Arcus Road Bush Wairarapa Plains Site WP 0606. (Grid ref. S26.175.188)

Site visit 2.7.1999 by Aalbert Rebergen, Conservation Officer, DOC Wairarapa Area

Arcus Road Bush is a forest remnant dominated by totara. It was not visited during the reconnaissance survey for the Wairarapa Plains Ecological District (1995-1996), and Sawyer et. al. (1997) does not give a description of the vegetation.

The Ryan family owns the forest. Most of it is dominated by totara, with small pockets of rewarewa, titoki and tawa. In the western part, at the edge of the totara forest, is a small shallow pond, with a few kahikatea and pukatea.

The understorey of the totara forest is monotonous and species poor. Coprosma areolata is abundant, all shrubs of the same age (2-3 m tall). Locally Coprosma crassifolia and C. rotundifolia are common. Tradescantia (wandering jew) covers approx. 80% of the totara forest floor, and is preventing further regeneration. Many other exotic plants occur in the totara forest, along the forest edges or in the eastern part, including pine, hawthorn, gum tree, sycamore and barberry.

Near the stream (north of the totara forest) is a small block of swamp forest, with pukatea, kahikatea and swamp maire. Further north (in a paddock) is a small forest block (treeland) dominated by tawa and titoki.

Significant plant species include the epiphyte orchid *Drymoanthus adversus*, northern rata, pukatea and swamp maire.

D. adversus is common in the totara forest. It is found only on the 15 or so rewarewa trees. Some tree trunks had a few dozen plants on it, including many small ones.

A single northern rata was found at the forest edge, near the pond. Swamp maire and pukatea are the dominant trees in the forest block near the stream.

The wetland at the western side of the totara forest looked like suitable mudfish habitat. During 12 trap nights no mudfish or other fish species were caught (2-5.7.1999). The area is located on a fault and the wetland may be relatively new. The absence of eels, the small size and the perfect habitat make the site suitable for a possible (experimental) mudfish release.

The landowner has made a first important step in the protection of the forest remnant by excluding stock. As a result some shrub species have regenerated and are now abundant. The weed *Tradescantia* has also benefited from the exclusion of stock and now covers most of the forest floor. Some weed control, using herbicides, is recommended. Alternatively, stock could be used for a short period of time, to reduce the *Tradescantia* cover, especially as most of the regenerating shrubs are tall enough to withstand cattle (grazing and trampling). A grazing trial in a small part of the totara forest will allow the landowner to evaluate the effectiveness of cattle grazing in the control of *Tradescantia*.

The swamp forest has not been excluded from grazing, but the low intensity grazing does not appear to cause any major damage to the vegetation. *Tradescantia* is uncommon here, perhaps because of the occasional stock grazing.

A QEII Covenant would be the preferred next step, as fencing alone is not enough to guarantee the long-term survival of the forest. QEII staff can assist the landowner with the management of the forest, including the control of *Tradescantia*. I will inform the landowner of the options for legal protection.

Plant list:				
trees and shrubs	totara	a block	swamp forest	paddock block
41	titoki	1	ц	c
Alectryon excelsus	wineberry	u	-	
Aristotelia serrata Beilschiedia tawa	tawa	l	1	С
	tavva	a	1	
Coprosma areolata C. crassifolia		c	1	
C. grandifolia		u	u	
C. rhamnoides		С	1	u
C. robusta		u		
C. robusta x propinqua		u		
C. rotundifolia		С	c	l
C. tenuicaulis		u		
Cordyline australis	cabbage tree	u	u	
Coriaria arborea	tutu		u	
Dacrycarpus dacrydoides	kahikatea	1	c	1
Elaeocarpus dentatus	hinau	u	u	u
Hebe stricta	koromiko		u	
Hedycarya arborea	pigeonwood	u	u	u
Hoheria sextylosa	lacebark	u	1	
Knightia excelsa	rewarewa	l	u	u
Kunzea ericoides	kanuka	u		
Laurelia novae-zelandiae	pukatea	u	С	
Leptospermum scoparium	manuka	u		
Macropiper excelsum	kawakawa	С	1	
Melicope simplex		1	1	
Melicytus ramiflorus	mahoe	С	С	c
M. micranthus		u		
Metrosideros robusta	northern rata	u		
Myrsine australis	mapou	u		
Nestegis cunninghamii	black maire	u	u	u
Pennantia corymbosa	kaikomako	1	u	u
Podocarpus totara	totara	a	u	C
Prumnopitys ferruginea	miro			u
Pseudopanax arboreus	five finger	u		
P. crassifolius	lancewood	u		***
Streblus heterophyllus		u	u	u
Syzygium maire	swamp maire		c	
Urtica ferox		u	u	
climbers	totara block		swamp forest	paddock block
Metrosideros diffusa		1	1	1
Muehlenbeckia australis		ì	1	1
Parsonsia sp.		1	1	
Passiflora tetrandra	kohia	1	1	1
Ripogonum scandens	supplejack		1	1
Rubus schmidelioides			u	
birds				
tui		x	х	
NZ pigeon		x		
fantail		X	X	x
pukeko		X		

a = abundant, c = common, u = uncommon (or actual no. of individuals), l = local (may be common in small areas), x = present.

