

The Hedgehog House is based on a design I downloaded and modified. I kept to the principal dimensions suggested, using my own preferred construction methods. A copy of the original document is provided on page 10, to offer full credit to the originator (Corinne Welch © 2015), where applicable.

This PDF contains details of construction and siting information. If you intend to make one yourself based on this design, it is recommended you read the whole document first. Please note, no timber used needs to be treated with any chemicals as it will be well protected.

Details related to capturing video and images is contained in a separate PDF document called HEDGEHOG HOUSE OPERATION V006.

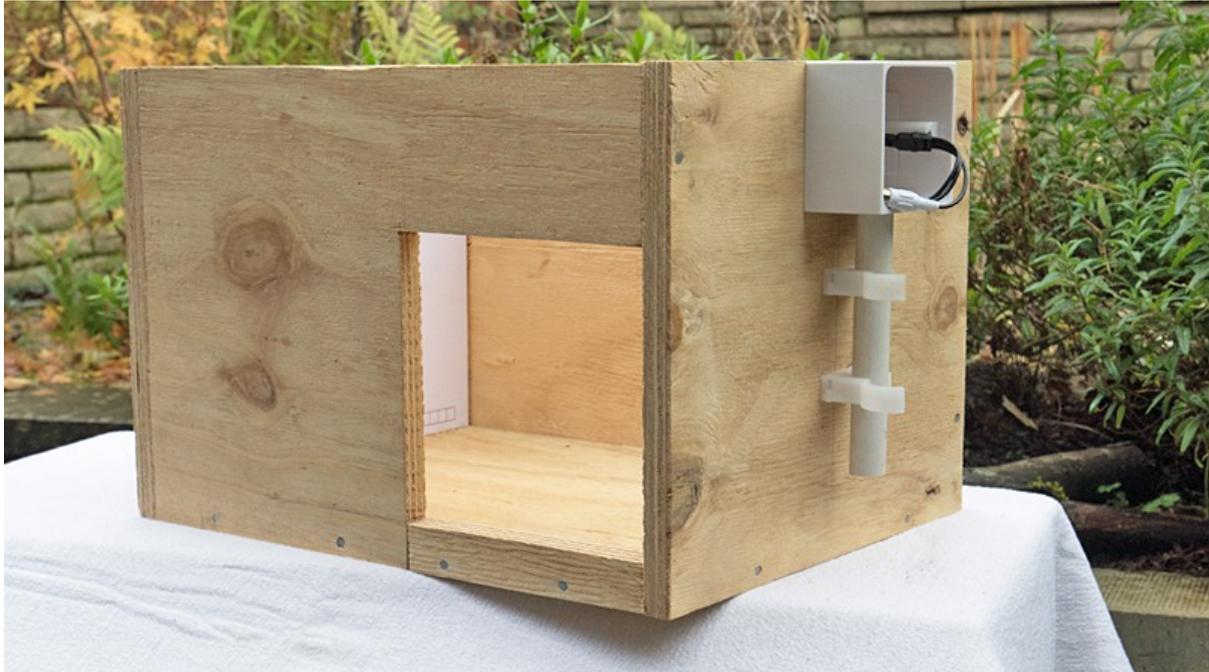


This young Hedgehog is one of my visitors that had concealed itself in undergrowth next to my pond. I must have disturbed it when hunting Dragonflies with a lens. The Hedgehog was lifted and placed next to a Hedgehog House where it hid until nightfall. NB: My pond has several good exit ramps in case a Hedgehog falls into the water.

When my first Hedgehog House was made available to let, furnished with dried leaves, it was only three weeks before a Hedgehog arrived. No one was more surprised than I was. If I am being honest I did not really expect I would ever be honoured by a visit from a Hedgehog or indeed anything at all so quickly. You never know what is rummaging about your garden at night. *Always assuming they can actually get into your garden.*

This document now includes measurements and other details to assist anyone to make their own Hedgehog House, based on the simple design. Hedgehog Houses can be bought ready made but this method is far more robust and any House produced should last for many years given care in siting. You can also readily adapt the idea if you wish.

