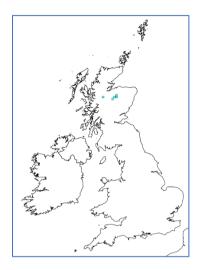
Wood ant spider - Dipoena torva

A good starting point is via this web-link, a write up by Mike Davidson in around 2011, covering many of the things that I have seen over the last couple of months.

https://www.woodants.org.uk/sites/www.woodants.org.uk/files/documents/Mike%20Davidson%20 -%20Some%20observations%20on%20the%20wood%20ant%20spider.pdf

The NBN Atlas map below shows the current UK distribution of the spider.





See also British Spiders https://srs.britishspiders.org.uk/portal.php/p/Summary/s/Dipoena+torva

Also, for a limited period (to May 2023) the spider can be seen in Edition 5 of BBC Springwatch 2022 see: https://www.bbc.co.uk/programmes/m00184gm where there are good views of a male spider.

I first found the spider on the 22 April 2022 when there was just a single spider hanging from what appeared to be a single web strand, and thankfully, I caught the spider in a tube so that I could photograph to confirm that this was the wood ant spider. This was the first time I'd seen the spider. With the large fangs it was obvious that this was a male and, in close up the male has a conically enlarged cephalothorax (behind the fangs) with a dent in the top. Looking for the spider was following a request from the BBC Springwatch team asking if I knew where the spider could be found/filmed.

Over several outings I visited locations where the spider had been found previously but I don't think I had my eye in for actually finding it where there wasn't an ant hanging from a web strand. The BBC had a tight deadline, and the cameraman came out for a day's filming without me having actually found an active spider and after a couple of hours visiting wood ant nests in a wood on the edge of Nethy Bridge the cameraman asked if I knew where there might just be an ant in a spiders web so this would provide the link to the ants he had been filming by a granny pine in Abernethy for the BBC. We went to the site I knew re this combination, and the ant was still visible in the spider's web (not *Dipoena*) and as he was setting up his camera, I found an ant hanging from a web strand and the wood ant spider was feeding on it. With other Scots pines close to the wood ant nest (*Formica lugubris*) I spent the time the cameraman was filming to take a closer look at the trees and found another single male just active on the bark of the pine and without a snagged ant for

guidance. This was on the 15 May and, despite revisiting the original 22 April site whilst doing a wader survey, no spiders were found.

Everything changed on the 17 May as I was returning from another wader count and visited a well-established wood ant nest and there were 2 ants hanging in webs, one with a spider in attendance and, checking adjacent trees 2 more spiders were seen just on the pine tree bark. I re-visited the site briefly two days later and again found an ant with spider in attendance. I returned the next day equipped with cameras and tripods and videoed a spider with ant and with a second spider regularly visiting the feeding spider causing lots of interactions.

21 May I went to an area in Abernethy where I knew there were several well established, large wood ant nests and got no further than the first one where I managed to find a motionless spider with an obvious silk web network around where she was resting. Wood ants were visiting the tree but in small numbers. Another tree closer to the nest was very active with ants probably climbing to find aphids and this was something that started to become apparent with the spider being vulnerable to being caught by the ants, they seem to avoid the main ant run up the trees or are on trees a little further from the nest where there were fewer ants. As I watched the spider, I became aware that there was an ant already in the strands of the web (not an orb type web) and as the spider became active the ant suddenly became detached from the bark and was hanging on what looked like a typical single strand but, on closer inspection, was attached to more than one strand. The spider quickly wound more web around the ant's antennae before sinking its fangs into the head of the ant and started to feed. I couldn't stay too long with this spider but at another site (17 May site), I know the spider remained attached to the ant for over 2 hours before heading off.

Most of the photos you see of the spider usually show the ant hanging from a twig or branch, which I do see, but quite a few are suspended from the bark on the tree. I re-visited my original 22 April site on 12 June where the ant nest is at the base of a mature Scots pine (not a granny pine) with other mature pines all within a few metres. However, there are also a few naturally generated trees probably 10-20 years old in the gaps and still with lots of small side branches, and a couple of these had a minimum of 2 spiders present, a couple with ants hanging from the small branches. Again, locations a little away from the main ant runs on other pines.

