

A Low-Cost Portable Deer Enclosure

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Highlight: Polyethylene fishing net was used as fence material to construct low-cost portable deer enclosures to pen tame and semitame mule deer (*Odocoileus hemionus hemionus*) for diet observations. Three workers could disassemble and set up a 225 m² pen at a new location in approximately 1.5 hours.

Research using tame deer may be hampered by a lack of adequate holding facilities. Deer-proof fences are expensive and their construction is time consuming. An alternative to wire and board fences is fishing net, which is a relatively inexpensive material. Fences made of fishing net were tested and successfully used to contain tame and semitame deer in a forage selection study conducted near Kamloops, British Columbia.

The fishing net was 12-cm mesh, 550 m long by 25 mesh deep, with double selvage top and bottom and weighed 120 kg. To facilitate handling, polypropylene rope 6 mm diam. was woven along the top and bottom webbing. To erect the fence, steel posts were driven at each corner of the plot. To the posts, 2.5-m long dried fir saplings (5 cm diam.) were wired and guy wires attached. The ends of the top and bottom ropes were tied to a corner post, stretched tight, and tied to the next corner post. The webbing was then distributed evenly along the distance by sliding it along the two ropes (Fig. 1). When the right amount of webbing was evenly spaced, pre-cut 2-m long saplings were placed upright every 4 m to support the top rope and hold the bottom rope down. Notches cut in the ends of the saplings fit over the ropes. The middle post along each side of the pen was supported by another steel post for greater rigidity.

It is important that the right amount of webbing be used for the height desired. If too little webbing was used, the top and bottom ropes were pulled together too tightly, and if too much was used, the webbing sagged. The right amount was found through trial and error. It was found that the original folded length of 550 m when erected yielded about 350 m for a 2-m high fence. Higher fences could be made but the length would be reduced.

Netting for one fence, 15 m × 15 m, with rope and wooden supports is easily carried by two people and may be managed by one person. Another benefit of the webbing is that when animals jump into it there



Fig. 1. Fishing net deer enclosure erected on a sagebrush site.



Fig. 2. Rocks and logs could be laid on the bottom rope to hold it close to ground.

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is enough give in the rope and webbing to minimize injury. As well, when the webbing is properly stretched, there is less problem of entanglement of hooves and antlers than was experienced with page-wire. On one occasion, an adult male deer entangled his antlers in the mesh. No injuries were sustained during his struggle and a minimum of damage was done to the netting.

There are some precautions that should be noted when using fishing net for fencing. No loose ends should be left where animals can get entangled in them, and all sources of alarm to the animals should be

avoided. We found that occasionally logs had to be laid on the bottom of the fence to discourage deer from lifting the bottom rope and escaping (Fig. 2). One individual became adept at that after being in a pen with a loose bottom rope and was continually a problem afterwards. Also, males during rut should be watched closely so that assistance could be given in case of entanglement in the mesh.

The cost of the webbing and rope was approximately \$1.50 per m, at 1976 prices, for a 2-m high fence. This cost, coupled with the ease of handling makes the fishing net an excellent fence material.