Note Well: First job. Gather leaves, mosses and other bedding material immediately, so they can be dried and stored ready for future use.



The basic shell is produced using 18mm plywood. Four strips 298mm wide can be sawn from a standard 1.200m wide sheet. If you can persuade three other people to participate that would be useful. Unless you have more than one like me. NB: This 298mm width allows for the thickness of the saw blade cutting the plywood at the timber merchant. The base and two long sides are 298mm x 400mm. The two ends 336mm long. The remaining plywood off-cut, cut to 438mm long and fitted with softwood edging 18mm square on both long edges will produce the lid. Therefore, four complete Hedgehog Houses can be made from one standard 2.400m x 1.200m sheet of 18mm plywood.

The lid drops on top and is located in its correct position by a couple of timber beads fixed to the underside. This beading could be the same softwood timber used to edge the lid. 1.800m of softwood 18mm x 18mm in total per Hedgehog House. No need to nail, screw or hinge the lid. Self weight and eventual superimposed load (stones, logs and soil) must hold it in place ultimately.

Note how few fixings are used. In this case 50mm fine wire nails kept well back (75mm) from the corners so the nails do not spilt (i.e. delaminate) the plywood.

The hole size in the side (main entrance) is marked using the access tunnel as a template, starting 30mm up from the base of the House. The latter allows for the thickness of the base and the thickness of any additional protective layer (MDF or cardboard) you may decide to add to the floor. You will also need to allow for the protective plastic tunnel covering and a small allowance to make the tunnel easy to fit. Tunnel external dimensions plus 8mm suggested. The access tunnel slots in snug but loose. Not fixed. The tunnel slopes downhill.

The conduit (if any) shown for the low voltage cable may be push-fit plastic electrical conduit obtainable from DIY stores. The latter does not have waterproof joints. If you prefer waterproof joints, choose plastic plumbing overflow pipe of the solvent-weld type. Guaranteed water-tight. A conduit is not essential, as the cable is high quality.



Conduit something you may wish to consider in your particular case if there is any risk from mechanical damage to the cable, perhaps when gardening.

With my own I use solvent-weld rainwater pipe as I have multiple cables plus nylon cords to enable me to pull additional or replacement wires through in the future. Being waterproof the pipe is buried in the garden and the waste pipe will easily resist gardening hand tools used on the margins.

A hole can be drilled in the base of the electrical back box (deep type). I have a reamer for enlarging such holes to the size I want. Overflow pipe fits snug. Reaming not essential. A hole sufficient for the RCA cable plugs to fit through will do.

With proprietary electrical conduit products they make boxes with knock-outs for cable entry and conduit connecting adaptors. Your choice. These conduit plastic boxes are manufactured from a different polymer and are much less fragile but more expensive.

The main cable is completely separate from the camera with this particular camera system which is far better, then it can be replaced in the future or the camera swapped if you upgrade. The audio/video plugs can connect inside the electrical back box and a blanking plate can be fitted afterwards.

Tip: If you do use the solvent-weld type overflow or waste pipe as conduit, Leave vertical joints dry for dismantling later. On a vertical pipe the underside socket pointing down can be left dry, with the other joint solvent-welded. Such dry joints still lock home and water cannot enter.

Tip: If you decide to use plastic waste pipe (32mm or 40mm), you could alternatively use plastic compression joints straight couplings and/or elbows which are also waterproof.

I line the internal base with an offcut of thin MDF so it can be replaced in time if it ever needs to be cleaned. Stiff cardboard would do. I have not yet found it necessary to do so.

The A4 target sheet provided on page 11 is positioned opposite the camera. I produced the target sheet to help assess the optimum camera angle and (if needed) set the focus.

The angle of the camera needs to be determined to suit your personal choice. You also have the option to focus the lens with some camera models. Study the manual. The target sheet is useful for that as well. NB: Cameras usually arrive pre-focused so try that setting first.

I have of course assumed that any tenant will occupy the end furthest away from the tunnel entrance which cannot be guaranteed. That has to be your choice as well. Thus far, experience suggests they prefer a corner away from the entrance and will be seen to work hard to bury themselves with leaves, therefore don't be mean with supply of dried leaves and mosses. I harvest leaves in autumn and dry them in my workshop to build up a good supply.

