

Oil Beetles

Last March, on 2017, we were intrigued to find an unusual beetle in the garden. It was black, quite large, with segmented legs which showed a lot of blue colouring. It wandered around the vegetable beds in the sunshine. We took some pictures (see the one here) and did some research. It turns out that it was a female Black Oil Beetle, and the more we read the more we were intrigued - here is an extract from an article on the Buglife website:



“Oil beetles have some of the most extraordinary life cycles of any British insects.

They rely on solitary mining bees to complete their life cycles. Adult oil beetles feed on the leaves and petals of flowering plants and grasses. In the spring the female first finds a mate then selects a suitable place to dig a nest burrow. She must lay lots of eggs to ensure that enough larvae make it through their complex life cycle. They can lay up to 1000 eggs, usually in 2-3 burrows dug into the soil near to where there are bees digging their own nest burrows.

The eggs hatch into leggy, louse-like larvae known as triungulins. These larvae are very active, and for good reason – in order to survive and reach maturity they must immediately find a bee and hitch a ride on its back.

To have the best chance of meeting a bee, the larvae climb up flower stems and lay in wait within a flower. A solitary bee collecting nectar and pollen for its own nest may unwittingly become covered in the oil beetle larvae, secured by their specially-adapted hooked feet.

Once inside the bee’s nest, the triungulin disembarks and begins to feed on the bee’s eggs and the store of pollen and nectar. The larva develops in the bee burrow until it emerges in the spring as an adult oil beetle ready to mate and start the whole cycle again.”

The intriguing thing about this is that apparently the triungulins are active in May and June whereas most of our mining bees in the garden are spring bees, active in March and April. They are apparently often to be found on Lesser Celandine – which in this part of the world is well over by May and June. So quite how our baby oil beetles find a bee nest I am not sure – though perhaps the fact that we saw the same, or a different, oil beetle, a couple of weeks later wandering around the banks where the mining bee nests are located provides a clue. Perhaps they find a bee nest without climbing up flowers?

The ideal habitat for oil beetles species is wildflower-rich grassland – a habitat that has declined in quantity and quality due to intensive management of the countryside. Oil beetles are sensitive to changes in land management and are a good indicator of the health of our countryside. It is well worth keeping an eye open for them on coastal path walks. Here is a better picture to help you identify them.



Rosemary Royle