

Cellar Beetle *Blaps mucronata* at Kemerton, Worcestershire 2015

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Blaps mucronata Latreille, 1804, (Coleoptera, Tenebrionidae, the Cellar or Churchyard beetle, was found in small numbers in Kemerton village (SO93) in 2015. There are nine earlier records for

Worcestershire (table 1) held by the Worcestershire Biological Records Centre (WBRC) five of which are from Kemerton or nearby sites. This apparent concentration of records reflects the recording activities of John Meiklejohn and John Clarke rather than the true distribution in Worcestershire. The other four records are also by John Meiklejohn, three in Worcester city and one in an old building at Childswickham (SP03).

Scientific Name	Common Name	Grid Reference	Location Name	Date	Comment	Recorder
<i>Blaps mucronata</i>	Cellar Beetle	SO835555	Henwick, Worcester	1950		JWM
<i>Blaps mucronata</i>	Cellar Beetle	SO85M	Commandery Worcester	14/03/1983		JWM
<i>Blaps mucronata</i>	Cellar Beetle	SO93N	Kemerton	1984		J Clarke
<i>Blaps mucronata</i>	Cellar Beetle	SO93P	Westmancote	1984		J. Clarke
<i>Blaps mucronata</i>	Cellar Beetle	SO9438	Bredon Hill	1985 - 1986	1	JWM
<i>Blaps mucronata</i>	Cellar Beetle	SO946368	Kemerton Churchyard	1989		J Clarke
<i>Blaps mucronata</i>	Cellar Beetle	SO878556	Lyppard Grange	June 1995		JWM
<i>Blaps mucronata</i>	Cellar Beetle	SP073387	Childswickham	01/12/2007	1 behind panelling in old house	JWM
<i>Blaps mucronata</i>	Cellar Beetle	SO944365	Kemerton	16/03/2008	1 in old dwelling	J Clarke

Table 1. Records for *Blaps mucronata* held by WBRC February 2015.

Kemerton records 2015 (JP).

30th June 2015

SO 94715 37323

A single beetle in dry leaf litter at the base of a wall of a stone house with a cellar built in the 1800s (01 & 02)

17th July 2015

SO 94374 36534

Two beetles behind stacked stones at the base of an old stone outbuilding which had recently been excavated underpinned (03 & 04)

October 2015 (not sure of exact date)

SO 94487 36461

The remains of a beetle found in the cellar of a very old house which was once a mill.

4th November 2015

SO 94707 37339

A group of five beetles under leaf litter against the base of an old stone outbuilding nearby where the first beetle found on the 30th June

Whilst working as a gardener and landscaper in Kemerton the beetles were uncovered by JP on four separate occasions (three ignoring the dead one) at different locations a maximum of 900 metres apart. They were predominantly found under leaf litter whilst carrying out garden maintenance, both singularly and in groups of two and four. All sites where the beetles were found were at the base of old stone houses or outbuilding walls dating to the 1800s or earlier (05, 06, 07).



01. *Blaps mucronata*, Kemerton, 30 June 2015. J. Poloni



02. *Blaps mucronata*, Kemerton, 30 June 2015. J. Poloni.



03. *Blaps mucronata*, Kemerton, 17 July 2016. J. Poloni



04. *Blaps mucronata*, Kemerton, 17 July 2015. J. Poloni.



05. *Blaps mucronata*, Kemerton, found in dry leaf litter at base of stone wall. J. Poloni.



06. *Blaps mucronata*, Kemerton, found amongst stones used to repair a wall. J. Poloni.



07. *Blaps mucronata*, Kemerton, found amongst stones used to repair a wall. J. Poloni.

Comment

Blaps mucronata is a large dull-black slow-moving beetle, usually nocturnal and once common in cellars, churchyards, houses, stables, out-buildings and warehouses but now scarce although widespread. It is almost always associated with old buildings and both beetles and larvae (which resemble 'meal-worms') feed on detritus, spilled food, cereals and other vegetable matter. At times it can be a pest of stored foods.

The species probably originated in arid habitats and various morphological features help it avoid water loss. The beetle is flightless and the elytra are dove-tailed together along the central suture with a cavity beneath which may help control moisture levels as air enters the abdominal spiracles beneath. Or when the animal drinks the abdomen can expand into the space so enabling water storage (McGrath 1986).

People have long been aware of Cellar beetles. Peter Marren (2010), writing in *Bugs Britannica* quotes Muffet, a physician and naturalist who lived from 1553-1604, on the beetle: "A shame-faced creature and impatient of light, not so much for its ill-favouredness but the guiltiness of its conscience in regard to the stinke it leaves behind it". Marren then writes "It is a flightless beetle that lives in damp cellars, stable and barns and other dark humid places and was once familiar to householders from its habit of hiding in outdoor lavatories or 'base places' as Muffet refers to them. When disturbed the beetle leaves behind a smell described as 'decaying coffins' which is difficult to get rid of!". (Muffet or Moffet or Moufet) collected a large amount of information on insects published posthumously in 1634 as *Insectorum sive Minimorum animalium theatrum* (08), later translated into English by J. Rowland as *The Theatre of Insects, or Lesser Living Creatures.*)



08. Title page of *Theater of Insects* from internet

Joy (1833) writes in his small book (not the great key): “They have a peculiar foul smell, which is difficult to get rid of”. McGrath (1986) notes that the stink emitted by frightened beetles first encourages dispersal of the group then as part of the excretion disperses the remaining stink encourages re-aggregations!

In relatively more recent times compared to the 1600s Fowler (1891) writes: “In cellars, stable, kitchens, churchyards etc; crawling about at night; generally distributed and common throughout the greater part of the kingdom; Mr Bold remarks that it has been found in plenty in the Northumberland and Durham district down some of the deepest coal mines.”

