Make a pre-dawn By Mel Dash MOUNT CALCULATION By Mel Dash Calculation Calculat

If you're getting up early to see Matariki, you could be sharing the dawn with some other sky dwellers – moths.

Many of our moths are in hibernation during winter, but some hardy species emerge from their cocoons during this time. The frosty, still mornings are ideal for fragile first-time fliers.

Why not head out early with your whānau, and explore the night sky armed with a moth catcher?

You need

- a large torch with a white light
- a white sheet
- two large pegs





Here's how...

- Get up nice and early, while it's still dark, and look for a good, safe spot to watch Matariki.
- **2** Find a spot to hang your sheet, using the pegs.
- Set up your torch and shine the light through the sheet.
- Mait and see who comes to visit.
- When you see a moth, take photos, sketch, or note down the size, shape, and colour.
- See if you can identify it when you get home.
- 7 For a great resource, go to www.landcareresearch.co.nz and click on 'What is this bug'.

Try this at night-time in spring and summer, too. See what different moths you get – and how many more of them.

Moths you might see in winter



Austramathes purpurea. You'll usually find it in winter and spring.



Slender owlet moth (*Rhapsa scotosialis*). It's very common, and found all year.



Green mahoe moth (Feredayia graminosa). It's well camouflaged against greenery!



Green mahoe moth photo: Donald Hobern. Other photos: Olly Ball, NorthTec, Whangarei

Meterana vitiosa. That spot on its forewing can be white or orange-brown.



Meterana alcyone. It can look like a broken twig.

Ask an expert



We looked after a baby thrush and I noticed its poos were always white, even though we fed it things with no white in them. Why are bird poos always white?

Lottie Clarke age 10

Forest & Bird answers:

Birds' digestive systems are different from ours. Like us, birds need to get rid of waste from their kidneys. But while humans – and other mammals – make lots of watery urine to do that, *birds* need to conserve water. So they get rid of their kidney waste in a white or clear goo. This goo is really more like pee than poo.

Birds are also different in that they excrete all their digestive wastes in one big mess, instead of peeing and pooing separately. You might have noticed other colours swirling round in the white. Those bits are the equivalent of poo, and are from other parts of their digestive system.

In some birds' poos, you'll also find berry colour, undigested seeds, or fibre, depending on their diet.