The next image shows the camera position in context. Once the final position is determined, *the camera needs to be detached and removed to a place of safety* while the House protection is added, given the amount of hammering that will be required.

Cameras usually include a detachable mounting plate if you prefer to use that. In this context I fit the camera directly to the wall of the House.



The small piece of timber behind the camera I have planed to 13mm thickness for the rear corner of the camera to press against. That gives me my preferred camera angle. Not essential but I prefer it bearing in mind a mammal might knock the camera in some circumstances and the wood is easily fashioned. The camera does tend to work loose if moved. Belt and braces again. A watchmaker's screwdriver will tighten the fine screws securing the camera bracket to the camera.

The hole for the plugs and cable below the camera bracket, a recommended minimum of 19mm diameter. That will correspond with the back box (if any), cable entry point.

It is recommended you test the camera set-up first before moving on with protection. *Whatever you do, remove the camera to a place of safety while you complete protection.*

The only hard and fast rule about protection of the House is that it is applied in a particular overlapped sequence, well covered and well overlapped. Like me, some people may have scraps of different products, being left-overs from past jobs, as used and shown below.

DIY stores sell pieces of 1200 gauge plastic sheet (standard damp proof membrane as used under floor slabs in construction), known in popular construction parlance as Visqueen sheet.

Other options I variously use being left-overs (as used in the House below):

- Heavy duty bin liners or rubble sacks (base and tunnel)
- 300mm wide damp-proof-course off-cut (walls)

The lid is covered with a substantial amount of excessively long protection to act as an umbrella protecting the electrical box. Finesse in appearance not important, just well covered, well overlapped and well protected.

On completion a poncho of plastic could be thrown over the whole House and providing the House is on well drained ground, if necessary raised, it should last for many years.

