner to commission a specialist bat survey to identify bat roosts before any work commences. Maximum penalties for offences relating to disturbance to bats or their roosts can amount to imprisonment for a term not exceeding six months or fines of up to Level 5 on the standard scale under the Criminal Justice Act 1982/1991 (i.e. £5000 in April 2001) per roost or bat disturbed or killed, or to both.

4.6 If a bat roost is discovered, no work that could affect the roost can be undertaken until Natural Resources Wales grants a licence endorsing the work. A thorough method statement and adequate mitigation proposal will need to be submitted to support any licence application.

4.7 The Environment (Wales) Act 2016 puts an onus onto responsible bodies such as Local Planning Authorities to not only preserve, but also to enhance biodiversity meaning that planning applications must offer an element of ecological gain as well as preserving any aspects of ecological importance.

5.0 General Information

5.1 Bats are unable to build roosts themselves but instead rely on both man made and naturally occurring features to provide suitable accommodation. Bats generally prefer older buildings built with traditional materials, as traditional building methods provide more opportunities for gaps and entrances to buildings. Traditional cut roofs are preferred to a roof with trusses. Bats also prefer to roost where the external roost area has access to sunlight during the day such as south facing roof elevations.

5.2 Bats can utilise the following features on a building; end tiles, barge boards, soffit, gable ends, porches, lead flashing, hanging tiles, ridge tiles, broken tiles, eaves, sash window frames, wood cladding, fascia boards, window sills and internal roof spaces and timbers. Although this list demonstrates the most popular roosting sites it is by no means definitive. Bats can use apertures as small as 10mm in diameter to gain access.

5.3 The U.K bat population is divided into two distinct families, Rhinolophidae and Vespertilionidae. In general, Rhinolophidae (Horseshoe) bats differ in their roosting requirements to Vespertilionidae (the remainder of UK bat species). Horseshoe bats prefer to roost in large areas such as internal attic spaces and hang in the open from the roof of the roost. They tend to roost in visible clusters to maintain the high temperatures that a maternity colony needs. Horseshoe bats also prefer free flight access and egress into the roosting area. Horseshoe bats tend to be more light averting to other UK bat species, and routinely fly around the internal roosting area to warm up before exiting. It is noted that Plecotus (Long Eared) bats share some of these preferences. Vesper bats are, on the whole, crevice dwelling bats who squeeze into small apertures to access the roost. These, like Horseshoe bats, will cluster in maternity colonies, but are normally hidden from view. Vesper bats, with the exception of Long Eared bats, do not require a large internal roost to fly around before exit. Long Eared bats, although part of the vesper family, are very light averting and will, on occasions share the roosting patterns of both Horseshoe and crevice dwelling species.

6.0 External Scoping Survey

6.1 The external scoping survey was undertaken on the **20th July 2024** in conditions of good natural light. All external aspects of the buildings were comprehensively evaluated for roost potential. Evidence was also sought for any staining or droppings which could suggest bat occupation.

6.2 The buildings were inspected for overt evidence of bat presence and occupation such as:

- Staining around the entry of roosting point caused by oils secreted by the bat into its fur
- Scratching on surfaces caused by the bat in the acts of take off and landing
- Bat droppings on walls; floors; roof voids; window sills or panes and barge boards
- Urine stains below a possible entrance site, within the entrance to a cavity or on timbers used for roosting
- Bats can produce chatter on warm evenings prior to leaving the roost. A heterodyne bat detector is used to help determine this
- Flies around the entrance or on the floor of possible roosts, which may be attracted to bat guano

6.3 Due to the age and condition of the buildings, there were a small number of opportunities present for bats to access and use the buildings and those that were available were deemed as having moderate potential for roosting bats. On the two storey building there were raised and slipped slates; apertures between the timber fasciae and the walls; areas of missing mortar and areas of vegetation. On the former shop there were apertures between the concrete fasciae and the walls and apertures between the metal roofing sheets. Due to the presence of a flat roof, not all areas of the roof could be visualised. Therefore, following the survey guidelines, the building was classed as having moderate potential for roosting bats.

