**Small Mammal Trapping**

Today we're going to be setting some small mammal traps, to capture small animals such as mice, voles, and shrews. We're not going to harm the animals in the process of doing so, and we are going to set them free back into the wild afterwards.

Small mammal trapping such as this is quite an effective way when the animal in question is hard to handle or observe in the field, and it's also quite useful when the animal is elusive, such as some of these small animals.

It's worth mentioning at the very start that some animals are protected by law, particularly shrews in this case, and that you must obtain a relevant permit from the appropriate body if you're going to do so. In our case that would be *Scottish Natural Heritage*. FSC Kindrogan, which is where we are, does hold a permit, so today we're going to be including some of these mealworms in our trap: so if you're a shrew you'd find that extremely tasty and attractive.

If you don't have a permit, it's okay - you can still do some small mammal trapping in your area, but you must include a small hole, an escape hole, for those shrews to come out of, that's 12mm in diameter, so that if they do go into the trap they can get outside. That hole is big enough for a shrew but not so big that mice or a vole could escape.

There's a variety of traps that you can get out there, ranging from cheaper plastic options that can cost under £10 to more expensive and durable options such as this one that can cost anything up to about £50.

Today we're going to be using this Longworth trap, which is a fairly common one used by ecologists in the field. It consists of a nest box that's going to be full of bedding and food, and that's where our small animals are going to stay if they go inside our traps; and it’s also made of a tunnel, which contains the door that the animal will enter, and also the trip-wire at the back which if the animal stands on will close the door behind it.

So I'm going to be setting this trap and I'm going to put it somewhere in the grounds of Kindrogan today. The first thing I'm going to need to do is add some bedding. Today I'm using simple dry straw, if you don't have dry straw it's okay, you could use something like dry shredded newspaper or non-absorbent cotton wool if you have that too. Both would do the job.

I'm filling it quite generously, as this is going to insulate any small animal that goes inside. The other thing that I'll be adding is a simple seed mix: this kind of stuff you can get from a pet store and it would be really good food for any mice or voles that go inside; and I'm going to put a generous handful in there for any animals. And then as I mentioned already, I'm going put in a nice generous supply of mealworms for those shrews: if you don't have mealworms then I've heard that blow fly pupae also are particularly favoured by shrews too.

The next job is to actually attach the tunnel onto the next box which, if this is your first time, it can be a little bit fiddly. You do so by lifting the small flap open away from you and hocking the top ridge of the tunnel under the large flap of the nest box, wedging the tunnel onto these two teeth at the bottom of the nest box; followed by clicking that small flap onto the washer board at the top of the tunnel here.

It should look a little bit wonky to begin with, and that nest box should be set at a diagonal. That's so any fluid such as the rain that gets into there can drain freely out, keeping our small animal nice and dry and warm.

I'm ready to set this trap now. I need to make sure that my door is open and I'm going to be looking for any area around this location that won't be disturbed in the next few hours. Also a place where these small animals are likely to be, such as long grasses; fence lines; hedgerows; or drystone walls. These would be preferred places.

So I'm now going to go and set it.

So I've just returned with the seven Longworth traps that I set earlier this morning, and many of the doors are now closed so we might have something inside and we're going to take a look. You'll notice now that I'm wearing gloves. In some cases around the UK small mammals such as this have been known to carry disease, so it’s always worth as a precaution to cover open wounds; to wash your hands afterwards; and to consider wearing gloves like I am.

I left these traps for approximately three hours, and because I might have a shrew in here, you shouldn't leave them for anything longer than four hours, as shrews need to almost constantly feed to maintain their really high metabolism.

If, on the other hand, you included that small escape hole, then you can afford to leave the traps slightly longer; anything up to about twelve hours, but no longer.

The best way to empty a trap like this is to use a clear plastic bag such as this one. This allows you to dismantle the trap and observe the animal inside. If you take your Longworth trap… and I'm going to be putting the whole trap inside my plastic bag here. This is going to contain anything that's inside. Some of these guys can be a bit jumpy, so it’s worth making sure you hold this bag upright with quite a firm grip. The first thing I'm going to do is just detach the tunnel from the nest box. I'm going check there's nothing inside the tunnel before I take it out, and it looks like this guy here has already hopped happily out of the nest box.

If I hold it up and have a bit of a closer look, I can see very big eyes and big ears, quite a pale underside to his body, and a nice deep dark brown fur on the top. This looks like a wood mouse or *Apodemus sylvaticus.*

These small mammals come out mostly at night with their big ears and big eyes to look out for any predators around; and their tails are often quite long, almost as long as their bodies. From this point, I could transfer the small mammal, our little wood mouse here, into my observatory or instead I can handle it and have a bit of a closer look.

You can handle small mammals, but you must do so in quite a fragile manner. I'd suggest you don't do it unless you're with somebody that knows what they're doing. These small mammals could cause you harm by giving you a nasty nip, or probably more likely you'll cause them harm if you hold them in an inappropriate way.

So the first job I'm going to do is just get this little fella closer to one corner of the bag. This is going to make it a little bit easier to hold the chap. He's going to put his nose down into the corner of the bag here...

Now I've got a firm grip on my little wood mouse here I can put my hand in and I'm going to be looking at pinching the small amount of skin just underneath his head, behind his ears, almost like the scruff of his neck…

I can hold him up and if I hold him correctly he's nice and calm. I can have a look at the underside of his body here, and I can see that this looks like quite a young male. And you can see his nice pale underside; his long hind legs which are going to be excellent for tree climbing and looking for food; as well as the dark side of the upper part of his body, that nice brown fur here.

I'm not going to hold him for too long, so some scientists might want to take measurements now by measuring the hind leg or the tail length, but I'm going to pop him back into this bag where he's probably a little bit more comfortable.

Once I've had a nice close look at my little wood mouse here, I'm going to be setting him free so we can go and find the other species that are living around this area.

If you want more help identifying small mammals, if you want more information about trapping them, there is a couple of good resources you can get. I've got the FSC Guide to Land Mammals here for identification and a bit more information from the Mammal Society with their Live Trapping Small Mammals book as well.

Small mammals are fairly under recorded in the UK, so if you do know the species then you can also add your data onto the Mammal Society's Mammal Atlas and contribute to our understanding of these beautiful and very small animals.