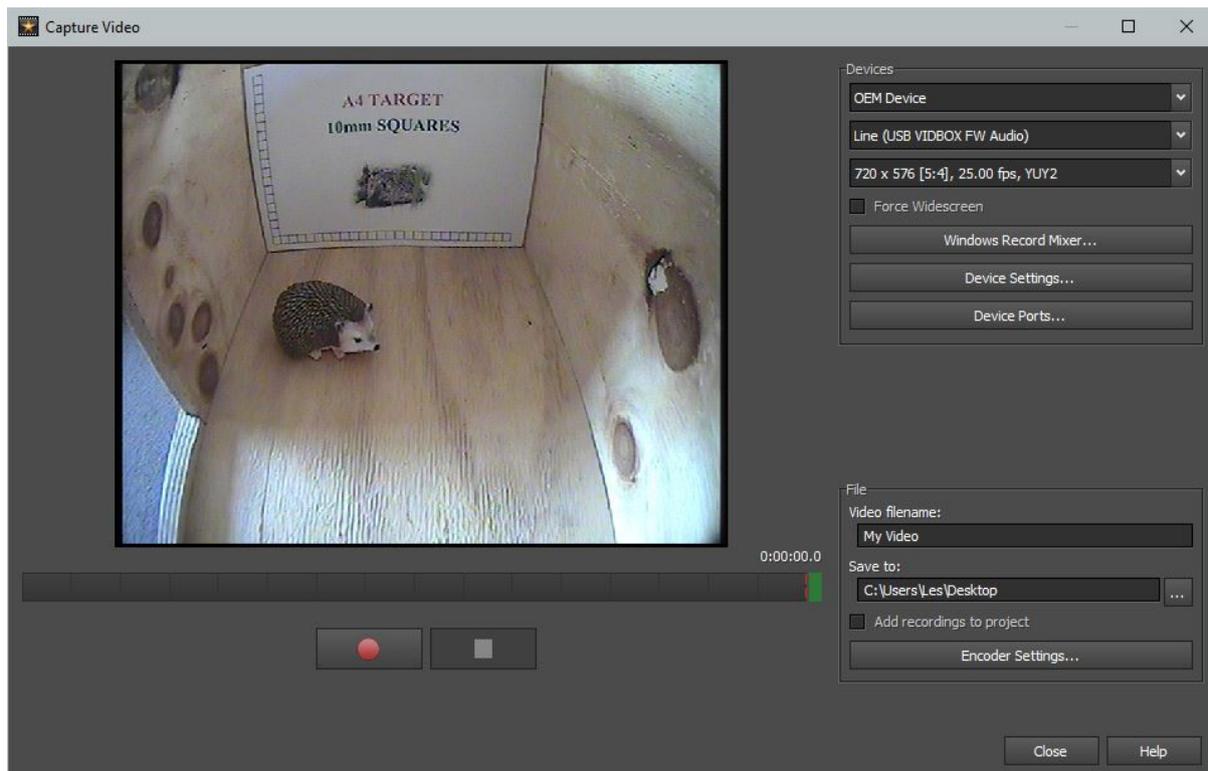


The access tunnel, again simply made. The key dimensions inside the tunnel 130mm x 130mm x 400mm long. The original was shown at 300mm long but I prefer a longer tunnel.

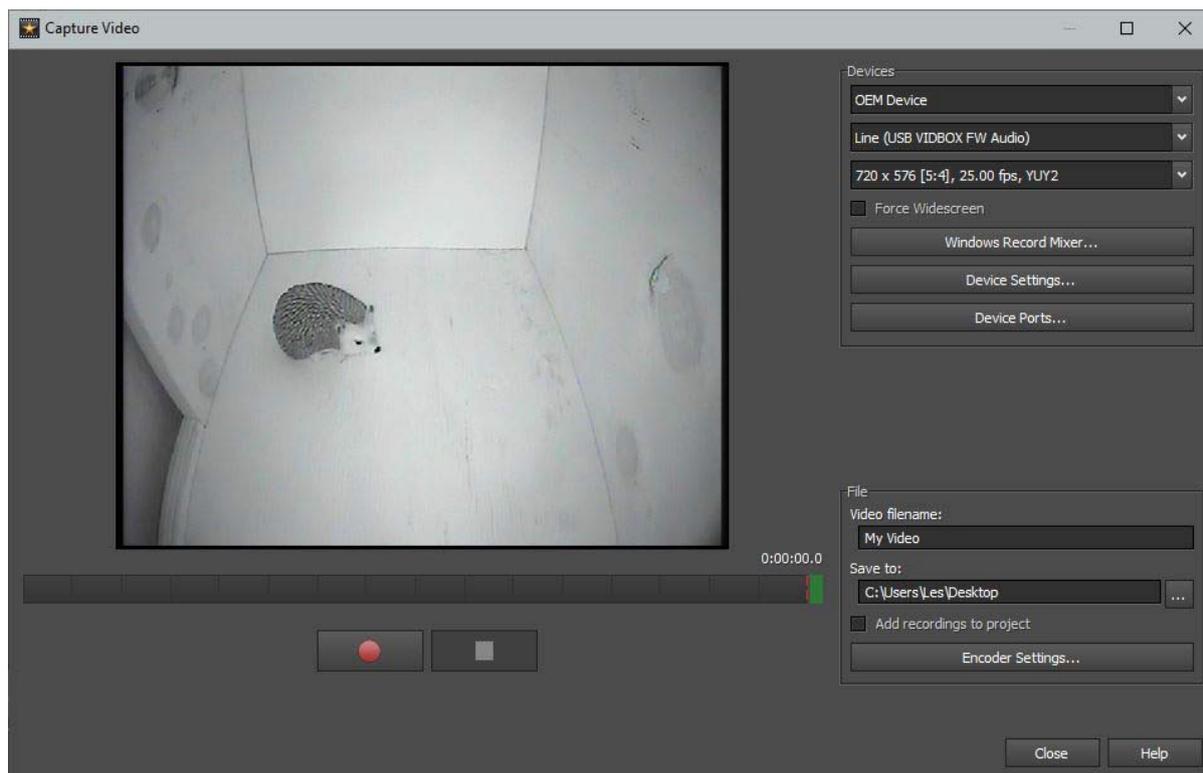
Some timber merchants may have short-ends or off-cuts they will let you have cheaper as it saves waste and they can make money on them.