6.4 No droppings or evidence of bats were discovered on any external features.

6.5 Evidence of nesting bird use of the two storey building was observed during the scoping survey.

6.6 Examples of apertures allowing access to cavities in the buildings:



7.0 Internal Scoping Survey

7.1 The internal scoping survey was undertaken on the **5th September 2024** by Hannah Evans (accredited agent S092780/2), an experienced bat ecologist with 5 years experience.

7.2 There were no enclosed attic spaces within the buildings. Ongoing works have commenced in the interior of the building and the ceilings have recently been taken down and the attic space above is now visible from the upper floors. The underside of the slates could be visualised and there was no lining present.



8.0 Emergence Surveys

8.1 The emergence surveys were carried out during the maternity season and adhered to current best practice guidelines. These surveys were conducted from half an hour before sunset until two hours post sunset. The surveyors used are all experienced bat counters who have undergone sufficient training in basic bat ecology and bat activity. All sound analysis was undertaken by Richard Watkins.

8.2 The emergence surveys gave extra consideration to the features identified during the external scoping survey which could be utilised by bats.

8.3 First Emergence Survey on 20th July 2024

- Sunset: 21:17
- Weather: Dry and calm with full cloud cover
- Temperature: 17 degrees celsius
- Surveyors: David Cunvin; Tyrone Evans; Adam Hughes; Lloyd James; Kieran Meek; Ryan Offers; Mason Smith and Kieran Turner

No bats were observed emerging from the buildings.

8.4 Second Emergence Survey on 15th August 2024

- Sunset: 20:34
- Weather: Dry and calm with approximately 95% cloud cover
- Temperature: 18 degrees celsius
- Surveyors: David Cunvin; Jonathan Daniels; James Day; Lloyd James; Matthew Kedward; Kieran Meek; Ryan Offers and Richard Watkins

No bats were observed emerging from the buildings.

8.5 The weather conditions were dry and calm with little wind and no rain and therefore conducive for bat activity. The temperature was above 10 degrees celsius during the emergence surveys.

8.6 The best viewing conditions were obtained.

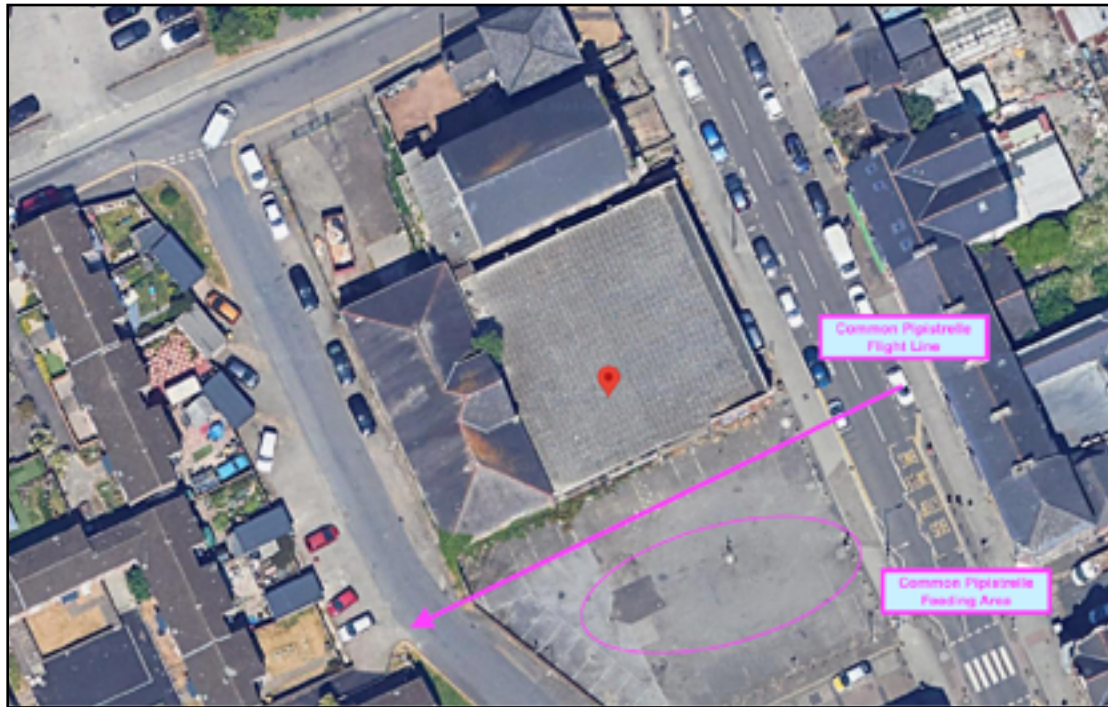
8.7 Echo-meter Touch 2 Pro bat detectors were present to acoustically record any bat calls. Nightfox Night Vision Goggles with record features were also used alongside additional infrared spotlights. These were positioned with the surveyors.

