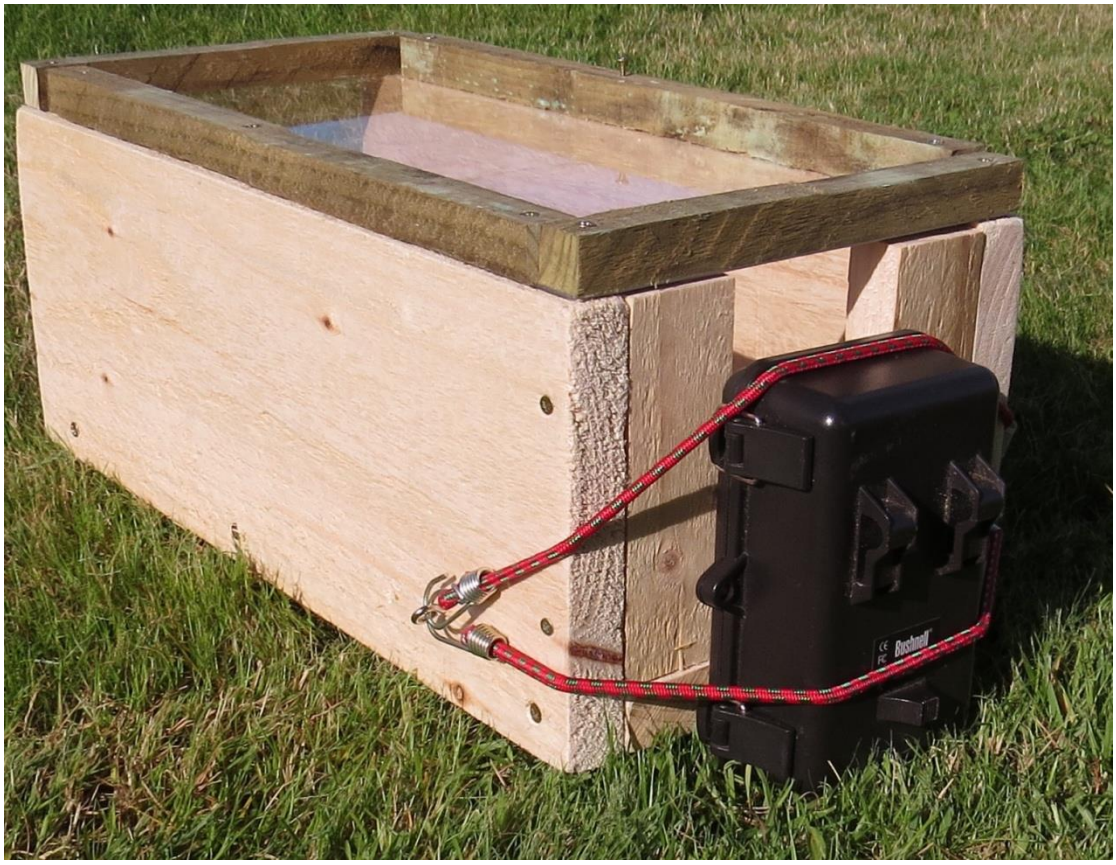
How to make a Littlewood box for small mammal camera-trapping

The boxes that I make are 40 cm long and something like 16 cm across the base (internal measurement). The precise measurements are unlikely to be critical if you have wooden boards available of a slightly different measurement.

We use a +4 diopter close focus filter (sometime called close focus lens). They can be bought individually or you may see packs containing one each of +1, +2, +4 and +10. A smallish diameter (we use 48 mm) is optimal so it doesn't overlap too much of the camera's sensor. And just attach with blu-tac. For most camera traps, this brings focus to c. 20 to 40 cm or so. There is no particular brand to aim for - the sets of four can be bought for £10 or so on Amazon, etc. (and we sometimes use the +1 or +2 in other less-extreme close-up situations, e.g. at a bird table).

The box has a clear plastic roof to let daylight in. We cover the flash with tape to dampen its intensity (trial and error to get this to optimal level but typically around 3 layers of brown packing tape with a sheet of paper first to prevent tape residue on the flash surface). If your camera trap(s) have the light sensor (that decides if it is dark enough for the flash to operate) housed within the flash unit, you

need to leave a tiny hole in the tape directly over it for this to still operate effectively - this is the case on some, but not all, Bushnells.



The camera attaches at one end with the curved black motion sensor bit "sitting" on the floor of the box and the camera is then held in place with bungees. I attach smaller panels of wood at the camera end and adjust these so that, ideally, the floor of the far end of the box comes to around a third of the way up the camera's view. I also drill a sort of pit at about 30 cm from the camera into the floor of the box, that I put the bait (birdseed and dried mealworms) in (though it does inevitably get kicked around). I then put the whole box into a clear plastic bag (open at the entrance of course) just to keep rain off the lens/filter. See photos (these were an earlier box version, without the "pit" but otherwise much the same).

The set-up is pretty simple and easy enough to make with some basic tools, Note that some camera trap models are more suited to this than others. Generally, the best camera traps are those in which the sensor is located low down on the front of the camera and protrudes slightly, so it can "sit" on the floor of the box. Ideally the lens will be close to the sensor, usually just above it. This is the case on most Bushnells, Minox 650, many of the Acorns and some other cameras. Less suited cameras include some Spypoints, where the lens is quite high up above the sensor, and some Brownings that have the sensor at the top rather than the bottom. Let me know if you'd like me to comment on likely suitability of any particular model

I make and sell the kits (including bungees and close focus lens) for £30 plus delivery (£6 for one, less for multiple buys).