

Friends of Rotoiti : DOC200 box design innovations Nelson Lakes National Park, New Zealand @ August 2011

During the past decade Friends of Rotoiti members have made many modifications to the Department of Conservation current best practice tunnel design. Particular care has been taken to retain the ability to "exclude non target species, guide target species and provide for public safety". These modifications have made the tunnels lighter, easier to clear and clean as well as safer for trap resetting.

The original idea to turn the box upside down to be hinged from a solid base came from Will Rickerby, with further fine tuning recently from Warwick Ward and Peter Hale. The current design is 'weka length' and is also used in the Rotoiti Nature Recovery Project (DOC), and includes the following improvements:

- ☞ A hinged top section which allows free access to the trap for easy and safe clearing, cleaning and trap resetting. A foot is placed on the base beside the trap whilst clearing and resetting. A strengthening spacer/spreader is positioned at both ends of the tunnel.
- ☞ Construction with DD grade H3 construction plywood, 9mm for the top, sides and centre baffle and 17mm for the base. Delaminating is no longer a problem with modern ply construction. The plywood is glued and nailed/stapled for increased robustness using polyurethane 30 minute cure glue (Gorilla, Probond or similar).
- ☞ A solid centre baffle with an arch instead of a hole allows the top to be raised without being held down by a captured animal.
- ☞ Where public safety may be an issue the hinged top can be easily secured by addition of a securing strap and screw.
- ☞ The most recent addition has been a strip of reflective tape placed on the outside bar of the trap, to enable quick trap checking from a distance (ie if the tape is vertical, the trap is set, if it's horizontal it's been set off).



PLY BASE - 17mm D-D GRADE TREATED PLY
 SIDES - TOP - & Baffle 9mm D-D GRADE TREATED PLY
 SPREADERS 30x25 H3 TREATED RADIATA
 MESH 10mm GALV MESH
 MIDDLES EX 25mm STRAP BRACE CUT IN 76mm LENGTHS
 TIMBER JOINTS POLYURETHANE GLUED & STAPLED