8.8 Analysis of sound recording on bat detectors:

Species of Bats Recorded in the Area:	
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>
Noctule	<i>Nyctalus noctula</i>

8.9 During the first emergence survey, no bats were detected or observed.

8.10 During the second emergence survey, a Common Pipistrelle was observed foraging in the car park to the south of the property and a Common Pipistrelle was observed commuting through the site. A Noctule was detected but was not observed.



8.11 NVA Still Shot Examples:





9.0 Concluding Remarks and Recommendations

9.1 During the emergence surveys, no bats were observed emerging from the buildings.

9.2 Throughout the surveys, a very low number of bat calls were recorded and no bats were observed using the buildings. Therefore it is suggested that the proposed building works will have a negligible impact on the local bat population.

9.3 The buildings do not offer significant hibernation potential for bats. The external walls were sound with no visible apertures for bats preventing access into the wall structure. When considering the absence of bat access points into the wall structure, the hibernation use of the building is considered to be limited.

9.4 Evidence of nesting bird use of the two storey building was observed during the surveys. Any building works must if possible be completed outside of the bird nesting season of March through August inclusive. If works are to proceed in the nesting bird season then a suitably qualified ecologist must first inspect the building for active birds nests. No works can commence until any active birds nests become vacant.

9.5 The buildings were classed as having moderate potential for roosting bats and there were a small number of opportunities present for bats to access and use the buildings.

9.6 The site is located in an area with relatively poor ecological connectivity for bats to the wider environment.

9.7 There were moderate amounts of ambient lighting within the vicinity of the site.

9.8 Following commencement of works; outside any ecologically supervised period and in the unlikely event that the contractor encounters any bats during any works, then work must immediately stop and the bat worker summoned. If for any reason they cannot be contacted, advice must be sought from Natural Resources Wales, (Telephone Number 0300 065 3000). No works would recommence until a licence is issued by NRW sanctioning works going forward. The guidance note on finding bats found in the appendices must be followed.

9.9 There is potential to offer ecological gain for bats if the project proceeds. This would help satisfy the local planning authorities legal responsibility to preserve and enhance biodiversity under the Environment (Wales) Act 2016. The creation of a bat roost for crevice dwelling bats can be incorporated into the new build element at very little expense and with no impact to the owners of the building. It is recommended that new roosts be created for crevice dwelling species of bats in the new build scheme and this should be added to the plans prior to submission for planning approval. Further ecological gain can be made by incorporating bird bricks into the new build design. Any new enhancements must not be directly illuminated and a dark corridor must be established allowing undisturbed access for any bat away from the site. If planning is granted then any ecological compensation/mitigation will be designed to maternity standards to ensure that there is no net biodiversity loss.

9.10 A suitable external lighting plan must be implemented to reduce any disturbance to the bats feeding and commuting in the vicinity of the property.

10.0 Proposed Enhancements

10.1 To comply with the Environment (Wales) Act 2016, ecological gain will be included into the scope of works. This will consist of:

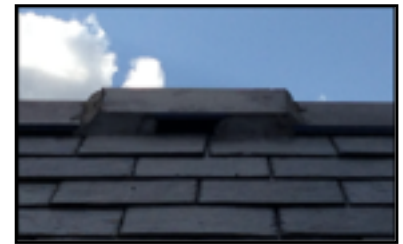
3 Raised Ridge Tiles and a self contained ridge roosting area for bats along the entire ridge line of the building.