This access tunnel should be made first and used as a template to determine the hole size in the side of the House, adding 8mm to height and width for tolerance and protective covering. The tunnel is not fixed in any way. Once installed it will not move.

Camera and electrics refitted afterwards and the whole fully tested. Target sheet and figurine of choice installed for the final screen test (NCH capture software used here) and focus.



Daylight view with no lid [These images using an earlier camera type].



View with absence of daylight

We are now ready to install the Hedgehog House.

A few words of advice regarding useful materials which may be salvaged in the interim. As my own particular base potentially vulnerable to damage from coarse small stones, it was set on a thin sheet of corrugated plastic. The sort that is used between layers of bricks in pallets of bricks. The same thickness as corrugated cardboard. I keep anything like that for these occasions. Strong, light, easy to cut, lasts and it is free.

NB: Plastic offcuts can usefully be recycled in my Local Authority home area if they are the right polymer. You could use a layer of clean pea gravel or small pebbles but the location must always be well drained.

I like Hedgehog homes to be buried on well drained ground and shielded from light-pollution as well. That said, consideration should be given to accessing the House in the future if the need arises. In my case that has only happened once when I upgraded a camera.

Large misshapen logs, rough stones and plenty of soil in lieu of mortar make a fine superstructure around the timber-framed House. This also insulates and helps protect against vibration and structure-borne sound.

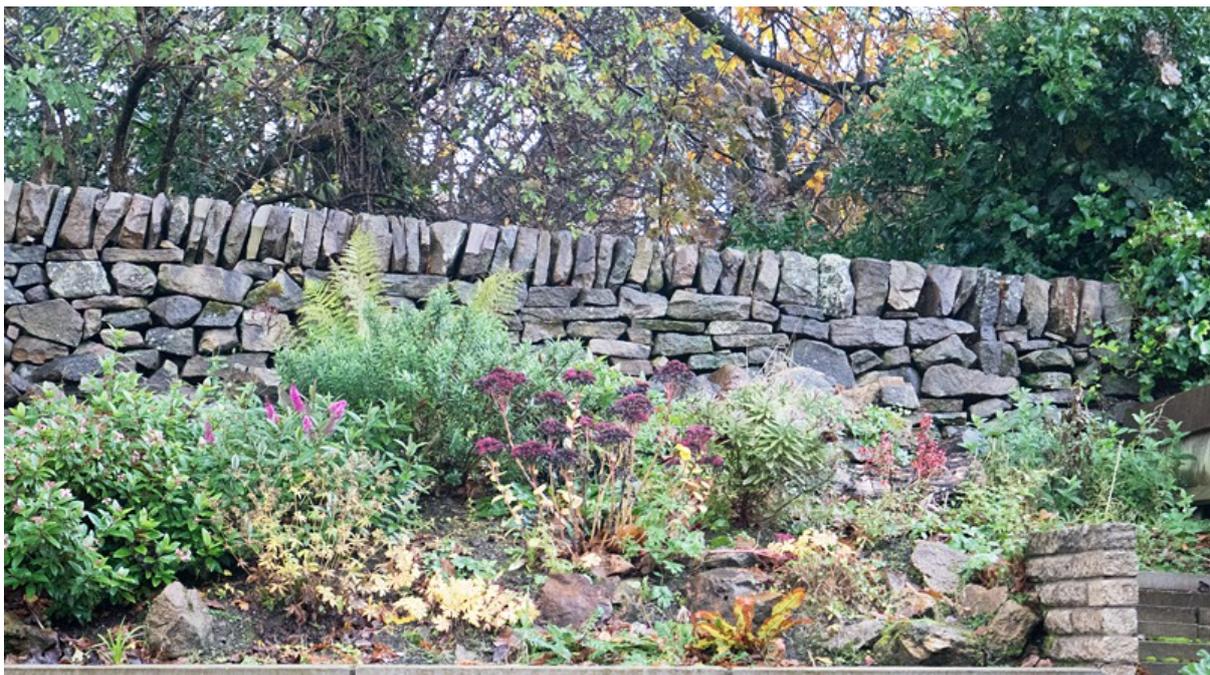
All gaps sealed with soil and eventually covered with rockery plants and mosses which are easily transplanted temporarily if the need arises for access.



