Vegetation stepping-stone enclosures

The 'vegetation stepping-stone' enclosures pictured in Figures 1 and 2, represent an easy to install and cost-effective way to establish connectivity and bird-friendly habitat on farming properties. The method was developed by Owen Whitaker and Alison Elvin of *Wildscapes Rural*. These enclosures have been successful on their sheep property 40km south of Cootamundra, NSW. A diverse native seed mix was applied with a direct seeder for the enclosure in Figure 1, constructed in 2018 (6yo). In small scale projects planting tubestock would be just as effective (Figure 2).

Figure 1. 6 year old vegetation stepping-stone enclosure, direct seeded using a diverse native seed mix.

The enclosures are 20m in diameter and require approximately 63m of hinged joint fencing wire (Figure 3) and 15 star pickets. Before constructing the enclosure, good soil preparation is essential, following the same soil preparation, weed control and planting practices as with all restoration advice in Birds on Farms Habitat Restoration Plans, using as diverse a 20:80 ratio mix of trees and shrubs as available.

Figure 2. Vegetation stepping-stone enclosure planted out with tubestock.

Method

After initial soil preparation, mark the area by driving a star picket into the centre of the prepared site. Attach a 10m rope to a wire ring, slip it over the picket and use it to measure out and mark (with spray marker) every 4m around the circle where the star pickets will be driven. Then fully drive in a star picket at each intermediate (8m) mark with the broader face of the pickets facing inwards. Secure the hinged joint wire firmly to these pickets, but not overly tight. To achieve the required tension, drive in the remaining pickets, gradually forcing the wire outwards, but not so much that the pickets begin to lean inwards by the strain. Secure the wire to the pickets with tie wire. Once familiar with this method, an enclosure can be constructed in under two hours.

These enclosures have withstood stock pressure from the Dorper sheep on the property. However, for enclosures where cattle or horses are present, once the tubestock has been planted out, it is advisable to install a 'hot' wire across the top of the fence using a portable solar electric fence unit, in accordance with the unit's instructions. Figure 4 shows a graphic of two proposed enclosures in a recent Habitat Restoration Plan with potential to provide connectivity from the reserve on the boundary of the property via 'stepping-stones' of vegetation for smaller woodland birds to access the water source of the dam.

Budget

The tables below show the budget requirements for a vegetation stepping-stone enclosure.

Table 1. Budget for the fencing component of the vegetation stepping-stone enclosure (2024 pricing)

Fencing costs of enclosure	Unit cost	# of units	Cost
Star pickets	$9	15	$135
Hinge-lock fencing wire *	$1.50	64	$96
If using - Solar electric fence unit, e.g. Solar 2 Thunderbird	$300	1	$300
		Total	**$531**

* Three enclosures can be constructed from a 200m roll of hinge-lock fencing wire at (under) $300 per roll.

Planting costs	Unit cost	# of units	Cost	In-kind
Native Tubestock trees + shrubs	$2.25	36	$81	
Tree guards and stakes	$3	36	$108	
Planting (manual digging, planting and tree guarding)	$40/hr	3		($120)
		Total	**$189**	($120)

Figure 3. Hinged joint fencing has a tightly wrapped knot which is flexible enough to withstand moderate stock pressure. It is recommended a 'hot' wire be installed if cattle or horses are present.

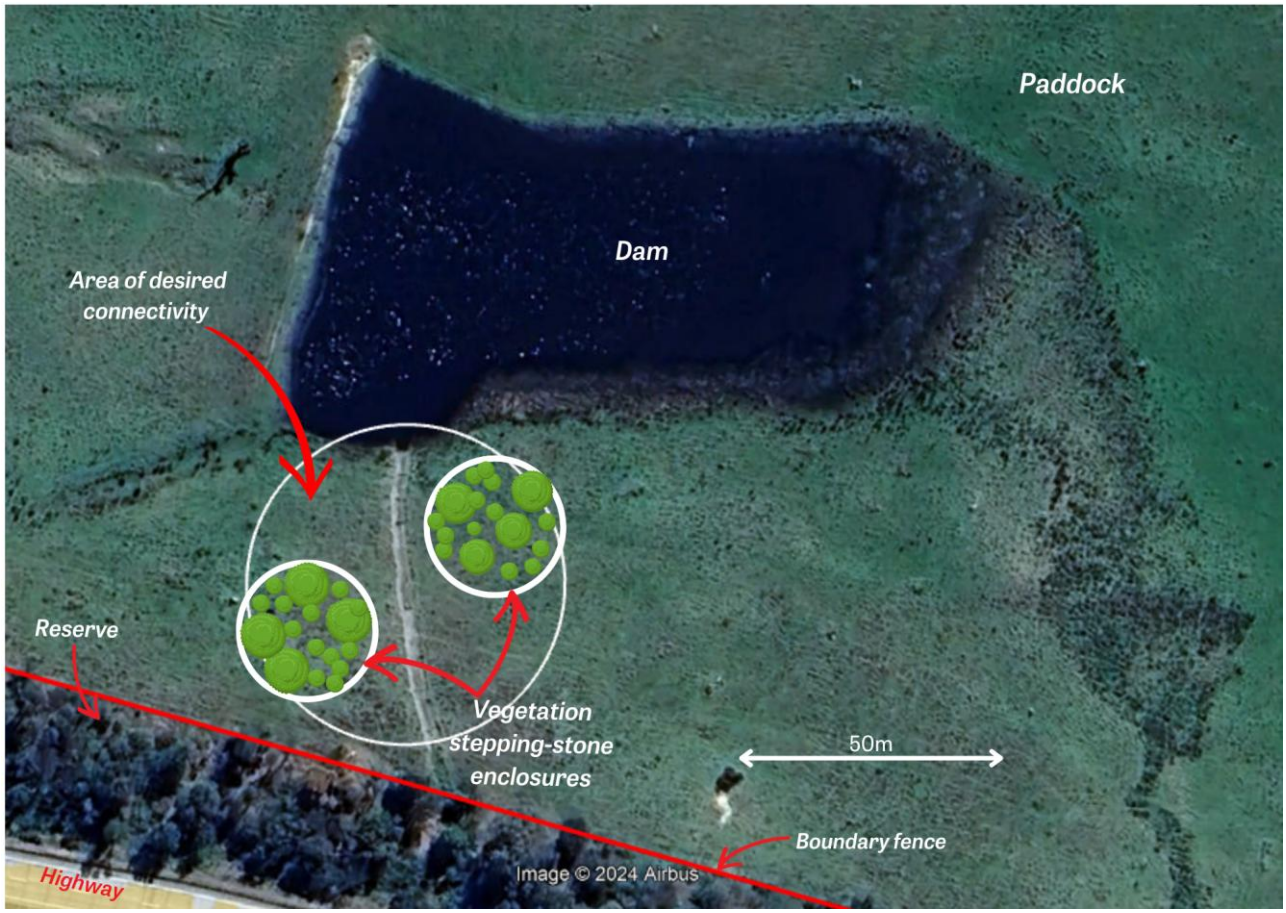

Figure 4. Potential use of vegetation stepping-stone enclosures for creating connectivity and bird-friendly habitat near a water source.