1 Surface Mounted Vivara Pro WoodStone Swift Nest Box.

If any of the above products are not available, then further advice must be sought from a suitably qualified ecologist regarding a suitable replacement product.

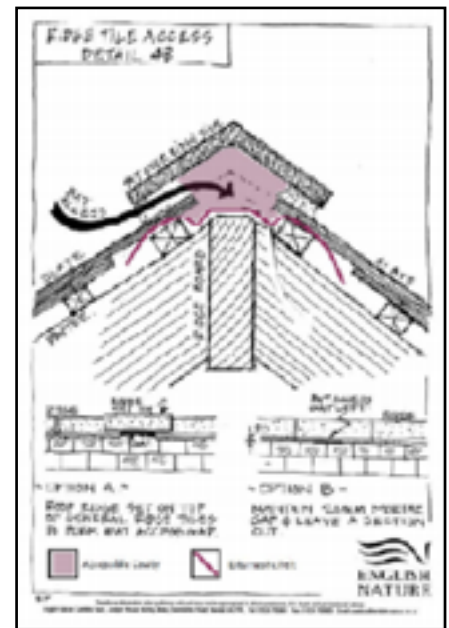
10.2 Permanent enhancements will comprise 3 raised ridge tiles and a self-contained roost area under the entire ridge line of the building.

10.3 The raised ridge tiles will have two access apertures measuring 100mm long by 25mm high; one on the front elevation and one on the rear.



10.4 The roosting area will benefit from uninterrupted access to the sun on its southern aspect. This along with the heat generated from the living space will create a favourable temperature range for bats. The roosting area will be sufficient in size for a maternity colony to establish.

10.5 Bats will be restricted to the void in the underside of the ridge tile by using a continuous piece of 1F bitumen felt as a base liner. This will be fixed in location over the top rafters as per adjacent image.



10.6 Breathable membrane is dangerous for bats, therefore it is essential that the detail contained in the adjacent drawing is followed exactly and is to be fitted under direct ecological supervision by a suitably qualified ecologist.

10.7 One Vivara Pro WoodStone Swift Nest Box will be surface mounted on the northern elevation of the building. **This will not be situated on a south facing elevation. Care must be taken not to obstruct the entrance hole.**



10.8 Any nesting bird enhancements will not be suited on the south elevation as this may experience excess heat from the sun.

10.9 Direct and prolonged illumination of the building, especially near any roost entry points or bird boxes must be avoided as this will cause disturbance.

10.10 Where practical, all bat features should be located far enough from any windows to avoid any direct light spill, at least a minimum of 2 metres away.

10.11 On occasions the suggested enhancements can be in short supply. Please order the enhancements as soon as practical to avoid supply issues during the building phase. If supply is depleted please seek advice from a suitably qualified ecologist on a suitable replacement prior to the purchase.

