# Dorset Environmental Records Centre

Newsletter No. 87
Spring/Summer 2022

In our newsletter this time, I am delighted to include an article by Ian Cross on shieldbugs which I am sure will get you all looking at these fascinating creatures more closely; Peter Tinsley introduces two marine species newly added to the Dorset list; and we also have a piece on the violet helleborine which summarises some of the work done by the Dorset Flora Group last summer – updating the Dorset Rare Plant Register is part of an ongoing strategy to focus on some of our more vulnerable species.
**Carolyn Steele (Records Centre Manager)**

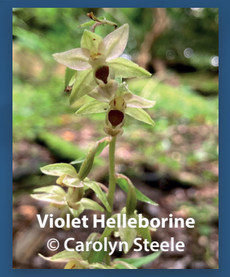
## Violet helleborine (*Epipactis purpurata*) with the Dorset Flora Group

Violet helleborine is widespread throughout southern England, but never in large numbers and none further west than Dorset. This makes our populations important, but most sites are not visited very often because they are in small, obscure woods on private land. The Dorset Rare Plant Register (2004) tells us that violet helleborine is a scarce plant of hazel woodland and that it appears to do better in abandoned coppice. It lists nine sites (eight of which are SNCI) with low numbers of plants in the 1990s.

In August Mariko Whyte (Dorset Wildlife Trust) organised permissions and enlisted the help of DFG to survey the SNCIs. Not all known sites were visited but pleasingly, plants were found in all but one of those searched. In most sites one to five plants were found but Horse Close Wood was the best in show with 16 plants recorded.

We clearly still have a scatter of plants in the traditional sites, with probably little change over the last thirty years. There are lots of other small woods around Dorset where anyone could stumble over it in late summer. With its small, dull coloured flowers growing in dim places, it is notoriously easy to overlook (and photograph). To add to the challenge, as the surveyors found, many plants had been eaten by deer or slugs, so how many plants there really are in Dorset is a mystery.

**Robin Walls**


Violet Helleborine © Carolyn Steele

## Crystal jellyfish and saddled sea-bream

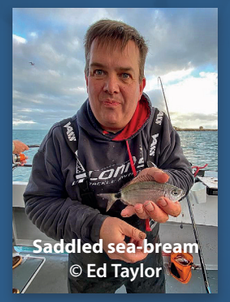

Crystal jellyfish © Jeremy Robson

### NEW MARINE DISCOVERIES FOR DORSET

A young member of the public was paddling and rockpooling on Monmouth Beach in July when she spotted a jellyfish which was different from the usual common blue (*Cyanea lamarckii*) and compass jellyfish (*Chrysaora hysoscella*). She caught it in a bucket and sent a photo through to DERC to confirm the ID. It turned out to be a crystal jellyfish (*Aequorea vitrina*) – a first record for Dorset. Technically *Aequorea* is not a jellyfish, but a hydromedusa. True jellyfish, such as the moon jelly (*Aurelia aurita*) have a prominent planktonic medusa (jellyfish) stage in their lifecycle. Hydroids also have a planktonic stage, but their medusae are usually very small – *Aequorea* is one of a small number of hydroids with medusae that are large enough to be easily visible. A look through a plankton sample with a hand-lens or low-power microscope will usually reveal a number of delicate hydromedusae.

Later in the year a saddled sea-bream (*Oblada melanura*) was caught by an angler fishing off Weymouth in early November. This fish is normally found in the Mediterranean and the Bay of Biscay and this is only the second UK record (the first was caught off St Austell 20 years ago).

**Peter Tinsley**


Saddled sea-bream © Ed Taylor



## Shieldbugs in Dorset

Shieldbugs are most at home in a hot, continental climate and the number of species to be found explodes the moment you cross the Channel. Because of this, in the UK the richest faunas are found in the south-east. However, Dorset is no sluggard in the shieldbug stakes. According to Hunnisett (who gave the most recent account of the Dorset fauna) and the latest shieldbug atlas (Bantock 2018), the number of species with confirmed Dorset records currently stands at 29.