As mentioned on the first page “*always assuming they can get in your garden*”. I had my drystone wall rebuilt and took that opportunity to create two separate access points, as indicated by the arrow heads. Natural stone lintels over the openings.

The first Hedgehog House just left of the right-hand arrow head completely encased in stone, logs and soil. The second Hedgehog House on the far left, barely visible.

The whole area long since overwhelmed by nature to provide cover and protection from the light-pollution of my rear facing windows. Wildlife can enter and leave unnoticed.



Note Well: Always check in spring and summer to ensure nature has not blocked the access points into the garden and/or Hedgehog House. Mine always need weeding at intervals to remove brambles, nettles and other rapidly growing vegetation.

Reviewed and updated: 28.08.2024

# Make a deluxe hedgehog house

## You will need

- 20mm FSC plywood boards cut to the sizes shown

- Hammer and nails



- 2 metal hinges



- Soil



- Dry leaves



- Straw or dry grass



- Newspapers



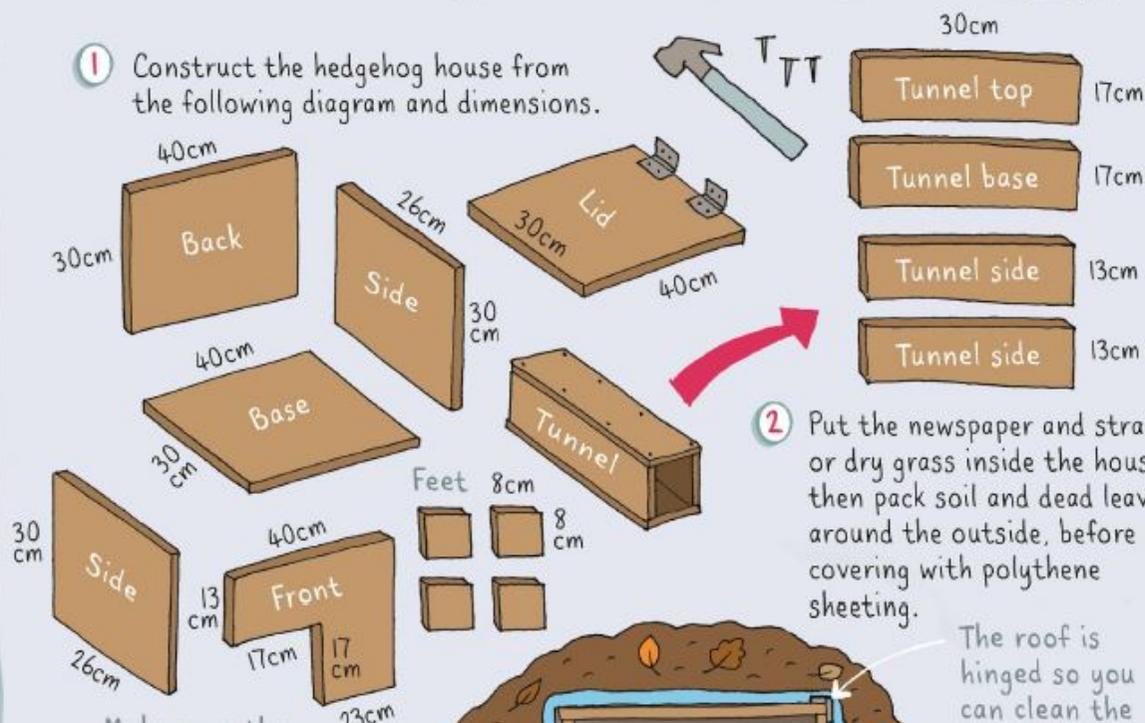
- Polythene sheeting



Do not creosote or treat the wood

Birch is ideal

1 Construct the hedgehog house from the following diagram and dimensions.



2 Put the newspaper and straw or dry grass inside the house, then pack soil and dead leaves around the outside, before covering with polythene sheeting.

The roof is hinged so you can clean the box in future

Make sure the entrance tunnel faces south, and is kept clear at all times