10.12 Recommended Locations of Bat and Bird Enhancements:

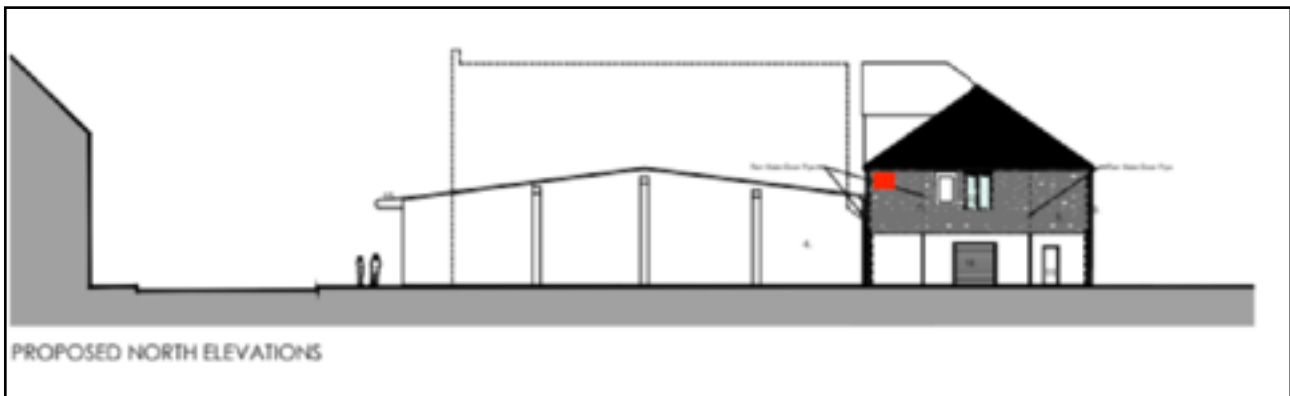


Location of the Raised Ridge Tiles

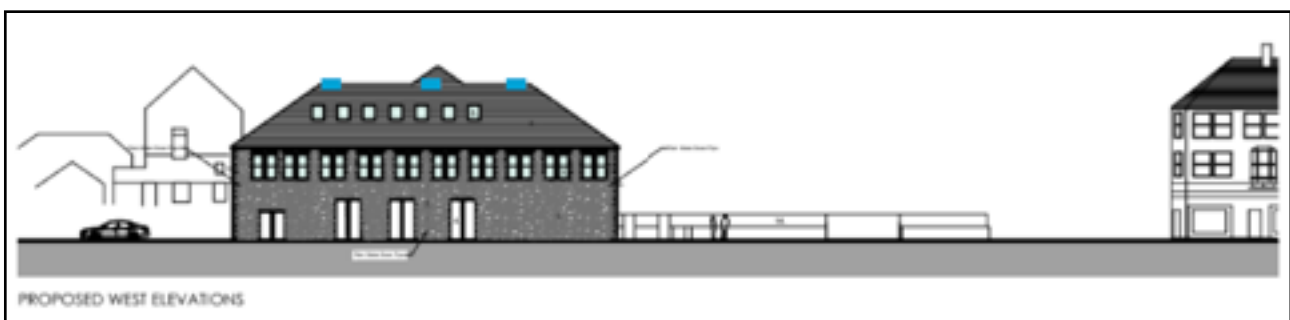


Location of Vivara Pro WoodStone Swift Nest Box

Northern Elevation



Western Elevation



Signed: *R Watkins* Date: October 2024

11.0 Appendix

Aerial Site Photograph

OS Map

Surveyor & NVA Positions

Guidance Note

Appendix 1 Aerial Site Photograph



The site in its wider environment offering relatively poor ecological connectivity to the surrounding habitat.

Appendix 2 OS Map National Grid Reference ST 3144 8723



Appendix 3 Surveyor & NVA Positions



Guidance Note (Important information in the unlikely event that bats are discovered)

Where any building or demolition work is to commence, all contractors should remain vigilant at all times during the course of the works, looking for signs that bats are present or that bats have formerly occupied the building. Whilst this survey has been undertaken and no visible evidence of bats found within the building, the possibility of a bat or bats being present cannot be absolutely ruled out. In the extremely unlikely event that bats are discovered during the works, then work must **stop** as soon as it is safe to do so, The bat worker must be contacted immediately and Natural Resources Wales informed in order for a licence to be granted to complete the works. No works will be permitted until such time a license is approved.

If in the unlikely event a roost is accidentally opened up, any loose bats should be returned to the roost and apertures closed to prevent their escape until they can be examined for injury by a bat worker. Dead bats should be retained. Bats are very fragile and should be handled by a professional, and unless absolutely necessary should not to be approached and disturbed. However, where a bat is clearly injured and distressed, the contractor should carefully collect them and place in a light proof box. Gloves must be worn when handling bats*

In the Event of a Bats being discovered the bat worker must be contacted immediately that it is safe to do so on 07866461726

If the bat worker is not available, Natural Resources Wales must be contacted on 0300 065 3000

*Bats can potentially carry European Bat Lyssa Virus (EBLV) which is a strain of rabies virus that is found in some bat species although extremely uncommon, a potential risk occurs; therefore, all bats must be handled with thick gloves.