

<b>Location (name, details):</b> <b>EARTHQUAKE SLIP CONSERVATION AREA</b>	<b>Grid reference: W20/600159</b>  <b>Area (ha): 94</b>  <b>Ecological District: Waihua</b>																																																																																																																			
<b>Protective status/designation: Conservation/Stewardship Area</b> <b>Managing agency: DOC</b>																																																																																																																				
<b>Observer(s): Geoff Walls</b> <b>Route taken: From top down through forest remnant to sea; N end examined from clifftops with binoculars</b> <b>Photos taken: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</b>	<b>Date: 21/12/98</b>  <b>Time spent: 3 hours</b>																																																																																																																			
<b>Significant fauna site: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</b> <b>Significant flora site: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</b>																																																																																																																				
<b>Landform:</b> Towering coastal cliffs, below which are areas of gentle land formed from 1931 Napier earthquake slump debris <b>Altitude, Aspect:</b> 0-390m asl; E aspect  <b>Soil/rock type:</b> Calcareous sandstone, siltstone, mudstone, limestone  <b>Drainage:</b> Several small streams; many seepages; one small boggy wetland  <b>Erosion:</b> Sheet, slump and gully erosion actively occurring in many places  <b>Other notes:</b>																																																																																																																				
<b>ECOSYSTEM/HABITAT</b>																																																																																																																				
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<b>VEGETATION</b>					
<b>Canopy cover (%):</b> <input type="checkbox"/> 0-5 <input type="checkbox"/> 5-25 <input type="checkbox"/> 25-50 <input checked="" type="checkbox"/> 50-75 <input type="checkbox"/> 75-100					
<b>Canopy composition (underline dominant species):</b> <u>Manuka, Tauhinu, Rank grass</u>					
<b>Vegetation condition (health):</b>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Don't know</u>	<u>Comments</u>
Canopy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Monocultural!
Subcanopy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Understorey/Undergrowth	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Ground cover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Notes:					
<b>Vegetation trend:</b>	<u>Improving</u>	<u>Stable</u>	<u>Deteriorating</u>	<u>Don't know</u>	<u>Comments</u>
Canopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Manuka and Tauhinu increasing
Subcanopy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	but little sign of other plants
Understorey/Undergrowth	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ground cover	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Notes:					
Too many goats and possums for diverse vegetation					
<b>Regeneration:</b>	<u>None</u>	<u>A little</u>	<u>Moderate</u>	<u>Much</u>	<u>Main species/Comments</u>
Canopy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Manuka, Tauhinu
Subcanopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Understorey/Undergrowth	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ground cover	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Epicormic shoots	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Notes:					
<b>Special plants (rare, threatened, local, distribution limits/anomalies, etc.):</b>					
<u>Species</u>	<u>No. (estimate)</u>	<u>Condition (as above)</u>	<u>Trend (as above)</u>	<u>Main threats/Comments</u>	
Notes:					
<b>Threats, Impacts and Management urgency:</b>					
	<u>Minor</u>	<u>Major</u>	<u>Urgent</u>	<u>Not urgent</u>	<u>Comments</u>
Deer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Goat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Still too many to allow diverse regen.
Pig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Possum	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	A big problem at forest remnant
Rabbit, Hare	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Sheep	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Getting in
Cattle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rat, Mouse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Vine weeds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shrub, Tree weeds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Herb/Grass weeds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pampas
Human visitor impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fire!
Survey/Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Vegetation plot
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Notes:					

