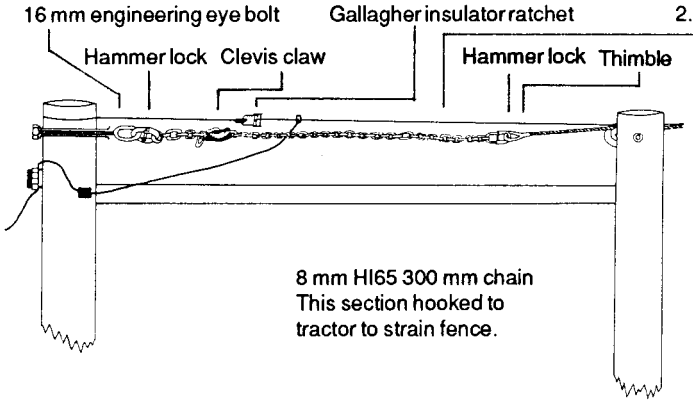
Upper River Torrens Landcare Group Inc.

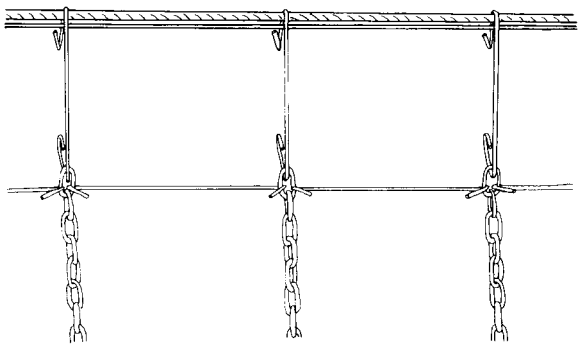
Data Sheet
Electrified Floodgates

These drawings detail two ways of securing a permanent floodgate assembly. The crossing distance and height of mesh or chain drop will determine your design, based on a simple or commercial rachet strainer, turnbuckle or tractor-strained cable.

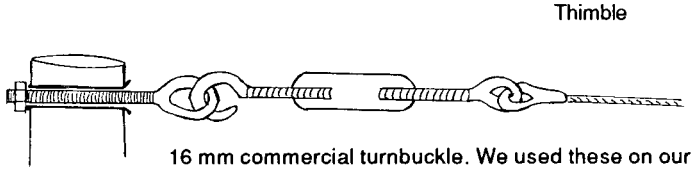
STRAINER ASSEMBLY FOR OUR 63 METRE ELECTRIFIED FLOOD GATE



SECTION OF IN-LINE ASSEMBLY



TURNBUCKLE ASSEMBLY ON OUR 24 METRE CREEK CROSSING RACE



TROUBLE SHOOTING

1. If voltage loss occurs at times other than at flooding (e.g. in dry, summer conditions), the large number of loose joints with the coupling clip/chain design can lead to some voltage loss through arcing at the touch points.

Options:

(1) Place two or more floodgate controllers in parallel.

(2) Slip plastic dripper tube over the cable, isolating it from the positive (+) wire.

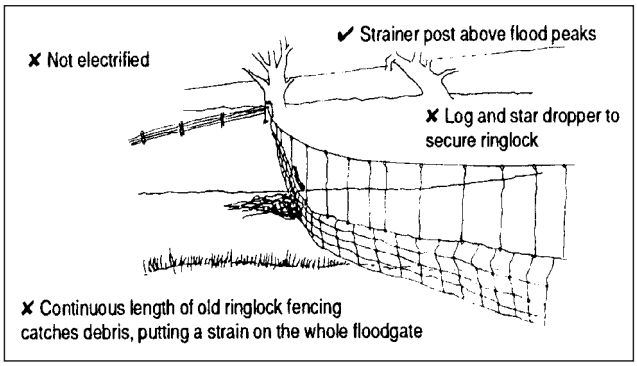
2. In summer, with dry, sandy, rocky or earth banks, ensure that stock (mainly sheep) step on to a strip of galvanised wire secured to the ground (and connected to a super earth system) when they touch the suspended mesh or chains.

Floodgate observations

Right: Ideal - permanence and low maintenance

Any branch or litter mass only impacts on the chains that it touches... before passing through. Where litter/debris is not a problem, separated mesh panels will be effective for all stock - and cheaper.

NB Voltage loss to main fence is protected with a simple flood gate controller



✔✔ Improve to permanent /reduce maintenance by:

1. *Removing ringlock - leave single wires*
2. *Slip black poly-pipe over cable to allow for electrifying. Run hot wire across*
3. *Attach galvanised chain to each wire over water zone*
4. *Suspend mesh panels over bank area*

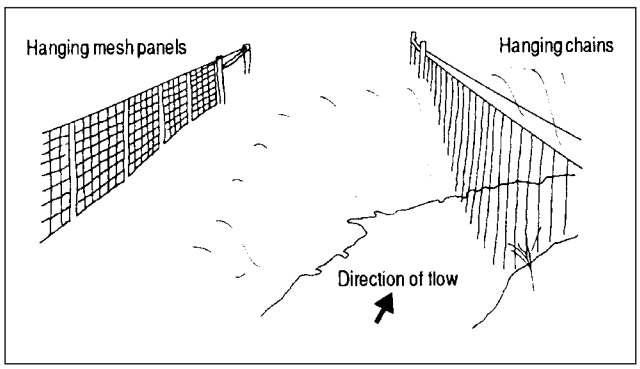
Difficult sites

What to do, eh, Michael?

Rocks and dry sand - bad news for electric fencing because of poor or zero earthing. (For sheep, it is important to have a super earth - see Trouble Shooting No. 2 over the page)

With such a difficult site, the answer is either a permanent fixture (cable/mesh/chains) or a breakaway disposable section.

Stock races



Above: Mesh panels and chains can be used, and modified for stock access to a permanent waterhole by ending the chains/mesh at the low water mark

Left: A simple but well constructed culvert crossing is designed to minimise danger from stock and variable water flows