A combination of relatively large size, bright colours, the instantly-recognisable shield shape of many of the larger, commoner species and the availability of well-illustrated, modern identification guides has made the shieldbugs a popular group to ID. A good place to start is with the familiar green shieldbug (picture 1). Many shieldbugs hibernate as adults and some undergo remarkable colour changes to maintain their camouflage through the winter. They turn brown as the cold approaches (picture 2), then assume their normal green in the spring. Parental care is not something we usually associate with insects. However, the parent bug (picture 3) is a model mother. She stands guard over her batch of eggs, shielding them with her body. When they hatch, the nymphs cluster in a tight group and any youngster that strays is shepherded back to join the others.

Most shieldbugs feed on plant sap. However, a small group is renowned for being predators of other insects. The commonest of these is the aptly-named spiked shieldbug (picture 4). They are often encountered with a limp and 'deflated' caterpillar dangling from their beak-like mouthparts as the prey is slowly drained of body fluids.

The bold patterns of many shieldbugs have a variety of functions, including camouflage and warning. The striking black and white pied shieldbug (picture 5) probably falls into the latter category. In Dorset it is found on white deadnettle. Some shieldbugs are habitat specialists. Others have a close association with a select group of plants, often reflected in their common names. One such is the woundwort shieldbug (picture 6), a common and widespread garden species with a fondness for hedge woundwort. The coppery-purple triangle on the scutellum gleams as it catches the sun. The brassica shieldbug comes in a range of dazzling colours. Glossy black, with hints of metallic blue, it has a contrasting pattern of either red, white, cream, orange or yellow. The bugs seem to display no preference for mates of one form or another – 'mixed' pairs are frequent and make for an attractive photograph (picture 7). As the name suggests they feed on a range of plants in the cabbage family.

Shieldbugs have specialist predators, including a number of tachinid flies whose larvae develop inside the body of their host bug. One of the most spectacular predators is the hunting wasp, Astata boops. The female wasp catches and paralyses mature nymphs of a range of shieldbugs and carries them back to her nest (picture 8) to be eaten by the growing wasp larva.

Hemipterists (students of true bugs) recognise the shieldbugs as including the families: *Acanthosomatidae*, *Scutelleridae*, *Cydnidae*, *Thyreocoridae*, *Plataspidae* and *Pentatomidae* – though several other families are often given honorary status as 'allies'. Together they show a remarkable variety of lifestyle and colour and DERC would welcome any new records, preferably with photos for the less common species and a note on any associated plant.

**Ian Cross**

**References:**
Bantock, T. (2018) Provisional atlas of shieldbugs & allies, Unpublished
Hunnisett, J. (2007) Dorset Hemiptera – Heteroptera (True Bugs) Part 1: Aradidae (Bark Bugs) – Stenocephalidae (Spurge Bugs), in Recording Dorset 9, Dorset Environmental Records Centre

Edited by Carolyn Steele

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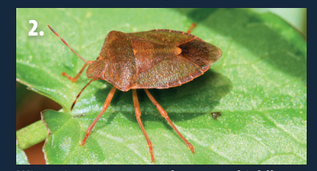
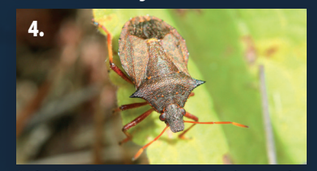
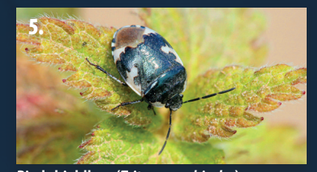
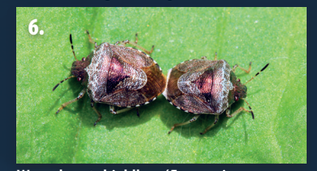
1.
The Green shieldbug (*Palomena prasina*) - a common and familiar species.


2.
Winter is on its way, so the green shieldbug takes on a more appropriate hue.

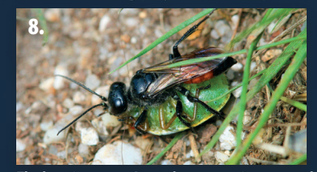

3.
Parent bug (*Elasmucha grisea*) – proving that insects can also be good mothers.


4.
Spiked shieldbug (*Picromerus bidens*) – a predatory species, particularly fond of caterpillars.


5.
Pied shieldbug (*Tritomegas bicolor*).


6.
Woundwort shieldbug (*Eysarcoris venustissimus*).


7.
Brassica shieldbug (*Eurydema oleracea*)


8.
The hunting wasp *Astata boops* carrying a nymph of the gorse shieldbug (*Piezodorus lituratus*).