RAPID ASSESSMENT FORM FOR ECOLOGICAL CONDITION AND TREND

<b>FAUNA</b>					
<b>Overall fauna:</b>					
	<u>Rel. abundance</u> <sup>1</sup>	<u>Condition</u> <sup>2</sup>	<u>Trend</u> <sup>3</sup>	<u>Main threats/Comments</u>	
Native birds	Few	Poor	?	Predators, habitat lack	
Exotic birds	Mod	Fair	Stable		
Bats					
Native reptiles	?	?	?	Need survey: could be stronghold for skinks and geckos	
Native frogs					
Exotic frogs					
Native fish					
Exotic fish					
Native land inverts	?	?	?		
Exotic land inverts					
Native aquatic inverts					
Exotic aquatic inverts					
Other (specify)					
<u>Notes:</u>					
<b>Special fauna (rare, threatened, local, distribution limits/anomalies, etc.):</b>					
<u>Species</u>	<u>No. (estimate)</u>	<u>Condition (as above)</u>	<u>Trend (as above)</u>	<u>Main threats/Comments</u>	
Blue penguin	?	?	?	Predators, people	
<u>Notes:</u>					
<b>Management needs:</b>					
	<u>Minor</u>	<u>Major</u>	<u>Urgent</u>	<u>Not urgent</u>	<u>Comments</u>
Deer control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Goat control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pig control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Possum control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Rabbit, Hare control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mustelid, Cat control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Needs addressing
Rat, Mouse control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Needs addressing
Weed control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fencing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Needs checking/maintenance
Human visitor management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Penguins, reptiles
Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<u>Notes:</u>					

<sup>1</sup> None; Few; Moderate; Many

<sup>2</sup> Good (healthy, thriving); Fair (okay); Poor (depleted, struggling); Don't know

<sup>3</sup> Improving; Stable; Declining; Don't know (?)

<b>SPECIFIC CONDITION AND TREND INDICATORS FOR SITE/AREA</b>				
[Examples: highly palatable plants, good food plants for birds, rare species, seedlings, epicormic shoots, possum sign, tracking, bark stripping, sensitive fauna, rampant weeds, visitor numbers, water quality, erosion, vegetation structure, bird population.....]				
<u>Indicator</u>	<u>Condition<sup>1</sup></u>	<u>Trend<sup>2</sup></u>	<u>Monitoring technique</u>	<u>Comments</u>
Karaka, Titoki canopy	Poor	Deteriorating	Observation	Possum browse, windthrow
Karaka, Titoki seedlings	Poor	Improving	Observation	Goat and possum browse tho
Karaka epicormic shoots	Poor	Improving	Observation	Goat and possum browse tho
Manuka & Tauhinu in grass	Fair	Improving	Observation	Goat numbers down
Karamu ( <i>Coprosma robusta</i> )	Poor	Stable	Observation )	When see an increase in these, especially seedlings, will know management is effective
Koromiko ( <i>Hebe stricta</i> )	Poor	Stable	Observation )	
Tutu ( <i>Coriaria arborea</i> )	Poor	Stable	Observation )	
Cabbage tree	Poor	Stable	Observation )	
Ngaio	Poor	Stable	Observation )	
Possum & Goat sign	High	Stable	Observation	

<b>MANAGEMENT HISTORY, CURRENT REGIME AND FUTURE NEEDS</b>						
<u>Control Programme</u>	<u>&gt;10 yrs ago Effectiveness</u> (o * ** ***)	<u>3-10 yrs ago Effectiveness</u> (o * ** ***)	<u>Last 3 years Effectiveness</u> (o * ** ***)	<u>Current Effectiveness</u> (o * ** ***)	<u>Future Needs</u> Scale up    Scale down	
Ungulate	o	*	**	**	✓	
Pig						
Possum	o	o	o	o	✓	
Mustelid/Cat	o	o	o	o	✓	
Rodent	o	o	o	o	✓	
Weed	o	o	o	o	✓	
Fencing	o	**	**	**	✓	
Visitor impact	*	*	*	*		✓
Other (specify)						

Notes:

<b>PRIORITY FOR MANAGEMENT</b>							
<u>Management Need</u>	<u>Priority</u>			<u>Urgency</u>			<u>When/Frequency<sup>3</sup></u>
	<u>Low</u>	<u>Mod</u>	<u>High</u>	<u>Low</u>	<u>Mod</u>	<u>High</u>	
Baseline survey	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Next 3 years
Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Seasonally, Annually
Animal pest control	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ongoing
Weed control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	As required
Visitor management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<sup>1</sup> Good (healthy, thriving); Fair (okay); Poor (depleted, struggling); Don't know (?)

<sup>2</sup> Improving; Stable; Declining/Deteriorating; Don't know (?)

<sup>3</sup> Monthly, Seasonally, Annually, 2-yearly, 5-yearly, 10-yearly, Ongoing, etc.