Rye & Fowler (1899) give an interesting description of *Blaps* shown in (09).

The *Blaptina* have the last joint of the maxillary palpi hatchet-shaped, the epipleuræ of the elytra wide, and the hind femora long; they are represented here by one genus (*Blaps*) of three species, all of which are large, somewhat flat, dull black, with the elytra soldered together and pointed behind. They are found (sometimes in great numbers) in kitchens, out-buildings, stables, churchyards, &c., and are very slow in their movements, sedately lifting one long leg at a time, and only crawling about at night. They have a peculiarly foul smell, which is difficult to get rid of, and are indiscriminately known as the “churchyard beetle.” Their larvæ closely resemble the common “meal-worm;” and instances have been recorded of their having been discharged (once in large numbers) from the human stomach.

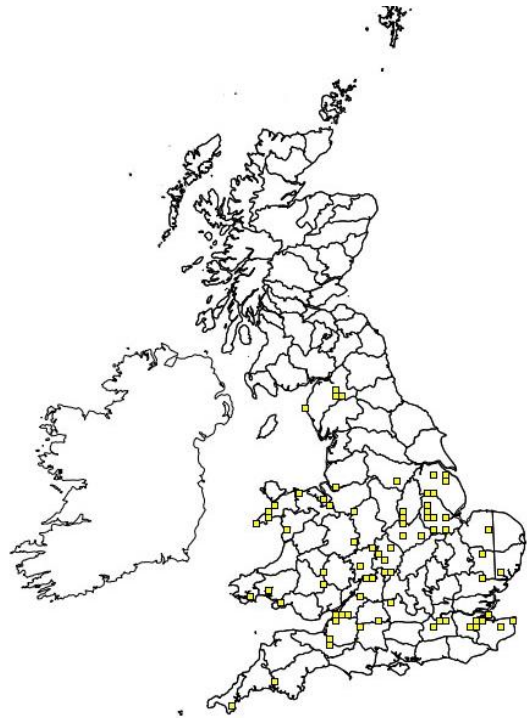
Our commonest species is *B. mucronata*, formerly called *mortisaga*; the latter, however, is much rarer, only occurring in the north of England, and readily distinguished by the longer process at the apex of its elytra, and by its thorax being more evidently punctured and more contracted behind.

09. Rye & Fowler 1899 part of of page 221 on *Blaps*.

Since Fowler’s Victorian times, Cellar Beetles have become scarce, a decline which probably accelerated after WW2 as hygiene in both in houses and farm buildings used for animals and storage of foodstuffs improved. This, coupled with the widespread use of insecticides to remove cockroaches and other insect invaders from buildings, has probably hastened the decline. It is now rare. Nevertheless, correspondence on the Beetles-British Isles egroup early in 2015 mentioned surviving colonies, usually in old stone-built houses, warehouses, stables, in straw bales, in old flour mills, occasionally in large numbers, although most correspondents had rarely or never seen Cellar Beetles.

Blaps mucronata is not in the list of coleoptera compiled by Fletcher (1902) in the *Victoria County History of Worcestershire* but he states that commoner species are excluded from the list. Specimens prepared by Fletcher are in the Worcester City Museum (Green 2015).

The current national distribution of records held by the National Biodiversity Network (NBN) is shown in (10).



10. *Blaps mucronata* distribution map from NBN 10x10 km squares

***Sphodrus leucophthalmus* (Linnaeus, 1758)** Coleoptera:

Carabidae. Predator of *Blaps*

This is a species we would like to find! It is a 20-25mm long-legged dull-black ground beetle recorded in the past in out-buildings, warehouses and cellars where it apparently preyed on *Blaps* spp. It was probably exclusively synanthropic, formerly widespread but now very rare indeed. The last British record held by the national carabid recording scheme is 30th October 1979 from St Merryn in West Cornwall. The last Irish record apparently 1894. Lindroth (1992 translation of 1945 book) states it to be exclusively synanthropic, occurring in cellars, outbuildings, bakeries, and grinding mills in Scandinavia and throughout the rest of Europe.

Fowler (1887) states that it is widely distributed, but not common, and found in cellars in London and in a few other English towns which he lists.

Sphodrus leucophthalmus is not in the list of coleoptera in the *Worcestershire Victoria County History* compiled by Fletcher (1901).

The NBN distribution map shows records for only 13 squares 10x10 km squares nationally. Duff (2012) states that it is usually found in urban areas in cellars and stores apparently preying on the larvae of *Blaps* sp. Formerly local, sometimes frequent, now very rare with no British Records since 1979.

Specimens in Worcester City Museum and Art Gallery.

The old collections of insects held in the basement of the museum are being curated by David Green (Green 2010, 2011). Following the discovery of *Blaps mucronata* in Kemerton he has examined the collection for this species and for *Sphodrus leucophthalmus* and found Victorian specimens of both species as reported and illustrated elsewhere in this issue of *Worcestershire Record* (Green 2015).

Conclusion

This note is partly to draw attention to these beetles and to appeal for records. We have very few records (ancient or modern) of *Blaps mucronata* in Worcestershire. It may still be lurking around old buildings, cellars, churches or churchyards. The beetle seems to be able to ‘hang on’ a low population levels for a many years as indicated by the Kemerton records. It may well be found when building work is carried out on old buildings, especially those made of stone and with cellars.

Its predator *Sphodrus leucophthalmus* is now extremely rare and possibly extinct but may also be lurking alongside *Blaps mucronata* in suitable sites. The only Worcestershire records are the museum specimens.

References

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Images

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