23 May I visited one of the aspen woods where I work closely with the owner in establishing the next generation of aspens mostly from suckers. One area of the wood is a mix of hazels and aspens where there are many well established wood ant nests, mostly close to mature birch trees. I've regularly seen the ants climbing the pines so checked the birches to see some trees were also being visited and, being mature trees, there were lots of opportunities for the spider to use the fissures in the bark to create lines of silk webs as per pine trees. However, no spiders were found.

14 June. I was returning from checking out a local orchid site ahead of the annual count and knew of a wood ant nest by the single-track Tulloch Moor Road so decided to visit it. Before I got to the known nest, I spotted another, smaller nest on the road verge surrounded by mainly birches and, on checking the nearest tree firstly saw a hanging spider and then another with a female spider attached. Close by was a male. As the female fed, the male moved around quite close to the female, close enough to be in the zoomed in photos. Possibly the male was awaiting a chance to mate but sadly I didn't have the time to wait and observe. I did though briefly visit the nearby bigger nest

which is surrounded by mature birches and Scots pines and on a pine I managed to find 2 suspended ants but, in the time I had available, didn't see the spiders.

So, lots of contacts with the wood ant spider (10 locations, some with more than 1 active spider/tree) so suggestions for what HBRG members might consider looking for:

- If passing an active wood ant nest check nearby trees initially for ants hanging from the spider's web strands. This might indicate the wood ant spider is present. The web is usually obviously wound round the ants antenne(a).
- I have seen another spider however (money type spider?), with an ant caught via a similar web so suggest an active wood ant spider is looked for on the same tree.
- I've spent 20-30 minutes visiting trees close to ant nests and slowly circling the trees checking for hanging ants or active spiders not always with the captured ant. The latter has happened several times and, once you get your eye in, the spider without ant can be found.
- If you find a spider do try and take a close-up photo, the fangs on the male are usually quite obvious but more difficult to see on the female. However, and I'm not an expert, the legs of this spider do seem to be a mix of brownish and black sections when compared to the other spider I see which has longer, paler legs as well as some small white marks on the body.
- Captured ants can be hanging from small branches or from sections of bark on mature trees. At one location the ant capture web was at the base of a pine tree, attached to tree bark and vegetation.
- When checking trees next to and close to the ant nest perhaps avoid the main ant runs going up and down the tree. Further round the tree from the ant run should be suitable or check the trees a little further away from the nest where fewer ants are active running up and down the tree. I've found the spider, with ant, about 8m from the ant nest. I've found main ant runs can vary by tree depending on whether in or out of the sun, changing through the day.
- Scots pines seem to be the most regularly used trees, but finding the spider with ant on a mature birch tree didn't surprise me and I wouldn't be surprised if the spider caught ants on branches on the ground.
- The spider is tiny (smaller than the ants head) but can be found on the bark of the trees, easier to see if on the move.
- The spider will be more active on warm, sunny days, but I have found them on dull warm days.
- When active? British Spiders suggests "Both sexes have been found in June and females also in July, August and September", but this is just from 22 records. More records could add a lot more information about when each sex is active with my first male 22 April and females in May.
- If confident possibly worth identifying the ant species being caught by collecting a sample from the nest. The 2 I've checked were *Formica lugubris*.
- Also, does the spider only feed on the ants head as suggested in the literature or on other parts of its body as seen on Springwatch where it is feeding on its abdomen.

Wood ant spider photos



A typical captured ant with spider. Note silk web round antennae



A male spider showing large fangs



Male spider feeding on head of wood ant



Male with ant showing web structure ie not aways a hanging single strand



Male spider on bark of Scots pine tree



Female spider (underside) showing small fangs



Female spider with silk web strands visible



Male spider with enlarged cephalothorax & with obvious dent on top visible





Photos of another spider regularly encountered when looking for the wood ant spider, however, there is usually a more complex web, the spider's legs appear longer and are of a paler colour, and there are pale markings visible on the body. This is possibly a money type spider.



A 'hanging' ant, on a young Scots pine & hanging unusually on a side branch quite a way out from the trunk of the pine tree



So far, the only ant/spider combination I've found on a birch tree but with Scots pines close by



Details of ant nest location & ant/spider combination found on the birch tree to the left of the wood ant nest.